NONRESIDENT TRAINING COURSE

June 1991

Military Requirements for Petty Officer Second Class

NAVEDTRA 14146

Although the words "he," "him," and "his" are used sparingly in this course to enhance communication, they are not intended to be gender driven or to affront or discriminate against anyone.

PREFACE

By enrolling in this self-study course, you have demonstrated a desire to improve yourself and the Navy. Remember, however, this self-study course is only one part of the total Navy training program. Practical experience, schools, selected reading, and your desire to succeed are also necessary to successfully round out a fully meaningful training program.

THE COURSE: This self-study course is organized into subject matter areas, each containing learning objectives to help you determine what you should learn along with text and illustrations to help you understand the information. The subject matter reflects day-to-day requirements and experiences of personnel in the rating or skill area. It also reflects guidance provided by Enlisted Community Managers (ECMs) and other senior personnel, technical references, instructions, etc., and either the occupational or naval standards, which are listed in the *Manual of Navy Enlisted Manpower Personnel Classifications and Occupational Standards*, NAVPERS 18068.

THE QUESTIONS: The questions that appear in this course are designed to help you understand the material in the text.

VALUE: In completing this course, you will improve your military and professional knowledge. Importantly, it can also help you study for the Navy-wide advancement in rate examination. If you are studying and discover a reference in the text to another publication for further information, look it up.

Sailor's Creed

"I am a United States Sailor.

I will support and defend the Constitution of the United States of America and I will obey the orders of those appointed over me.

I represent the fighting spirit of the Navy and those who have gone before me to defend freedom and democracy around the world.

I proudly serve my country's Navy combat team with honor, courage and commitment.

I am committed to excellence and the fair treatment of all."

CONTENTS

INSTRUCTIONS FOR TAKING THE COURSE

ASSIGNMENTS

The text pages that you are to study are listed at the beginning of each assignment. Study these pages carefully before attempting to answer the questions. Pay close attention to tables and illustrations and read the learning objectives. The learning objectives state what you should be able to do after studying the material. Answering the questions correctly helps you accomplish the objectives.

SELECTING YOUR ANSWERS

Read each question carefully, then select the BEST answer. You may refer freely to the text. The answers must be the result of your own work and decisions. You are prohibited from referring to or copying the answers of others and from giving answers to anyone else taking the course.

SUBMITTING YOUR ASSIGNMENTS

To have your assignments graded, you must be enrolled in the course with the Nonresident Training Course Administration Branch at the Naval Education and Training Professional Development and Technology Center (NETPDTC). Following enrollment, there are two ways of having your assignments graded: (1) use the Internet to submit your assignments as you complete them, or (2) send all the assignments at one time by mail to NETPDTC.

Grading on the Internet: Advantages to Internet grading are:

- you may submit your answers as soon as you complete an assignment, and
- you get your results faster; usually by the next working day (approximately 24 hours).

In addition to receiving grade results for each assignment, you will receive course completion confirmation once you have completed all the assignments. To submit your assignment answers via the Internet, go to:

http://courses.cnet.navy.mil

Grading by Mail: When you submit answer sheets by mail, send all of your assignments at one time. Do NOT submit individual answer sheets for grading. Mail all of your assignments in an envelope, which you either provide yourself or obtain from your nearest Educational Services Officer (ESO). Submit answer sheets to:

> COMMANDING OFFICER
> NETPDTC N331
> 6490 SAUFLEY FIELD ROAD
> PENSACOLA FL 32559-5000

Answer Sheets: All courses include one "scannable" answer sheet for each assignment. These answer sheets are preprinted with your SSN, name, assignment number, and course number. Explanations for completing the answer sheets are on the answer sheet.

Do not use answer sheet reproductions: Use only the original answer sheets that we provide—reproductions will not work with our scanning equipment and cannot be processed.

Follow the instructions for marking your answers on the answer sheet. Be sure that blocks 1, 2, and 3 are filled in correctly. This information is necessary for your course to be properly processed and for you to receive credit for your work.

COMPLETION TIME

Courses must be completed within 12 months from the date of enrollment. This includes time required to resubmit failed assignments.

PASS/FAIL ASSIGNMENT PROCEDURES

If your overall course score is 3.2 or higher, you will pass the course and will not be required to resubmit assignments. Once your assignments have been graded you will receive course completion confirmation.

If you receive less than a 3.2 on any assignment and your overall course score is below 3.2, you will be given the opportunity to resubmit failed assignments. **You may resubmit failed assignments only once.** Internet students will receive notification when they have failed an assignment--they may then resubmit failed assignments on the web site. Internet students may view and print results for failed assignments from the web site. Students who submit by mail will receive a failing result letter and a new answer sheet for resubmission of each failed assignment.

COMPLETION CONFIRMATION

After successfully completing this course, you will receive a letter of completion.

ERRATA

Errata are used to correct minor errors or delete obsolete information in a course. Errata may also be used to provide instructions to the student. If a course has an errata, it will be included as the first page(s) after the front cover. Errata for all courses can be accessed and viewed/downloaded at:

http://www.advancement.cnet.navy.mil

STUDENT FEEDBACK QUESTIONS

We value your suggestions, questions, and criticisms on our courses. If you would like to communicate with us regarding this course, we encourage you, if possible, to use e-mail. If you write or fax, please use a copy of the Student Comment form that follows this page.

For subject matter questions:

E-mail: n314.products@cnet.navy.mil
Phone: Comm: (850) 452-1795
              DSN: 922-1795
              FAX: (850) 452-1370
              (Do not fax answer sheets.)
Address: COMMANDING OFFICER
              NETPDTC (CODE N314)
              6490 SAUFLEY FIELD ROAD
              PENSACOLA FL 32509-5237

For enrollment, shipping, grading, or completion letter questions

E-mail: n331@cnet.navy.mil
Phone: Comm: (850) 452-1511/1181/1859
              DSN: 922-1511/1181/1859
              FAX: (850) 452-1370
              (Do not fax answer sheets.)
Address: COMMANDING OFFICER
              NETPDTC (CODE N331)
              6490 SAUFLEY FIELD ROAD
              PENSACOLA FL 32559-5000

NAVAL RESERVE RETIREMENT CREDIT

If you are a member of the Naval Reserve, you will receive retirement points if you are authorized to receive them under current directives governing retirement of Naval Reserve personnel. For Naval Reserve retirement, this course is evaluated at 6 points. (Refer to *Administrative Procedures for Naval Reservists on Inactive Duty,* BUPERSINST 1001.39, for more information about retirement points.)

COURSE OBJECTIVES

In completing this nonresident training course, you will demonstrate a knowledge of the subject matter by correctly answering questions on the following: naval organization; leadership; equal opportunity programs and policies; professional development; training; personnel safety; chemical, biological, and radiological defense; damage control; and security requirements.

<u>Student Comments</u>

Course Title: *Military Requirements for Petty Officer Second Class*

NAVEDTRA: 14146   **Date**:

<u>We need some information about you</u>:

Rate/Rank and Name: _____ SSN: _____ Command/Unit _____

Street Address: _____ City: _____ State/FPO: _____ Zip _____

<u>Your comments, suggestions, etc</u>.:

INTRODUCTION TO MILITARY REQUIREMENTS AND THE NAVAL STANDARDS

The United States Navy has always placed great emphasis on the pride and professionalism of its personnel. In keeping with this strong tradition, the Navy has taken a new approach in teaching military subjects by developing individual military requirements training manuals. These manuals are divided into the basic military requirements (BMR) for apprenticeships and advanced requirements for third class, second class, first class, and chief petty officers. These manuals cover the MINIMUM Naval Standards required for advancement in rate.

The purpose of the separate manuals for each rate is to define more clearly the duties and responsibilities of the petty officer at each rate. That simply means if you are studying for advancement to petty officer second class, you will study material that applies to the petty officer second class. This is not to say that a petty officer second class performs only at the petty officer second class level. Many times the needs of the service require a petty officer to fill the billet of a more senior petty officer. That has always been the case and will continue to be true.

Because the manuals have been separated according to rate, you can now study the required material at the appropriate time in your career.

NAVAL STANDARDS

Naval Standards (NAVSTDs) are those qualifications which specify the minimum knowledge required of all enlisted personnel in the Navy. Your knowledge of NAVSTDs will be tested on the Military/Leadership examination. Unlike the Navy Occupational Standards, which state the tasks required of enlisted personnel, NAVSTDs, for the most part, state the knowledges required.

NAVSTDs encompass military requirements, essential virtues of professionalism and pride of service in support of the oath of enlistment, and maintenance of good order and discipline. They also include knowledges pertaining to the well-being of Navy personnel that directly contribute to the mission of the Navy.

NAVSTDs apply to all personnel at the specified paygrade except where specific limitations are indicated. Primarily, two factors make these qualifications necessary—the basic requirements of duty at sea and the requirements of duty in an armed force. For example, all Navy personnel must know certain elements of seamanship and must be prepared to assume battle station duties. Both men and women must learn the general orders for a sentry, be able to stand a security watch, and possess certain skills and knowledges needed for their own protection and survival. Certain other qualifications, mainly in clerical and administrative duties, have been added to the NAVSTDS because knowledge of them is important for all enlisted personnel regardless of occupational specialty.

This rate training manual covers the Naval Standards (military requirements) for petty officer second class.

CHAPTER 1

NAVAL ORGANIZATION

LEARNING OBJECTIVES

Learning objectives are stated at the beginning of each chapter. These learning objectives serve as a preview of the information you are expected to learn in the chapter. By successfully completing the accompanying nonresident training course (NRTC), you indicate you have met the objectives and have learned the information.

Upon completion of this chapter, you should be able to do the following:

1. State, in general terms, the duties and organizational relationships between the Department of the Navy (DON) and the Navy Department, the Shore Establishment, and the operating forces.

2. Describe, in general terms, the purpose of the major elements of the Navy's Shore Establishment.

3. Describe, in general terms, the purpose of the major elements of the Navy's operating forces.

Naval organization is the element of administration which entails the orderly arrangement of materials and personnel by functions in order to attain the objective aim or goal.

> —*Standard Organization and Regulations of the U.S. Navy,* OPNAVINST 3120.32B

As you prepare for advancement to petty officer second class, you need to know the organization of your unit and the U.S. Navy. Your introduction to naval organization started with your study of *Basic Military Requirements (BMR).* That manual gave you a good background in unit organization.

The first chapter of this manual will give you a good working knowledge of the organizational relationships within the Navy. It covers the Department of the Navy, the Navy Department, the Shore Establishment, and the operating forces.

Memorizing all the different offices, bureaus, systems, commands, departments, and divisions within the Navy's organizational framework is impossible for most people. Therefore, this chapter discusses only the major parts of the naval organization. The purpose of this chapter is to help you perform your work in the Navy more efficiently by giving you a basic understanding of our Navy's organizational system.

EARLY DEVELOPMENT OF THE NAVY

The Constitution of the United States is the best framework for government ever worked out by man. The American people believe independence is the only protection of basic human rights. Since the rights of the people might be threatened from time to time by forces either

foreign or domestic, the Constitution gives Congress the power to carry out the following:

- Raise and support armies

- Provide and maintain a navy

- Make rules for the government of the land and the regulation of its naval forces

CONGRESSIONAL ACTION

The Continental Congress passed legislation on 13 October 1775 to form a committee to purchase and arm two ships. That action created the Continental navy; and that date is, historically, the birthday of the U.S. Navy. The gallant fighting of the Continental navy during the revolutionary war was a large contributor to America's independence as a new nation. The Continental navy began a heritage and tradition of victory that serve as the basic doctrine of our modern Navy.

The United States Constitution provided for the creation of a navy under the jurisdiction of the War Department. Article I of the Constitution states that Congress shall have power to provide and maintain a navy. It also states that Congress shall have power to make rules for the government and to regulate the land and naval forces. Article II states that the President shall be Commander in Chief of the Army and Navy of the United States. (The Air Force came into being in 1947.) These three short entries are the only specific references to the navy in the Constitution. These few lines, however, authorized Congress to establish the navy, develop navy regulations, and appoint the President as Commander in Chief.

The increasing tempo of naval matters as war with France became certain prompted Congress to take two actions during 1798. On 30 April Congress acted to establish a separate Navy Department (fig. 1-1). That action removed naval affairs from the jurisdiction of the War Department. On 11 July Congress established the United States Marine Corps (USMC) as a separate service within the Navy Department. These actions gave the Secretary of the Navy (SECNAV) direct control over the Shore Establishment. They gave him as much control over the operating forces as existing communications permitted. This change in the Navy's organization lasted through the nation's conflict with France, the Tripolitan War (1801-1805), and the War of 1812. During that period, naval shipyards and hospitals became parts of the Shore Establishment.

MODIFICATIONS TO THE NAVY'S ORGANIZATION

The growth of the Navy and its technology caused Congress to create a system of bureaus in 1842. The bureaus provided for the supply of materials and technical aid to fleet and shore activities.

In 1915 Congress created the position of Chief of Naval Operations (CNO) to fill SECNAV's need for an official naval advisor. Before World War II, the CNO was responsible for the operation and readiness of the fleet and the preparation of naval war plans. In addition, he served as an advisor to SECNAV.

During World War II, the CNO had *military command* of all Shore Establishment and bureau activities. The activities remained under the *management* of SECNAV and his assistants. After the Korean conflict, the position of Commandant of the Marine Corps shifted within the Navy organization. It remained a part of the Navy Department under the Secretary of the Navy. However, separate USMC headquarters provided a distinction between the Navy and Marine Corps organizations.

REFINEMENTS TO THE NAVY'S ORGANIZATION

In 1949 an amendment to the National Security Act of 1947 created the Department of Defense (DOD). That amendment changed the organizational structure of the existing military departments. The old Navy Department became the Department of the Navy.

The Department of the Navy has since undergone many adjustments. These adjustments improved coordination within the Department of Defense and helped DON keep up with advances in modern weapons and technology. Along with technical and weapons bureaus, functional
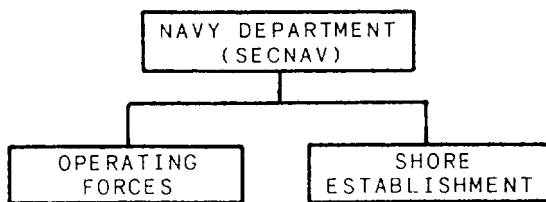

Figure 1-1.-Navy Department in 1798.

organizations were created to oversee particular activities of central importance to the Navy. Some of these organizations were intelligence, security, telecommunications, weather, oceanography, education and training, and Naval Reserves. Although it is larger and more complex, today's Department of the Navy still retains one aspect of the 1798 organization. That aspect is the division of the operating forces from the Shore Establishment. The division between the operating forces and the Shore Establishment became sharper through the 1949 amendment to the 1947 National Security Act. The amendment placed the operating forces of the Navy and other services into unified and specified commands. Both commands are under an operational chain of command to the Secretary of Defense (SECDEF) and the President.

NAVY RELATIONSHIP TO THE DEPARTMENT OF DEFENSE

With the establishing of the DOD, the unified and specified combatant commands began. These commands have broad continuing missions and consist of operating forces.

Unified commands consist of operating forces of two or more services or components. An example of a unified command is the Pacific Command headed by the Commander in Chief,

Pacific (CINCPAC). Component commands of CINCPAC are the Navy's Pacific Fleet (PACFLT); area Army Command (USARPAC); area Air Force Command (PACAF); and Fleet Marine Force, Pacific (FMFPAC).

Specified commands consist of operating forces from only one service. An example of a specified command is the Strategic Air Command. It consists only of forces from the U.S. Air Force.

CHAIN OF COMMAND FOR COMBAT FORCES

The Secretary of Defense exercises two lines of control over the combatant forces of the military departments: operational and administrative (fig. 1-2). The operational chain of command extends from the President to the SECDEF through the Joint Chiefs of Staff to the commanders of the unified and specified commands and then to the operating forces. The administrative chain of command extends from the President to the SECDEF to the secretaries of the individual military departments. It then extends from the military departments through their respective service channels to the operating forces. The administrative chain oversees the training, readiness, administration, and support of the operating forces.

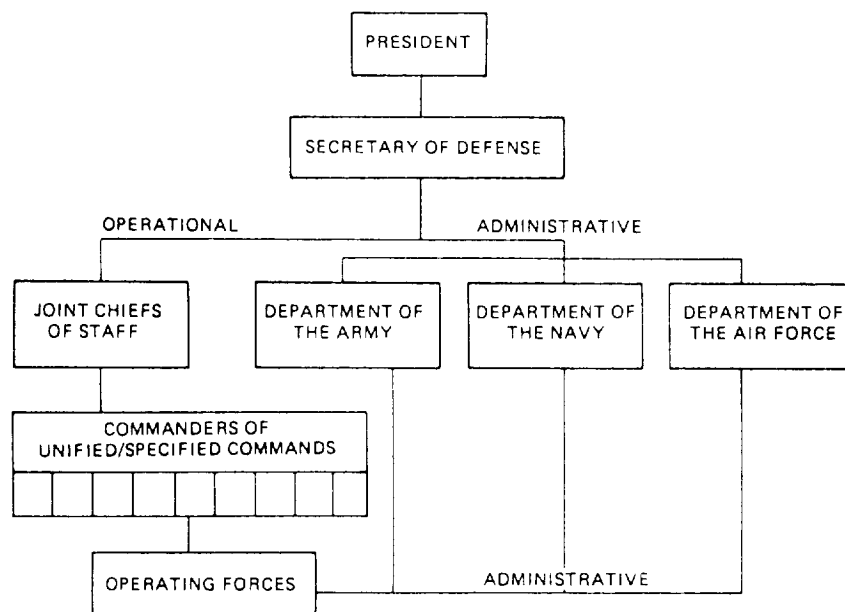The chiefs of individual services, such as the CNO, have no direct operational authority within

Figure 1-2.-Organizational relationship of the Department of the Navy to the Department of Defense.

their service over forces under unified or specified commands. Therefore, the CNO's function in operational matters for unified or specified commands is as a member of the Joint Chiefs of Staff. The Joint Chiefs of Staff provides direction and guidance to the commanders of unified and specified commands.

THE PRESIDENT (COMMANDER IN CHIEF)

The President's power as the Commander in Chief of the Armed Forces is extensive. That power increases in war or any other national emergency. For example, the President may declare an emergency and call out the military Reserves. He may even order the armed forces into military action before Congress actually declares war. Often a President has referred a matter to Congress after the fact. The following examples of such actions show the presidential authority and control of U.S. military forces:

- In 1801 President Jefferson sent naval squadrons to the Mediterranean and then informed Congress.

- In 1845 President Polk deployed the Navy to the coast of Mexico to quell trouble caused by the annexation of Texas. He asked Congress to declare war on Mexico 5 months later, and Congress did.

- In 1862 President Lincoln personally assumed command of successful military operations against Confederate forces in Norfolk, Virginia.

- In 1896 President McKinley ordered the naval blockade of Cuba. Congress declared war on Spain 3 days later,

- In 1941 President Franklin Roosevelt declared an unlimited national emergency and ordered the U.S. Navy to "sink on sight" foreign submarines found in our "defensive waters."

- In 1962 President Kennedy ordered a naval quarantine of Cuba based on Soviet military activity on that island.

- In 1965 President Johnson ordered naval air action against North Vietnamese gunboats and support facilities.

- In 1979 President Carter ordered units of the U.S. Sixth and Seventh Fleets to the Indian Ocean to help in hostage evacuation operations and as deterrents against Iranian actions.

- In 1989 President Bush directed U.S. forces to execute a preplanned mission (code named *Operation Just Cause)* in the Republic of Panama. Objectives were protection of American lives, restoration of the democratic process, protection of the integrity of the Panama Canal treaties, and apprehension of General Manuel Noriega.

- In 1991 President Bush sent troops into Saudi Arabia (code named *Operation Desert Shield)* to prevent Iraq from extending aggression into Saudi Arabia.

THE DEPARTMENT OF DEFENSE (DOD)

The President, as the Commander in Chief, heads the military chain of command within the Department of Defense. The Commander in Chief is kept abreast of all matters affecting the ability of the Department of Defense to defend the United States and its allies.

The offices of the Secretary of Defense; the Joint Chiefs of Staff (JCS) and their supporting establishments (the Departments of the Army, Navy, and Air Force); and various unified and specified commands make up the DOD.

The Department of Defense is the largest government agency in the United States. It spends a major portion of the national budget and employs nearly 4 million people (military and civilian). The DOD carries out the military policies of the United States. Its functions, simply stated, are to maintain and employ armed forces to accomplish the following:

- Support and defend the Constitution of the United States against all enemies

- Protect the United States, its possessions, and areas vital to its interests

- Advance the policies and interests of the United States

- Safeguard the internal security of the United States

Secretary of Defense (SECDEF)

The Secretary of Defense (SECDEF) is a member of both the President's Cabinet and the National Security Council. In that capacity, the SECDEF exercises "direction, authority, and control over the Department of Defense." The Secretary of Defense, by virtue of an Executive order, has responsibility for all the President's

functions involving the DOD. Those functions include the President's powers, duties, and authorities. As the President's principal assistant in DOD matters, the SECDEF reports to the President on all DOD military matters. The Deputy Secretary of Defense aids the SECDEF. The Deputy supervises and coordinates the activities of the department and substitutes for the SECDEF during absence or disability.

The Joint Chiefs of Staff

Five members make up the Joint Chiefs of Staff (JCS):

1. A chairman, who maybe a member of any service and who is appointed by the President with the advice and consent of the Senate
2. The CNO
3. The Chief of Staff, U.S. Army
4. The Chief of Staff, U.S. Air Force
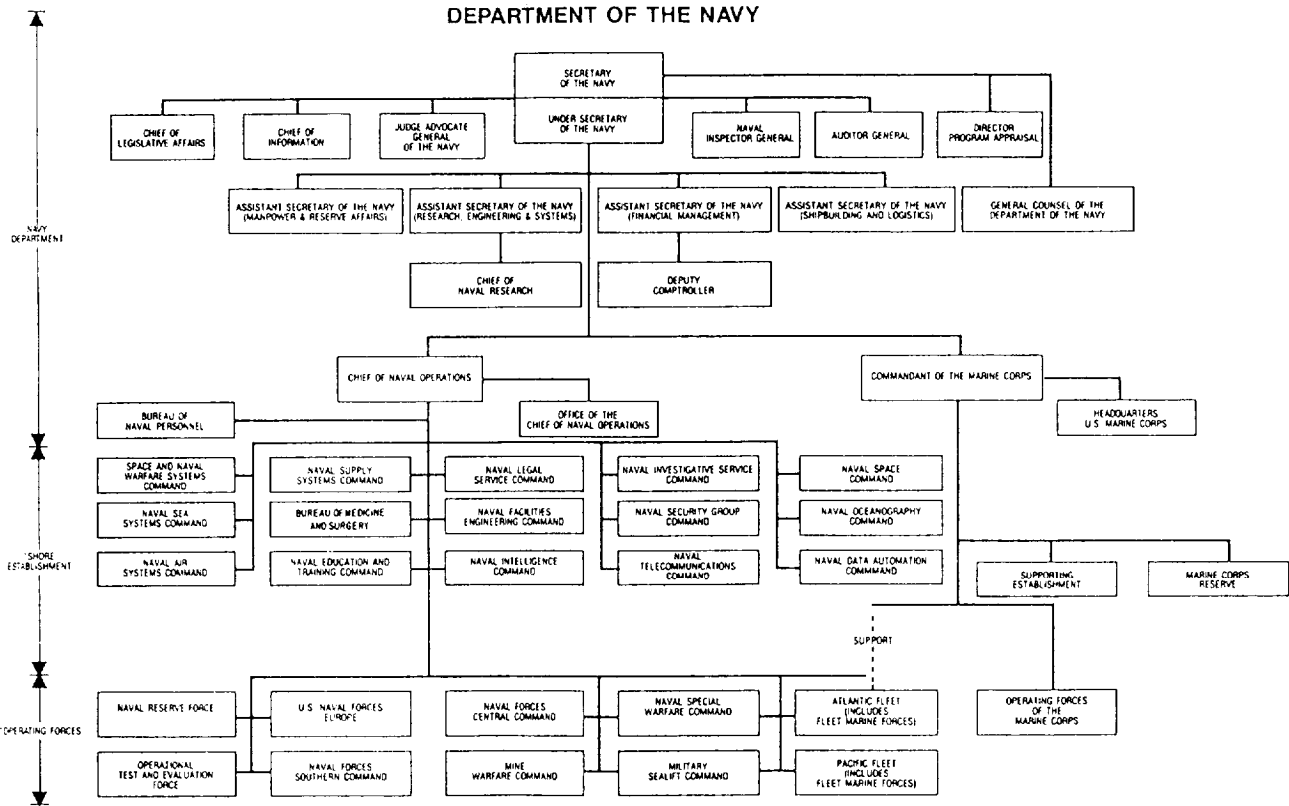5. The Commandant of the Marine Corps.

The JCS is the immediate military staff of the SECDEF. As such, the JCS helps the SECDEF in exercising direction over the operating forces. In addition, the members of the JCS are the principal military advisors to the President and the National Security Council.

DEPARTMENT OF THE NAVY

Since its formal beginning as a military department in 1798, the Navy has been organized into three separate bodies:

1. The Navy Department (originally known as central headquarters), located in Washington, D.C.
2. The Shore Establishment
3. The operating forces

These bodies, as shown in figure 1-3, include the Marine Corps and, in time of war or when directed by the President, the Coast Guard.

Figure 1-3.-Organization of the Department of the Navy.

The Department of the Navy has two tasks. It carries out the first task as directed by the President or the Secretary of Defense. That task is to organize, train, equip, prepare, and maintain the readiness of Navy and Marine Corps forces to perform military missions. It carries out the second task as directed by the Secretary of Defense. That task is to support Navy and Marine Corps forces, as well as the forces of other military departments assigned to unified or specified commands. Support includes administrative, personnel, material, funding, and technological support through research and development. The Department of the Navy is under the control of the Secretary of the Navy (SECNAV).

The Secretary of the Navy heads the Department of the Navy under the direction, authority, and control of the Secretary of Defense. The Secretary of the Navy is responsible for the policies and control of the Department of the Navy, including its organization, administration, operation, and efficiency.

The Secretary of the Navy assigns department-wide responsibilities essential to the efficient administration of DON to civilian executive assistants. These assistants consist of the Under Secretary of the Navy, the Assistant Secretaries of the Navy, and the General Counsel of the Navy. They are SECNAV's principal advisors and assistants on DON administrative affairs. Each civilian executive assistant has a certain area of responsibility. The civilian executive assistants carry out their duties in cooperation with the CNO, the principal naval advisor and executive to the SECNAV.

THE NAVY DEPARTMENT

The Navy Department aids SECNAV in carrying out the responsibilities of that office. As mentioned before, SECNAV is responsible, under the Secretary of Defense, for the policies and control of the Navy. SECNAV's responsibility includes the Navy's organization, administration, operation, and efficiency. The Navy Department controls and provides policy and direction for the Shore Establishment and the operating forces. The Navy Department, shown in figure 1-4, includes the following organizational levels:

- The Under Secretary of the Navy

- The civilian executive assistants

- The offices of staff assistants

- The Chief of Naval Operations and supporting staff

- The Commandant of the Marine Corps and the Marine Corps Headquarters

- The headquarters organization of the Bureau of Naval Personnel

Let's take a look at those offices of the Navy Department that could be of interest to you. They include the Office of Legislative Affairs, Office of Information, Office of the Judge Advocate General, and Office of Program Appraisal. These offices are generally headed by military officers. We will also look at the Assistant Secretaries of
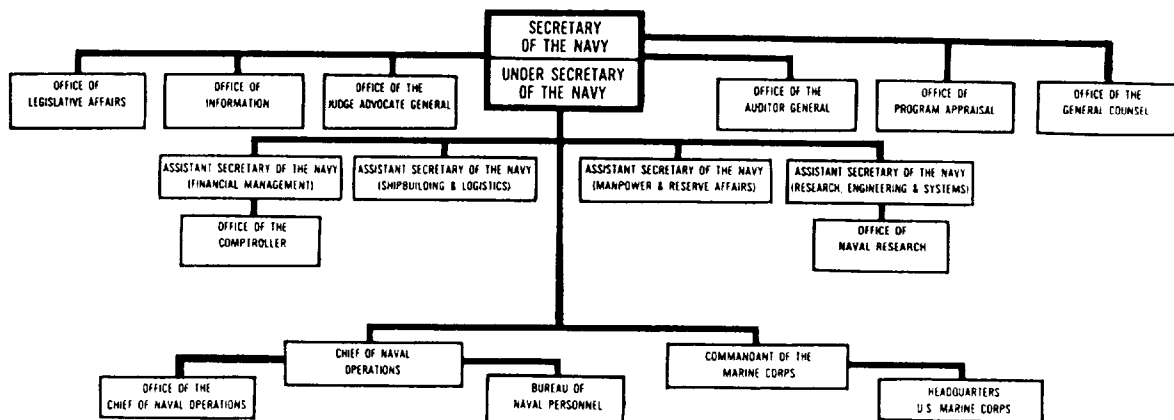

Figure 1-4.-The Navy Department.

the Navy, who are civilian executives, We will then look at the duties and responsibilities of the Shore Establishment and briefly review the operating forces.

Office of Legislative Affairs

A military officer heads the Office of Legislative Affairs. The office functions in a supervisory and coordinating capacity. It supervises, coordinates, and arranges for the presentation of statements, testimonies, briefings, and reports to members and committees of Congress. Military and civilian personnel of the Department of the Navy make these presentations. The office also monitors and evaluates congressional proceedings and actions affecting the Department of the Navy.

Office of Information

The Office of Information, headed by a military officer, provides services to the public. These services include the answering of inquiries and the coordination of Navy participation in community events. The Office of Information also ensures a prompt and accurate flow of information to the news media.

Office of the Judge Advocate General

Headed by a military officer, the Office of the Judge Advocate General (JAG) provides legal services within the Department of the Navy. It provides legal services in all areas except those areas of business and commercial law assigned to the General Counsel of the Navy. The JAG office supervises the administration of military justice throughout the Department of the Navy based on the *Uniform Code of Military Justice (UCMJ).* It provides free legal counsel for any member of the naval service charged under the UCMJ with a serious offense. The JAG office also conducts investigations, provides legal help and advice, processes various claims for and against the Navy, and advises on maritime law.

Office of the Auditor General

The Office of the Auditor General is responsible for internal audit within the Department of the Navy.

Office of Program Appraisal

The Office of Program Appraisal (OPA) provides an appraisal of the Navy. It ensures existing and proposed Navy and Marine Corps programs achieve the goals of the Department of the Navy. The OPA analysis gives the Secretary of the Navy (SECNAV) information on the validity, need, and usefulness of Navy programs. SECNAV then uses that information to assess the overall direction of the Navy.

Assistant Secretary of the Navy (Manpower and Reserve Affairs)

The Assistant Secretary of the Navy (Manpower, Reserve Affairs, and Logistics) supervises all DON manpower and Reserve component affairs. The Assistant Secretary supervises policy and administration of affairs related to military (active and inactive) and civilian personnel. The Assistant Secretary also supervises those offices and organizations as assigned by SECNAV.

Assistant Secretary of the Navy (Research, Engineering, and Systems)

The Assistant Secretary of the Navy (Research, Engineering, and Systems) manages all stages of DON acquisition programs. The only exception is the acquisition of naval ships funded by the appropriation "Ship Building and Conversion, Navy." The Assistant Secretary ensures the technical maintenance or alteration of material and directs all DON research, development, engineering, test, and evaluation efforts. These efforts include management of the appropriation "Research, Development, Test and Evaluation, Navy." The Assistant Secretary also directs acquisition programs for oceanography, ocean engineering, and closely related matters. The Assistant Secretary supervises those offices and organizations as assigned by SECNAV.

Assistant Secretary of the Navy (Financial Management)

As Comptroller of the Navy, the Assistant Secretary of the Navy (Financial Management) manages all DON matters. The Assistant Secretary's responsibilities include budgeting, accounting, disbursing, and financing; progress and statistical reporting; and management information systems and equipment (less those concerning weapons systems). This Assistant

Secretary supervises those offices and organizations the SECNAV assigns.

Assistant Secretary of the Navy (Shipbuilding and Logistics)

As an acquisition executive, the Assistant Secretary of the Navy (Shipbuilding and Logistics) procures aircraft and naval ships. This executive manages all stages of acquisition of naval ships in the 5-year shipbuilding program, including design and weapons system integration. The Assistant Secretary's responsibility includes business and contractual policy and logistic support of all Department of the Navy acquisition programs. It includes the maintenance, alteration, supply, distribution, and disposal of material; the Mutual Defense Assistance Program; all transportation matters; printing and publications; and industrial security. It also includes labor relations of contractors with the Department of the Navy. The Assistant Secretary supervises the acquisition, construction, use, improvement, alteration., maintenance, and disposal of DON real estate and facilities. The Secretary supervises those offices and organizations the SECNAV assigns.

Office of the General Counsel of the Navy

The Office of the General Counsel of the Navy provides legal advice, counsel, and guidance to SECNAV, SECNAV's civilian executive assistants, and their staffs. These legal services concern matters of business and commercial law. This office manages the Department of the Navy and performs such other duties as the SECNAV assigns.

Chief of Naval Operations

The Chief of Naval Operations (CNO) is the senior military officer of the Department of the Navy. The CNO takes precedence over all other naval officers, except a naval officer serving as Chairman of the Joint Chiefs of Staff. The CNO is the principal naval advisor to the President and the SECNAV on the conduct of DON activities. The CNO keeps the Secretary of the Navy fully informed on matters the JCS considers or acts upon. The CNO is the Navy member of the Joint Chiefs of Staff. As such, the CNO is responsible to the President and the SECDEF for duties external to DON as prescribed by law.

The Chief of Naval Operations, under the direction of the Secretary of the Navy, exercises command over the operating forces of the Navy. (The CNO's authority is consistent with the operational command vested in the commanders of unified or specified combatant commands.) These forces include the Military Sealift Command, the Fleet Marine Forces, and the several fleets, seagoing forces, and other forces and activities assigned by the President or the SECNAV. The CNO also exercises command over the Bureau of Naval Personnel and other shore activities assigned by the SECNAV. In addition, the Chief of Naval Operations has the following specific responsibilities:

- To organize, train, equip, prepare, and maintain the readiness of Navy operational forces

- To determine and direct the efforts needed to fulfill current and future Navy requirements for manpower, material, weapons, facilities, and services

- To exercise leadership in maintaining a high degree of competence among Navy officers and enlisted and civilian personnel

- To maintain the morale and motivation of Navy personnel and the prestige of a Navy career

- To plan and provide health care for personnel of the naval service and their dependents

- To direct the organization, administration, training, and support of the Naval Reserve

- To monitor the Department of the Navy to determine and maintain efficiency, discipline, and readiness

- To determine the need for and to provide for the conduct of research, development, test, and evaluation that meet long-range goals, immediate requirements, and fiscal limitations

- To devise Navy strategic plans and policies and help devise joint and combined strategic plans and policies

- To budget for commands, bureaus, and offices assigned to the CNO's command and for other activities and programs as assigned

The Vice CNO and the Vice CNO's Assistant, Directors of Major Staff Offices (DMSOs), and Deputy Chiefs of Naval Operations help the CNO carry out these responsibilities (fig. 1-5). Of particular interest to the enlisted community is the master chief petty officer of the Navy (MCPON).

The Master Chief Petty Officer of the Navy

In 1966 the Secretary of the Navy's Task Force on Navy/Marine Corps Personnel Retention recommended the creation of the office of the master chief petty officer of the Navy (MCPON), The function of the office was to provide a direct, unofficial channel of communication between enlisted personnel and the senior policy level of DON. With a tour length set at 4 years, the office was formally set up 1 March 1967.

The master chief petty officer of the Navy performs the following specific duties:

1. The MCPON's assignment is to the immediate Office of the Chief of Naval Operations. The MCPON serves as the senior enlisted representative of the Navy and acts as the primary enlisted advisor to the CNO. The MCPON advises the Chief of Naval Personnel in all matters about both active-duty and retired enlisted members and their dependents.

2. The MCPON serves in an advisory capacity on various boards pertaining to enlisted members, including the following:

● Board of Managers, Navy Relief Society

● Board of Administrators of the BUPERS Central Nonappropriated Funds

● Board of Equal Opportunity for Women

Figure 1-5.-Office of the Chief of Naval Operations.

- Rating Review Board

- Navy Wives Club of America (Liaison)

- Fleet Reserve Association (Liaison)

- Navy Resale System Advisory Board

3. The MCPON, when called upon, testifies before congressional committees and subcommittees. The MCPON occasionally accompanies the CNO and the Chief of Naval Personnel on official trips and the Navy Inspector General on selected inspection trips. The MCPON travels extensively throughout the fleet and serves as the Navy enlisted representative of the DON at special events, celebrations, and ceremonies.

4. The MCPON recommends ways to develop effective leadership and training at all enlisted levels and to attain high standards of conduct and general appearance within the enlisted community. The MCPON acts always to maintain and promote the chain of command and its associated chain of communications. Further, the MCPON advises the CNO about existing or potential situations, procedures, and practices affecting the use, morale, retention, career enhancement, human goals programs, and general well-being of the Navy enlisted personnel and their dependents. Further, the MCPON advises the CNO about existing or potential situations, procedures, and practices affecting Navy enlisted personnel. The MCPON's advice concerns the use, morale, retention, career enhancement, human goals programs, and general well-being of Navy enlisted personnel and their dependents.

The MCPON does not work alone. Aided by a staff, the MCPON relies on the quality and experience of the fleet, force, and command master chiefs. With their solid support, the MCPON carries out the duties of that office.

The Commandant of the Marine Corps

The Commandant of the Marine Corps (CMC) commands the Marine Corps, The Commandant is directly responsible to SECNAV for the administration, discipline, internal organization, training requirements, efficiency, readiness, and total performance of the Marine Corps. The Commandant also operates the material support system of the Marine Corps. The Commandant keeps the SECNAV fully informed on matters considered or acted upon by the Joint

Chiefs of Staff. As the Marine Corps member of the Joint Chiefs of Staff, the Commandant is responsible to the President and the SECDEF for duties external to the DON as prescribed by law. The Commandant is directly responsible to the CNO for the organization, training, and readiness of Marine Corps forces assigned to Navy operating forces. Marine Corps forces, when so assigned, are subject to the command exercised by the CNO over the Navy operating forces. Likewise, Navy members or organizations assigned to the Marine Corps are subject to the command of the Commandant of the Marine Corps.

Chief of Naval Personnel

The Chief of Naval Personnel plans and directs the procurement, distribution, administration, and career motivation of Navy personnel. The Chief of Naval Personnel plans the amount of education and training needed by Navy personnel, including that of the Naval Reserve, to meet manpower requirements as the CNO determines. The Chief of Naval Personnel has the additional responsibility to develop, implement, and administer the servicewide programs for improved human relations.

THE SHORE ESTABLISHMENT

The parts of the naval organization discussed thus far exist at the Navy Department level. This section discusses those major shore commands (fig. 1-6) responsible for training, supplying, maintaining, and supporting the operating forces. The mission of those shore commands is to deliver material, services, and personnel to the operating forces. Those commands answer directly to the Chief of Naval Operations in carrying out their missions.

Space and Naval Warfare Systems Command

The Commander, Space and Naval Warfare Systems Command (SPAWAR) researches, develops, tests, evaluates, and procures airborne and shipboard electronics. SPAWAR functions involve space systems; command, control, and communications; electronic warfare; navigation; countermeasures; surveillance; air traffic control; and cryptography for naval battle forces. As required, they also involve the material functions of the Marine Corps. SPAWAR is the Navy's
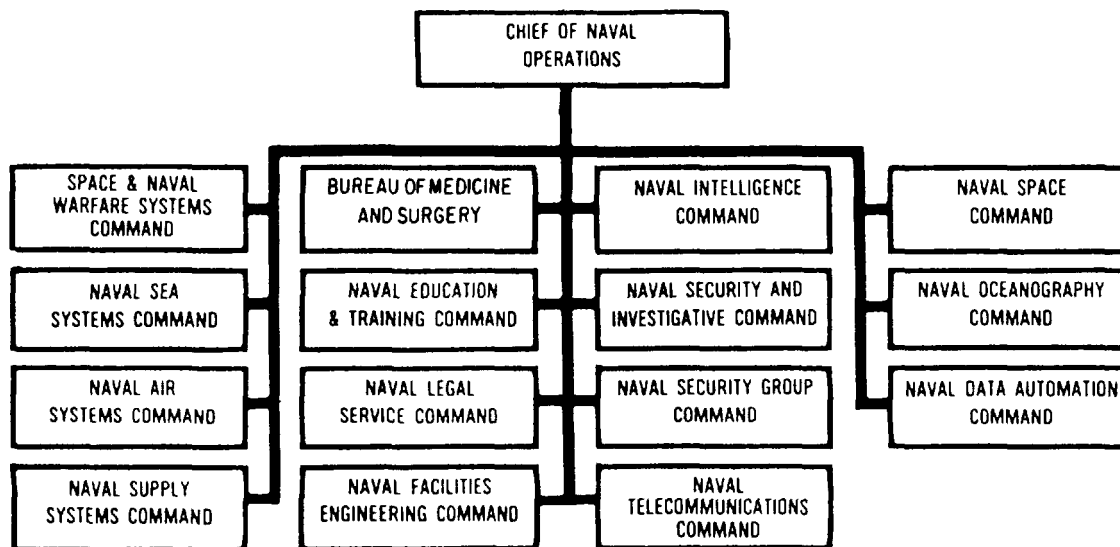
Figure 1-6.-The major shore commands.

central authority for electronics standards, technology, and compatibility.

Naval Sea Systems Command

The Commander, Naval Sea Systems Command (NAVSEA), researches, develops, procures, furnishes logistic support, and other material functions. NAVSEA carries out these functions for ships and craft, shipboard weapons systems and expendable ordnance, and air-launched mines and torpedoes. This command is also responsible for the above functions in shipboard systems and components. Some of these are propulsion (including nuclear), power-generating, sonar, search radar, and auxiliary equipment. NAVSEA is responsible for ship system integration and for coordination of logistic support for ships. NAVSEA has central authority for ship and nuclear power safety; for explosives, propellants, and actuating parts; and for explosive safety and explosive ordnance disposal. This command also provides technical and material support for diving and for salvage of stranded and sunken ships, craft, aircraft, and other objects. NAVSEA also coordinates shipbuilding conversion and repair in the Navy and DOD.

Naval Air Systems Command

The Commander, Naval Air Systems Command (NAVAIR), is responsible for research, development, test, evaluation, procurement, and logistic support in several areas. These areas include Navy and Marine Corps aircraft, air launched weapons, and other aviation-related equipment. NAVAIR is responsible for the systems integration of aircraft weapons systems and for audiovisual and meteorological equipment. This command manages target ranges and test facilities in support of these needs.

Naval Supply Systems Command

The Commander, Naval Supply Systems Command (NAVSUP), develops supply management policies and methods. NAVSUP also controls the Naval Supply System, publications and printing, the resale program, the Navy Stock Fund, and the field purchasing services. NAVSUP provides material support for materials handling, food service equipment, and special clothing. It provides accounting support to Navy activities as assigned and is responsible for transportation of Navy property.

Bureau of Medicine and Surgery

The Chief, Bureau of Medicine and Surgery (BUMED), directs the provision of medical and dental services for authorized personnel within assigned geographic and mission-specific commands. BUMED makes sure health care program policies are maintained and carried out. It also

maintains all assigned activities in a proper state of readiness to fulfill assigned peacetime and contingency missions.

Naval Education and Training Command

The Chief of Naval Education and Training (CNET) is responsible for assigned shore-based education and training of Navy, certain Marine Corps, and other personnel. That education and training supports the fleet, naval Shore Establishment, Naval Reserve, security assistance program, and interservice training programs. CNET develops specific education and training afloat programs for the fleet and controls Navy support for youth programs. This command acts as DOD agent for the Defense Activity for Nontraditional Education Support (DANTES) and executes the Navy's responsibility for dependents' education. CNET takes part in research and development activities to develop and carry out the most effective teaching and training systems and devices.

Naval Legal Service Command

The Director, Naval Legal Service Command, controls the Legal Services Program. The Naval Legal Service Command provides command direction for all naval legal service activities and resource assignments.

Naval Facilities Engineering Command

The Commander, Naval Facilities Engineering Command (NAVFACENGCOM), plans, designs, develops, procures, constructs, alters, estimates costs, and inspects. The command is responsible for these functions as they relate to public works, public utilities, construction, transportation, and weight-handling equipment at all shore activities. NAVFACENGCOM acquires and disposes of real estate for the Navy and manages Navy family housing. It directs the repair and upkeep of all public works, public utilities, and housing of the Navy. NAVFACENGCOM supports fleet construction forces and provides material support of nuclear power plants, shore and construction equipment, cranes, and fixed ocean structures. In addition, this command provides technical management of shore facility maintenance, environmental protection, natural resource conservation, and fire protection.

Naval Intelligence Command

The Commander, Naval Intelligence Command (NIC), directs and manages the activities of the Naval Intelligence Command. The Commander, NIC, makes sure of the fulfillment of DON's intelligence and security (related to SCI) requirements and responsibilities.

Naval Security and Investigative Command

The Commander, Naval Security and Investigative Command (NSIC), directs naval law enforcement, physical security, and the DON Security Program. The Security Program involves the physical security of personnel and information (except sensitive compartmented information [SCI]) and the determination of security clearances (except SCI). The Command, NSIC, also directs DON's investigative and counter-intelligence activities (except Marine Corps combat-related counterintelligence activities).

Naval Security Group Command

The Commander, Naval Security Group Command (NAVSECGRU), is responsible for cryptologic and related functions. NAVSECGRU provides, operates, and maintains an adequate naval security group. It approves requirements for the use of existing naval security group capabilities and resources and coordinates the execution of approved cryptologic programs. NAVSECGRU supports and controls its shore activities as well as other activities and resources as assigned.

Naval Telecommunications Command

The Commander, Naval Telecommunications Command (NAVTELCOM), directs and manages the Naval Telecommunications System (NTS). This command develops plans and programming for needed training and manpower in the use of naval telecommunications equipment, systems, and facilities. NAVTELCOM serves as the Operations and Maintenance Manager of those elements of the Defense Communications System (DCS) assigned to the Navy.

Naval Space Command

The Commander, Naval Space Command, provides direct space systems support to naval forces and helps prepare the naval service for a larger space systems involvement. This command

supports the coordinated mission and hardware development for future space activities. It commands and supports the naval space systems, including surveillance, environmental monitoring, communications, and navigation, in support of national maritime strategy.

Naval Oceanography Command

The Commander, Naval Oceanography Command (NAVOCEANCOM), directs the Naval Oceanographic Program and provides oceanographic technical guidance throughout the Department of the Navy. The command manages assigned oceanographic activities, including oceanography; meteorology; mapping, charting, and geodesy; astronomy; and chronometry.

Naval Data Automation Command

The Commander, Naval Data Automation Command (NAVDAC), controls and coordinates the Navy's Nontactical Automatic Data Processing (ADP) Program. NAVDAC works with all Navy ADP claimants to resolve ADP problems, develop ADP policy and procedures, and approve systems development. It also manages the acquisition of ADP service contracts and the purchase and use of ADP equipment. NAVDAC supports ADP technology and sponsors career development and training of ADP personnel.

Shore Activities Reporting to the CNO

The shore activities shown in figure 1-7 directly influence the ability of operational forces to meet their responsibilities in a professional manner. Although an integral part of the Navy, the many other activities that either support or work with those listed are too many to mention.

THE OPERATING FORCES

The operating forces of the Navy are combat or combat-support oriented. Combatant and certain supporting forces are assigned to the commander of a unified or specified command.
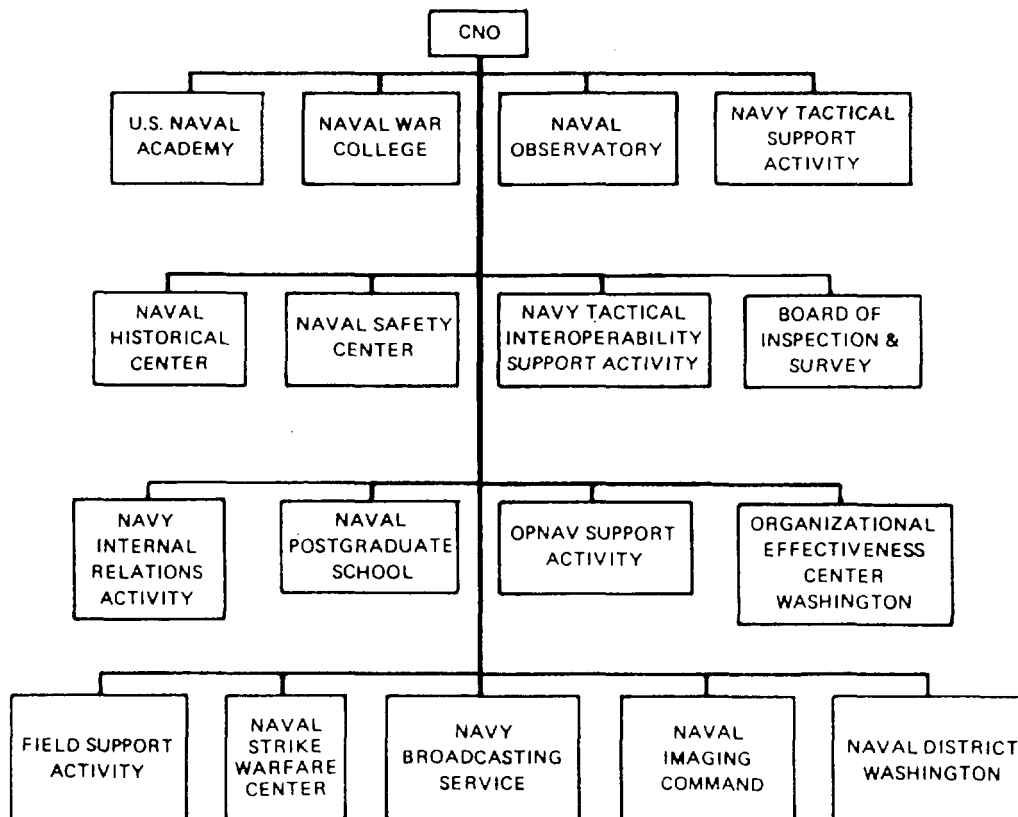

Figure 1-7.-Shore activities reporting to the CNO.

The operating forces of the Navy (fig. 1-8) include the following:

1. The composition of both Pacific and Atlantic Fleets, including forces and commands by type as follows:

    a. Fleet Marine Forces
    b. Naval Air Forces
    c. Naval Surface Forces
    d. Submarine Forces
    e. Training Commands

2. U.S. Naval Forces, Europe
3. Mine Warfare Command
4. Military Sealift Command
5. Operational Test and Evaluation Force
6. Naval Reserve Force
7. U.S. Naval Forces, Central Command
8. U.S. Naval Forces, Southern Command
9. Shore activities of the Department of the Navy assigned to the operating forces

As mentioned earlier in this chapter, the operating forces have two organizational chains of command. One is a permanent administrative chain (fig. 1-9), and the other is a task-oriented operational chain (fig. 1-10) structured to meet particular requirements. For example, a destroyer may administratively belong to a squadron (DESRON) that is part of a cruiser-destroyer group (CRUDESGRU). CRUDESGRU, in turn, is part of the surface force (SURFLANT) that reports to the Commander in Chief, Atlantic Fleet (CINCLANTFLT). Operationally the same destroyer may be deployed as part of a task element, unit, group, and force that are part of the Seventh Fleet answering to CINCPACFLT.

A task force is a subdivision of a fleet composed of several types of ships according to operational necessity. Thus, a task force may include battleships, aircraft carriers, cruisers, amphibious craft, and auxiliary vessels such as tenders or supply ships. Sometimes a fleet is large enough and its duties are extensive enough to require division into many task forces. When that happens, the task forces become part of groupings called task fleets. The division of a task force (TF) creates task groups. Task groups have numbers corresponding to the particular task force of which they are a part. For instance, if TF 77 has a task group assigned to reconnaissance, its set number will be TG 77.3. We may subdivide task groups even further into task units and task elements. For example, TU 77.3.1 is Task Unit 1 of Task Group 3 of Task Force 7 of the Seventh Fleet.

Fleet Marine Forces are type commands under the administrative control of the Commandant of the Marine Corps. These forces operate under their respective fleet commander in chief as do other type commands.
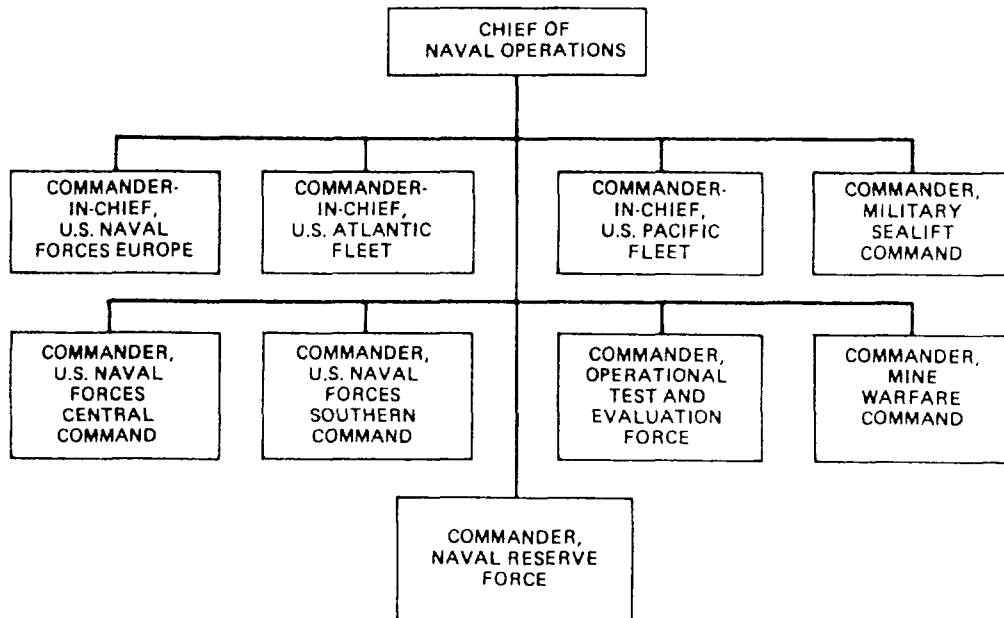

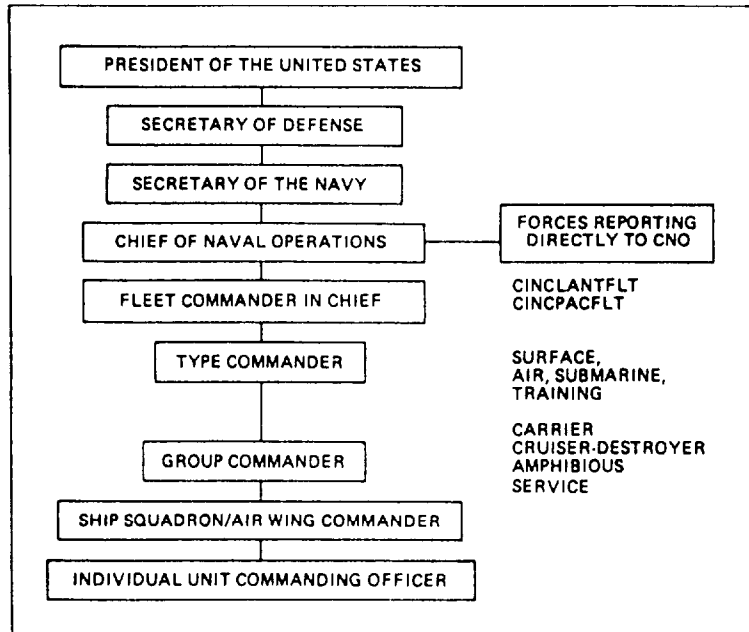Figure 1-8.-Operating forces reporting to the CNO.

Figure 1-9.-Administrative chain of command for operating units.

NOTE

* THE MEMBERS OF THE JCS ARE OPERATIONAL ADVISORS WITH RESPECT TO THE UNIFIED AND SPECIFIED SPECIFIED COMMANDS AND EXERCISE OPERATIONAL COMMAND OR CONTROL OF FORCES, ONLY WHEN DIRECTED BY THE PRESIDENT OR SECRETARY OF DEFENSE.
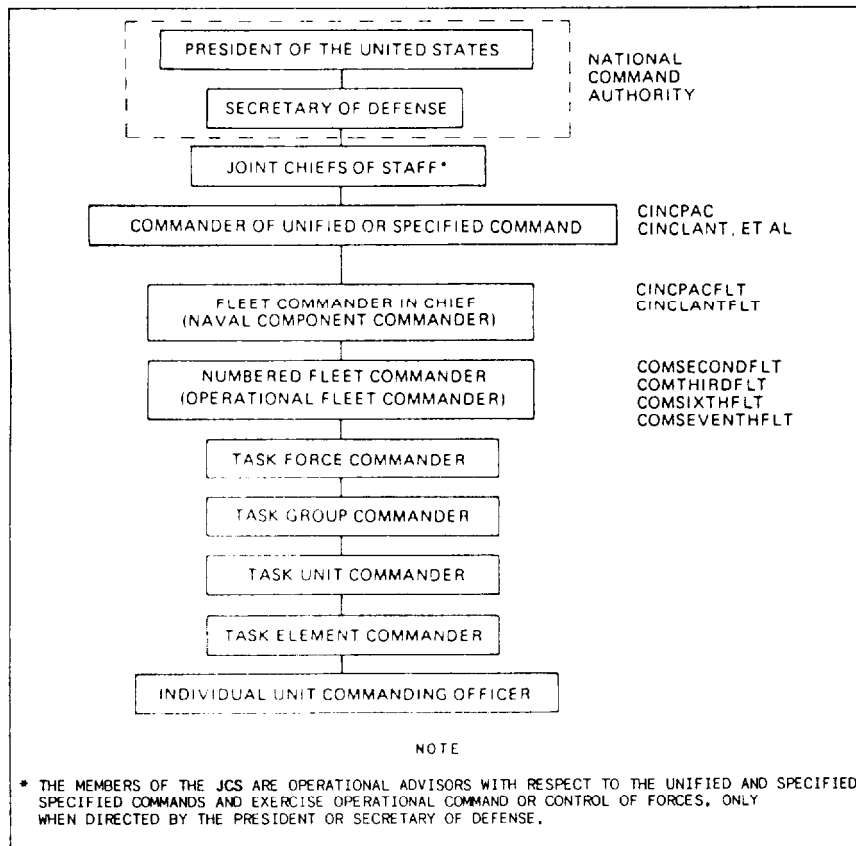
Figure 1-10.-Operational chain of command.

The Navy operates the Military Sealift Command for all armed services. The command consists of ships, tankers, and commercial vessels manned by civil service and contract personnel. The prime mission of the Military Sealift Command is to provide immediate sealift capability in an emergency. The ships of this command transport service personnel, their dependents, combat troops, and material throughout the world.

Operating forces may command shore activities that are outside the jurisdiction of an area coordinator or that provide support only to units of operating forces. Such activities may include naval air facilities, communicantions facilities, naval and submarine bases, ship repair facilities, and supply depots.

The operating forces carry out naval operations needed to support the DON's role in upholding and advancing the national policies and interests of the United States.

SUMMARY

Organization is not a new concept. Initially, you learned that in its simplest form, organization is the orderly arrangement of assets. As a person approaching middle management, you must understand the organization of our Navy.

Our Constitution authorized the building and supporting of our Navy as well as the Army. The Constitution also stated that the President of the United States would be the Commander in Chief of the Army and Navy. You have read the examples of Presidential acts that show the power of the Commander in Chief.

In 1949 the National Security Act (NSA) was amended, thus setting up the Department of Defense as we know it today. The NSA set up the position of SECDEF and gave the position presidential cabinet rank. The NSA also set up the Joint Chiefs of Staff (JCS). The Joint Chiefs of Staff are the top individuals from each service who advise the Secretary of Defense and the President on all military matters. The naval representative to the Joint Chiefs of Staff is the Chief of Naval Operations (CNO). The CNO is a member of the Department of the Navy, and so are you.

The Department of the Navy is composed of three major parts: the Navy Department, the Shore Establishment, and the operating forces. This chapter discusses these major activities.

REFERENCES

Organization of the U.S. Navy, NWP 2, Department of the Navy, Office of the Chief of Naval Operations, Washington, DC, March 1985.

Organization of the Department of the Navy, Headquarters Organization Branch, Office of the Chief of Naval Operations, Washington, DC, October 1985.

Unified Action Armed Forces, JCS Pub. 2, The Joint Chiefs of Staff, Washington, DC, December 1984.

CHAPTER 2

LEADERSHIP

LEARNING OBJECTIVES

Upon completion of this chapter, you should be able to do the following:

1. Describe how to develop a first draft of shift, office, or work center daily work schedules.

2. Explain how to apply leadership and supervisory skills.

3. Describe how to estimate time for accomplishment of tasks.

4. Describe how to direct daily work assignments using established time schedules.

5. Explain how to evaluate completed assignments of subordinates for quality, completeness, and timeliness.

6. Explain how to translate daily work requirements from immediate supervisor into specific assignments for subordinates.

7. Explain how to evaluate specific assignments to determine proper personnel to accomplish assigned tasks.

8. Describe how to coordinate availability of tools, supplies, equipment, and parts to perform required tasks.

9. Explain how to evaluate subordinates' qualifications to perform tasks.

10. Explain how to recommend formal reward/ recognition for subordinates to the immediate supervisor.

11. Describe how to counsel subordinates on professional performance.

We need men and women who by their personal integrity, their sense of moral purpose, and their acceptance of the requirement of hard work, will exemplify the best in leadership traditions of the Navy and of our country.

—Admiral Arleigh A. Burke
(USN RET) (Chief of Naval
Operations from 1955 to 1961)

As you strive to become a leader in today's Navy, you will confront many difficult leadership challenges. You will have to deal with recruiting in an all-volunteer force environment, ensuring equality for all, ending drug and alcohol abuse, and retaining valuable personnel. Leaders should know how to analyze these challenges objectively and take creative and innovative action to resolve them.

NAVY LEADER DEVELOPMENT

The Navy, with leader development goals in mind, has set up a program for its leading petty officers (LPOs) and chief petty officers (CPOs). This program is the Navy Leader Development Program (NAVLEAD). NAVLEAD was developed and designed to support career-long

leader development. NAVLEAD emphasizes the following:

- Individual commitment to self-improvement

- Command leader development training and opportunities and a positive, supportive command climate

- Formal leader development training and education programs

- Direct involvement by designated echelon 2 commands

NAVLEAD provides leadership training for naval personnel to accomplish the Navy's mission effectively. It also provides leadership training for different ascension levels in the three warfare communities for fleet and shore commands.

All NAVLEAD courses are based on 16 leadership attributes or competencies that distinguish superior performers from average performers. NAVLEAD courses refer to those competencies as "skills." The courses emphasize the knowledges, skills, behaviors, and thought patterns that research has shown to distinguish superior performers from average performers.

You can find further information about NAVLEAD course requirements in OPNAVINST 5351.2.

THE ROLE OF THE LEADING PETTY OFFICER (LPO)

The division officer normally designates the division's senior chief petty officer or senior petty officer as its leading petty officer. The leading petty officer aids the division officer in administering, supervising, and training division personnel. Those are just a few of the tasks you will perform when you serve as the LPO. You will also fulfill the following roles:

- Technical expert

- Supervisor

- Leader

- Advisor/counselor

- Mentor

To accomplish the above roles, you must learn to use 16 leadership and supervisory skills. Five steps support development of the knowledges, behaviors, or thought patterns related to these leadership skills:

RECOGNIZE SKILLS. Learn to recognize desired knowledges, skills, behaviors, or thought patterns of superior leaders.

UNDERSTAND THE SKILLS. Integrate the desired knowledges, skills, behaviors, or thought patterns into your own way of thinking.

SELF-EVALUATE IN RELATION TO THE SKILLS. Rate the relevance of the various skills, behaviors, or thought patterns to your own job, career, or life goals and identify specific areas for self-improvement.

PRACTICE THE SKILLS. Develop use of the skills, behaviors, or thought patterns by practicing them and receiving feedback on them.

PERFORM THE SKILL. Plan how you can use the skills, behaviors, or thought patterns on the job. Envision on-the-job problems, set goals to resolve them, and develop action plans that involve the use of the proper leadership skills.

Learning Styles

People learn in different ways. The way one person learns a skill or how to perform a task may not be an effective or efficient method for another person.

Most people develop a preferred, or dominant, approach to learning by using one or two styles more often than others. However, most people employ each of the learning styles, to some degree, often moving from one to the other.

To develop effective subordinates, you need to be an effective leader. That means knowing your own dominant learning style and the dominant learning style of each of your

subordinates. The four learning styles are as follows:

1. Concrete experience

People who primarily use the concrete learning style prefer an experience-based approach to learning. These people want to learn first hand without preparing beforehand. They do not want to learn by reading; they want to learn through experience.

Concrete learners have the following characteristics:

— Rely heavily on feeling-based judgments

— Are receptive to new experiences and activities

— Are people-oriented

— Prefer to treat each situation as a new case

— Learn best when they can get involved

2. Reflective Observation

People who primarily use the reflective learning style prefer to sit back and observe without getting involved. They like to see how the situation looks before making a judgment or committing themselves to learning.

Reflective learners have the following traits:

— Rely heavily on careful observations when making judgments

— Are more tentative or uncertain when it comes to learning

— Like to reflect on what they have observed before drawing conclusions

— Tend to be withdrawn

— Prefer to be objective observers

3. Abstract conceptualization

People who primarily use the abstract learning style prefer a theory-based, analytical approach to learning. These people prefer to study the topic and think about it. They don't want to learn through experience; they'd rather read about it.

Abstract learners have the following habits:

— Rely heavily on logical thinking and rational evaluation

— Are more oriented to things and symbols than they are to people

— Prefer authority-directed, impersonal learning situations that emphasize theory

— Are frustrated by "discovery" learning approaches such as role plays and simulations

— Like systematic approaches or theories

4. Active experimentation

People who primarily use the active learning style prefer to learn by becoming involved in a subject. They take a step-by-step, active approach. These people like to apply what they are learning.

Active learners have the following qualities:

— Rely heavily on experimentation

— Like to combine theory with application

— Tend to be practical and responsible

— Use feedback from others

— Use trial and error and learn from their own mistakes

Motives, Thoughts, and Behaviors

A motive is a need or want based on your personal desires or goals. A motive also leads you to think about how you would feel about reaching or not reaching the goal.

A thought leads to behavior that allows you to reach the goal.

A behavior leads to goals that satisfy your needs and wants in the initial motive.

We have three types of social motives: achievement, affiliation, and power. These motives lead to behaviors related to persons and tasks met in daily living.

The following chart shows some thoughts and behaviors that are typical of the three types of social motives:

THOUGHTS AND BEHAVIOR CHARACTERISTIC OF THE THREE SOCIAL MOTIVES

ACHIEVEMENT MOTIVE

TYPICAL THOUGHTS	TYPICAL BEHAVIORS
Outperforming someone else	Setting realistic but Challenging goals
Meeting or surpassing a self-imposed standard of excel-Ience	Looking for performance feed-back
Doing something unique Advancing one's career	Taking initiative
	Taking personal responsibility
	Trying to be innovative
	Choosing experts over friends to work with

AFFILIATION MOTIVE

TYPICAL THOUGHTS	TYPICAL BEHAVIORS
Developing and maintaining close friendships	Having many friends
Being with others to enjoy their company	Talking to others frequently; writing a lot of letters; making phone calls
Concern about separation from others and wanting to restore relationships	Choosing to be with others rather than be alone
Seeing group activities as social	Putting people before tasks
	Choosing friends over experts to work with
	Seeking personal approval
	Sympathizing, agreeing with, and consoling others
	Communicating about how others think and feel

POWER MOTIVE

TYPICAL THOUGHTS	TYPICAL BEHAVIORS
Taking strong and forceful actions	Being active in the organization's politics

2-4

POWER MOTIVE

TYPICAL THOUGHTS	TYPICAL BEHAVIORS
Giving help, advice, support (especially unsolicited)	Collecting and displaying objects of prestige
Developing strategies about how to control people and shape situations	Influencing people through control or persuasion, or offering help or aid
Thinking about the impact of actions and how others will feel or be influenced	Seeking positions of leadership
	Developing subordinates toward task performance
Thinking about status, reputation, or position	Seeking, withholding, and using information to control others

TIME MANAGEMENT

An effective leader makes the best use of time. Watch standing, competing demands, and paperwork duties are just a few examples of the time robbers that tend to take time away from your job.

Use your time efficiently. Use time management practices for day-to-day work schedules and long-term goals. Here are some time management practices that will get you off to a good start:

1. Set goals and arrange them in their order of importance.

2. Make a daily "to do" list.

3. Start with the most important goals.

4. Handle each piece of paper only once.

5. Decide which task to perform; then do it.

Set goals; then arrange them into long-term goals, lifetime goals, 2- or 3-year goals, or 6-month goals. Short-term goals are those we develop for a week at a time. Rank your goals in their order of importance; for example, A, B, C, or 1, 2, 3; today; this week; or this month.

Make a to do list at the beginning of each day. Sit down and list all the tasks you plan to do that day starting with the most important and going to the least important. Make this list regularly and at the same time each day. Rank each item on the list based on its importance; for example A = high value, B = medium value, C = low value, and CZ = no value at all. Avoid listing too much; your to do list should be challenging but realistic.

Make a decision about a piece of paper the first time you read it. Each additional time you handle the same piece of paper is a time waster.

Ask yourself, What is the smallest step or task I can or am willing to do right now? Then do it. Delegate as many of your tasks as possible, resolve issues quickly, and face people and problems immediately. Goal setting and action planning are important activities for effective leaders and supervisors.

Goal Setting

Goal setting in a work situation often begins with a recognition of critical equipment and systems problems or lack of resources in a work center. That can give you an idea of the actual (or real) operating condition of the work center.

Next you should identify the ideal conditions and needs of the work center. The ideal means the work center has high productivity with fully working systems and equipment. Looking at the ideal helps you see the operating condition of the work center as it should be.

Once you determine the real and the ideal, look at the discrepancies between them. Notice the problems that interrupt the smooth operation and productivity of some tasks. After finding the size of the gap between the real and ideal, decide whether you need to make changes to reduce the gap. Any changes should meet four criteria:

1. Be behaviorally specific: Specify what action to take
2. Be measurable: Specify criteria or checkpoints for rating accomplishment of the goal
3. Be realistic but challenging: Test your ability but have at least a 50 percent chance of attainment
4. Be time-phased: Show a time schedule or deadline for reaching the goal

Action Planning

Action planning involves four steps:

1. Taking action steps
2. Defining who will be taking the action
3. Creating a time schedule with deadlines
4. Listing skills needed to accomplish and attain the goal

EQUAL OPPORTUNITY

Equal opportunity is the practice of fair personnel management and development. It allows individual achievement, limited only by a person's aspirations, abilities, and talents. It provides for equal consideration and treatment within the laws based upon a person's merit, fitness, and capability, without additional influence of race, color, religion, gender, or national origin.

Navy personnel at all levels in the chain of command are responsible for carrying out equal opportunity. Navy policy directs that all military members and civilian employees will receive equal opportunity and treatment.

You must support equal opportunity in all of your day-to-day supervisory practices and routines. That includes the areas of justice and discipline, training and advancement, duty assignments, communications, awards and recognition, and evaluations and promotions.

You support equal opportunity when using the five leadership skill groups.

LEADERSHIP SKILLS

Through extensive research, the U.S. Navy identified a total of 16 leadership skills of superior performers. It then grouped these 16 skills under the following 5 basic areas of competence required of Navy leaders. To become an effective leader, you must recognize, understand, practice, and evaluate yourself based on the skills in each of these skill groups:

- Concern for efficiency and effectiveness

- Supervision

- Leadership

- Advising and counseling

- Applying concepts to job situations

Concern for Efficiency and Effectiveness

You show concern for efficiency and effectiveness by performing a task in the least wasteful manner (efficiency) to produce the intended results (effectiveness). Superior performers use this skill group more often, in more situations, and with better results, than do average performers.

When you use the concern for efficiency and effectiveness skill group, learn to use the following skills:

1. Set goals and performance standards.

2. Take initiative.

Both of these skills affect your performance as an effective leader.

SET GOALS AND PERFORMANCE STANDARDS. —Set goals and performance standards by taking the following steps:

1. Establish specific work goals.

2. Express concern for standards of task performance.

3. Revise goals to make them realistic.

4. Set deadlines for task accomplishments.

TAKE INITIATIVE. —To take initiative, develop the following aptitudes:

1. Start new actions or plans without being told.
2. Anticipate situations rather than react to them.
3. Take resourceful and persistent action.

Supervision

Supervision is the ability of a leader to get a job done, oversee the work process, and coordinate efforts toward task completion. The supervision skill group includes six of the leadership skills:

1. Planning and organizing
2. Optimizing use of resources
3. Delegating
4. Monitoring results
5. Rewarding
6. Disciplining

PLANNING AND ORGANIZING. —When planning and organizing how to do a job or correct a problem, first arrange the activities, people, or materials involved into a sensible order. For example, you might arrange them by priority, sequence, position in the chain of command, or administrative functions. Whatever order you decide to use, plan and organize so that you proceed from the problem to a goal.

First you must determine the specific steps you must take to get the job done. List and figure the equipment, time, and manpower needed for the job. Try to foresee any problems that might arise. Ask yourself, Are time, equipment, or personnel scarce? Do the personnel assigned have the skills or knowledge to perform the assigned tasks?

Next list your plans in their order of importance. What must be done now? What can be left until later? By deciding the order in which you must carry out your plans, you can set up a plan of action.

A plan of action lists who will do what tasks at what period. Take time to write down a plan of action. Doing that will help you work around obstacles, such as times your people will be away from the work center.

Taking the following steps will allow you to plan for interruptions and still complete the assigned task in the most efficient and effective manner.

1. Identify action steps, resources, or obstacles involved in reaching a goal.
2. Prepare a schedule.
3. Set priorities.

These steps will allow you to plan for interruptions and still complete the assigned task in the most efficient and effective manner.

OPTIMIZING USE OF RESOURCES. —Use all division personnel. Try to make every job meaningful by matching the right people with the right job. Matching your people with jobs they like to do and do well shows them you think their job is important. When you give your people jobs they have no interest in, they become bored.

Rotate your people, because doing the same job day after day gets old. Rotating your people gives them varied experience and training opportunities. It also ensures you will have people who can do the work if someone is on leave or gets transferred.

Use the following guidelines in optimizing use of resources:

1. Analyze the capabilities of individuals and the characteristics or requirements of the job.
2. Match the people and jobs to get the best performance.
3. Fully use the human resources available to accomplish tasks.
4. Consider the balance between the requirements and work morale.

DELEGATING. —Delegating authority to your people is important because it will encourage your subordinates to seek responsibility for managing tasks. Giving orders may seem like the easiest way to get a job done. However, that is not the best way to motivate an individual to be effective and efficient.

When you give an order, give a reason for the order. By explaining, your people will know you're not just making more work for them, but avoiding extra work and making the task easier.

Along with assigning a task, you must delegate your authority to carry out the task. Delegating authority works well when you have several jobs going on and can't oversee all jobs at the same time. Someone has to be in charge in every group. When you ask a subordinate to share in task

supervision, make sure the person understands the limits of that delegated authority. Morning quarters is a good time to announce daily task plans and the names of the people in charge of various groups. Delegating authority means you must hold subordinates accountable for completion of individual tasks. However, you remain responsible for completion of the entire job. Any problems from higher authority about tasks are your responsibility. Don't try to pass the blame to someone else—you made the task assignments. When delegating authority, use the following guidelines:

1. Clearly delegate authority and assign responsibility for task accomplishment to others.
2. Use the chain of command to get subordinates to share in task supervision.
3. Encourage others to seek task supervision responsibility rather than waiting for a direct order.

MONITORING RESULTS. —After you have planned your tasks and delegated authority, you must keep track of work progress. Once your people have started working, check from time to time to see if work is going as planned. Monitoring progress is especially important when you have a group of new people. You may have to check on them more often to be sure they know what type of work you expect of them. On the other hand, a group of people who have worked with you over a long time require less supervision.

As you monitor progress, make sure your people observe safety precautions. Many people are heedless of danger or think a particular regulation is unnecessary. Stress the importance of safety. Each time your people begin a job, emphasize the safety precautions involved. Should work progress slow down or come to a halt, find out why. You may then need to explain to your people what they are doing wrong and have them start over or correct their mistakes. Once your people are well into the job, check the progress of the work against a standard of performance: Does the job meet Navy standards? Are you satisfied with the work? Is the job being done according to plan? Have problems arisen you did not foresee? Was your job-person match successful? To monitor work progress successfully, follow three basic guidelines:

1. Keep track of a work process by seeking information about progress or by direct observation.

2. Check on results of own or others' action.
3. Rate the outcome of a task against a standard of performance.

REWARDING. —Once you find the results of a completed task are satisfactory, rewarding your people is important. Rewarding encourages high performance from subordinates and also shows your concern about their advancement within the Navy.

Your people feel encouraged when you tell them, "You did a good job; you took a lot of extra effort to complete it on time. Because of your efforts the job meets Navy standards." People do better work when they know you appreciate their efforts.

When possible, reward a person by praising him or her in front of your people; morning quarters is a good time. Let your people know you appreciate good work. That will help you establish a rewarding environment in which all of your subordinates feel encouraged to do a better job. You can reward and recognize many types of accomplishments. For example, you could reward a person for completing a training course, getting a college degree, or successfully completing a personnel qualification standards (PQS) requirement. Subordinates appreciate recognition for their accomplishments; it gives them an extra incentive to do better work. Reward subordinates as follows:

1. Provide feedback for average or above average performance on a specific task.
2. Publicly cite or recognize accomplishments.

DISCIPLINING. —Disciplining is almost the opposite of rewarding, because disciplining is a skill that you use to teach and correct any infractions of your people.

As a leader, you occasionally will have to warn, reprimand, or sometimes go as far as placing a person on report. You might not like some of the steps involved in disciplining, but carrying them out is part of a petty officer's responsibilities. Remember, the purpose of a reprimand is to teach, not to embarrass an individual. Before you give a reprimand, listen to your subordinate's side of the story. The person may have a logical explanation for whatever happened. Once you hear the facts and you feel the person is deserving of a reprimand, decide what effect you want the reprimand to have.

When you discipline someone, always try to do it as privately as possible. However, speak up

promptly if the person did something wrong in public; by remaining silent you will appear to condone the individual's wrong doings. If you humiliate the individual in front of others, you may lose the benefit of the reprimand. Convincing the person of the fairness of the reprimand is easier if you talk to the person in private. Some of the main points you might want to bring up during a reprimand are what was done wrong, why it was wrong, and suggestions on how to improve. After a warning, treat the individual as though nothing happened, but watch for results. Once you have taken the proper steps but have seen no signs of improvement, refer the problem to your leading petty officer, leading chief petty officer, or division officer. Follow three guidelines when disciplining:

1. Provide feedback to subordinates on in-appropriate appearance, behavior, or performance.
2. Hold subordinates accountable.
3. Discipline appropriately.

Leadership

Leadership is the ability to direct and motivate people on a person-to-person basis toward mission accomplishment. Superior performers use this skill more often, in more situations, and with better results than do average performers.

The leadership skill group involves four skills:

1. Self-control
2. Influencing
3. Team building
4. Developing subordinates

SELF-CONTROL. —Self-control means holding back an impulse to say or do something inappropriate in any given situation. Self-control does not mean you never get angry; it does, however, mean if you become angry, you control the anger. Think before you respond to people or to a situation, and then respond appropriately. Be aware of situations that trigger you to respond with an emotional outburst.

An outstanding leader controls impulses, suppresses rage, controls emotional involvement, and remains calm in potentially explosive situations. Maintaining self-control helps you to identify and weigh facts before deciding on a course of action.

Self-control also means controlling the urge to "do it all yourself. " That is a common mistake among new petty officers. They try to run the whole division by themselves by filling every role except that of a supervisor.

Self-control is the basis for leadership skills that require the skillful use of influence. As part of being an effective leader, exercise self-control in the following ways:

1. Hold back any impulse to say or do something inappropriate.
2. Do not show anger.
3. Decide only after identifying and weighing all the facts.
4. Control the urge to "do it yourself"; instead make personnel responsible for assigned tasks by supervising.

INFLUENCING. —An effective leader is skilled at influencing others. Influencing is the ability to persuade and convince others to accept your ideas. You can influence subordinates by sharing information and plans with them and setting a personal example.

New petty officers often use flattery to gain popularity. However, gaining popularity does not gain you respect; you must earn respect by gaining the confidence of your people. One way you earn your subordinates' respect and confidence is by conducting yourself properly in the daily routine of work. The same applies when ashore on liberty. Set a good personal example by refraining from the use of foul language and other actions that would bring discredit to you and the Navy.

Influence your personnel to commit themselves to the Navy's mission. Show them how they benefit from their work. You will earn the respect and trust of your subordinates when they know your exercise of authority is for the good of the Navy.

Another way of influencing your subordinates is by sharing information and plans with them. People always want to know what's going on. Sharing information with them relieves their anxieties and improves their morale. Common information you can share (as long as it is within the bounds of security) includes updates on ship movements, berth changes, and deployment schedules. That type of information will give your subordinates the opportunity to change their own plans, and they will appreciate the heads up. By showing your concern for their welfare, you influence your subordinates to trust you. Alert subordinates of upcoming drills, upkeep periods, inspections, and so forth, to give them time to prepare for them. That will promote a sense of

team work and cooperation within the work center. Remember the following guidelines when using the skill of influencing:

1. Persuade or sell ideas. Your people will buy into an idea faster if it is in their own self-interest.
2. Build political coalitions or potential influence networks.
3. Gain commitment to organizational goals, traditions, and values by appealing to a "higher" purpose.
4. Make others feel strong.
5. Influence by personal example.
6. Explain why, share information, and communicate the intent of actions.

TEAM BUILDING. —Team building is the act of promoting a spirit of team work and cooperation within or among work groups. In other words, you influence members of work groups to cooperate with each other to complete assigned tasks. In team building, you create visions of "I win, you win" situations. (There is no loser and the team is the winner.) Once a work group reaches its goal, such as achieving battle efficiency "E," subordinates will take pride in and identify with their accomplishments.

This leadership skill is especially important in nonroutine situations requiring cooperation between work groups to accomplish tasks. Once team members at all levels of the chain of command see the contribution their team effort makes to the Navy's mission, they will cooperate more readily.

Although you alone cannot develop esprit de corps among the ship's crew, your efforts can contribute to it. Wear your uniform proudly; compliment your people when they present a neat, sharp appearance. During inspections of compartment spaces, commend personnel for their team efforts and extra work in contributing to the good conditions of the spaces. Then point out any areas that need improvement and give suggestions on how to bring those spaces up to standards. Compliments, as long as they don't result in flattery, can encourage people to do a better job. Use the following guidelines when exercising the skill of team building:

1. Communicate to others the need for cooperation or teamwork.
2. Inspire teamwork in nonroutine situations requiring cooperation between people and work groups to accomplish tasks.

3. Act to create symbols of group identity, pride, or team effort.

DEVELOPING SUBORDINATES. —Effective leaders develop subordinates by instructing, coaching, helping, and training them to become leaders themselves. They help subordinates do their jobs more skillfully and responsibly to meet qualification standards.

Developing subordinates requires you to do more than give orders. You must set a good example, provide information and encouragement, and pass on your knowledges and skills. Effective leadership requires a balance between setting an example and delegating duties. Follow three guidelines when developing subordinates:

1. Transfer expertise by setting an example.
2. Provide the information and encouragement needed to get the job done.
3. Coach by making training opportunities, expert help, and resources available to subordinates.

LEADERSHIP STYLE . —Leadership style is the characteristic or typical behavior of a person in various leadership situations. The many elements that determine a person's leadership style include the following:

- The person's motives and values

- The specific leadership situation

- The person's experiences

- The job or task involved

- The leadership styles of the person's past and present superiors

The effectiveness of a particular leadership style depends on the character of the subordinates, the nature of the task, and the requirements of the task involved. Coercer, authoritarian, affiliator, democrat, pacesetter, and coach leadership styles are discussed as follows:

Coercer. —Leaders who use the coercer leadership style expect unquestioned compliance with their plans and instructions. Coercers practice the following methods in their leadership style:

1. Do not listen to subordinates' ideas or suggestions; subordinates see them as unresponsive.

2. Develop only short-range goals and plans.
3. Provide clear directions, and expect subordinates to carry out those directions.
4. Give subordinates specific, negative feedback of a personal nature.
5. Motivate primarily by threats—rarely praise or reward.
6. Do not develop subordinates; expect them to know their jobs or simply to comply with orders.

Coercers are effective in the following situations:

1. When a crises occurs
2. When emergencies occur, requiring a quick response
3. When a situation requires a leader to issue directions based on information or a perspective subordinates have no need to know
4. When subordinates must follow specific procedures exactly (that is, minor deviations from procedures will result in serious problems)

Coercer leaders are ineffective in the situations that follow:

1. When subordinates must solve problems, take initiative, or innovate
2. When a requirement for special procedures exists because of a complex organizational structure

Authoritarian. —Leaders who have an authoritarian leadership style expect to lead and make their own decisions. Authoritarian leaders use the following leadership practices:

1. Ask for input from subordinates on problems and decisions, but leave no doubt about who makes the final decision
2. Set goals and develop both short- and long-range plans
3. Direct clearly, are cordial, but leave no doubt about expectations
4. Inform subordinates of inadequate performance if a problem occurs, and give them rational reasons for needed improvement
5. Reward and discipline firmly and fairly
6. Provide indirect help to develop subordinates' skills

Authoritarian leaders are effective in situations such as the following:

1. When a need exists for special procedures because of a complex organizational structure
2. When they can use their influencing skills
3. When asking for input from subordinates and communicating results of a decision and its rationale are important
4. When subordinates may not have all the information or the comprehensive perspective needed to make a decision

Authoritarian leaders are ineffective in the following situations:

1. When the leader does not have a more comprehensive perspective on the problem or issue than the subordinates
2. When the status distinction between the leader and the subordinates is minimal (Both are petty officers, college graduates, and so forth.)
3. When the supervisor has no input requirement on decisions to help organizational performance

Affiliator. —Leaders who practice the affiliator style of leadership put people first. Affiliators have the following traits:

1. Listen a lot and are more interested in personal than task information
2. Do not set goals and standards or make explicit plans
3. Do not direct task performance clearly or exert influence on subordinates
4. Do not give task-oriented feedback
5. Reward personal characteristics, not task performance—never discipline
6. Do not develop subordinates' skills

Affiliators are effective when the following situations exist:

1. Tasks are routine (that is, everyone knows what is to be done and how to do it), and performance is at an adequate or high level.
2. Supervisors and subordinates are friends and have a close relationship.

Situations in which affiliators are ineffective involve the following:

1. Unique and complex tasks
2. Subordinates who need motivation to take initiative or be innovative
3. Substandard performance of a group or an individual
4. Decisions required based on information or a perspective possessed only by the leader

Democrat. — Leaders who exercise the democrat leadership style encourage taking part. Democrat leaders have the following approach to leadership:

1. Take an inactive part in meetings by listening only, but encourage subordinates to take an active part
2. Make decisions based on a consensus of subordinates' opinions; allow subordinates to decide upon and control work-related activities
3. Base direction upon a consensus of subordinates' opinions; try to match people and jobs
4. Give some task feedback
5. Motivate subordinates by rewarding adequate or desirable performance; give negative feedback (that is, discipline in any form) only in very limited situations
6. Work minimally toward developing subordinates' skills

Democrat leaders are effective under the following conditions:

1. All subordinates are excellent performers.
2. All subordinates are suitable for their jobs.
3. Subordinates have as much information relevant to decisions and activities as does the supervisor.
4. Subordinates must coordinate with each other to conduct independent activities.

Democrat leaders are ineffective under the following conditions:

1. Subordinates do not have access to information or a perspective that the leader has.
2. Crises or emergencies occur, which require a quick response or decision.

3. Subordinates lack an in-depth understanding of each others' work.
4. Subordinates must complete separate job tasks that will be combined to achieve the work center's goal.

Pacesetter. — Leaders who supervise using the pacesetter leadership style are self-directed and expect others to be self-directed. Pacesetters exercise the following methods of management:

1. Expect people to know their jobs and do them well (probably do not listen to others)
2. Communicate goals and standards, and set the example in their planning
3. Set the pace rather than direct, and take personal responsibility for success and failure; have difficulty delegating, so work unceasingly to try to accomplish everything alone
4. Give some task feedback
5. Reward good performance, but provide no warmth or support; often get very coercive when things go wrong
6. Develop subordinates using only themselves as a model

The pacesetter leadership style works effectively in the following situations:

1. Status distinctions between supervisor and subordinates are minimal.
2. Performance goals and standards are clear to everyone.
3. Subordinates must conduct their work independently of the leader with little coordination or integration among themselves.

The pacesetter leadership style works ineffectively when the following situations exist:

1. Subordinates must perform most of the tasks.
2. Coordination or integration is essential to task accomplishment or organizational efficiency.
3. One or more subordinates have performance problems.
4. Subordinate development must be quick, with special attention from the supervisor.

Coach. —In using the coach leadership style, leaders guide subordinates toward high standards

and improved performance, Coaches have the following traits:

1. Listen to subordinates
2. Are concerned about high performance standards, but feel subordinates should focus on self-improvement and individualized goals instead of absolute standards or goals
3. Are less directive than other leaders; see their job as one of aiding or guiding subordinates toward achieving standards (that is, not telling them or imposing the leader's view of the standards); ask subordinates to develop plans, solutions to problems, and alternate ways of accomplishing tasks; don't express personal preferences
4. Provide frequent, specific, task-oriented feedback, help, and resources to help subordinates improve performance
5. Reward task performance and improvement of performance; respond to failures by helping subordinates to improve
6. Develop subordinates effectively

The coach leadership style is effective under the following conditions:

1. Subordinates have their own access to performance-related feedback.
2. Everyone clearly understands performance measures and goals.
3. Performance feedback is available to subordinates in a timely manner.
4. Organizational goals are achievable even if one or more of the subordinates do not meet their individual performance goals.

The coach leadership style is ineffective when the following conditions exist:

1. Leaders have information which is not available to subordinates.
2. Subordinates do not have the comprehensive perspective needed to make performance-improvement decisions.
3. The organization's performance depends on the attainment of certain performance goals by every one of the subordinates.
4. Performance feedback is not easily obtainable from the coach or is not clear in its interpretation.
5. Decisions about the group's activities or performance have to be made in a rapid manner.

Advising and Counseling

Advising is the ability of a leader to provide needed information to help a person take action to correct a problem. Counseling is the ability of a leader to help a person explore, better understand, and find solutions to a problem. An effective leader uses this skill group more often, in more situations, and with better results.

Every ship has a limited number of crew members, each with various levels of training and expertise. Whether they have extensive or minimal training, everyone has a specific job. Every member contributes to the success of the mission and the welfare of the crew. Therefore, the problems of every subordinate should greatly concern you as a leader.

When you became a petty officer, you received more pay, but also more responsibilities. Those responsibilities include any personal problems that affect your subordinates' performance, such as marital, family, and financial problems. When those problems affect a person's performance, they will, in turn, affect the entire work group. Help your people solve their problems; in turn, you will gain respect and trust from others in the division.

The Navy has many helping resources to help personnel with problems. Become familiar with these helping resources and their specific purposes so that you can advise subordinates on how to get help with personal problems.

If you are effective in advising and counseling subordinates, you achieve the following results:

1. Solve problems more quickly by dealing with them within the work group.
2. Increase morale by building trust.
3. Ease the pressure on superiors by resolving situations at your own level.
4. Save time and energy of the few professional counselors for truly serious problems.

Although you should believe and trust in your subordinates' basic worth and ability to perform, you will sometimes have subordinates who do not meet standards. Learning to apply the three skills of the advising and counseling skills group will help you deal with those situations more effectively:

1. Positive expectations
2. Realistic expectations
3. Understanding

POSITIVE EXPECTATIONS. —Leaders who have positive expectations express a belief or trust in people's basic worth or ability to perform. Your expectation of your subordinates' ability to perform affects the climate in which they work. Positive expectations are important in motivating subordinates to work, but they are also important in advising and counseling sessions.

So far, we have only talked about leadership skills that deal with actions and behavior. The skills in the advising and counseling skill group deal with how you think. Since the way you think affects your actions, your subordinates can see how you view their basic worth. Therefore, they will know if you have positive expectations.

To develop positive expectations of a person, follow five basic guidelines:

1. Focus and build on the person's strengths, not weaknesses.
2. Express positive expectations about the person's abilities.
3. Listen and pay attention to the person.
4. Emphasize the person's worth.
5. Have confidence in your own ability to help the person solve the problem.

REALISTIC EXPECTATIONS. —Subordinates will have high levels of productivity only if they consider your expectations to be realistic and achievable. If you encourage subordinates to strive for unattainable goals, they will eventually quit trying to reach those goals. They will then settle for lower productivity than they are capable of achieving.

A leader's realistic expectations are those doubts and concerns about the ability of others to perform. Realistic expectations help you see personal blocks that prevent a person from solving problems or learning how to operate equipment.

Expectations affect performance. If you expect subordinates to perform poorly, you will be unable to hide that expectation from your subordinates. Indifferent and noncommittal treatment of subordinates usually communicates low expectations, which, in turn, leads to poor performance. For example, suppose you say nothing about your subordinates' performance. They might then interpret your silence to mean you are unhappy with their work or that they cannot do a good job.

Realistic expectations and negative expectations are completely different. Realistic expectations involve objectively assessing a subordinate's ability. Negative expectations involve "prejudging," "getting down on," or "giving up on a subordinate." Negative expectations can lead to undesirable performance.

UNDERSTANDING. —Effective leaders accurately identify and help others to understand what created a problem. They accurately assess the motives, thoughts, and behavior patterns of others and respond appropriately to improve job performance.

When a personal problem causes a performance problem, know what resources are available to help the individual. Your subordinates will respect your knowledge, experience, and advice and will appreciate any interest you show in their welfare.

ADVISING AND COUNSELING SES-SIONS. —This section explains key points involved in effective advising and counseling sessions. It covers types of advising and counseling sessions and the actual process involved in each.

KEY COUNSELING POINTS

We perform counseling to solve a problem or to fulfill a need.

Determine interview goal before meeting Review available records.

Give the individual the facts, whether they are pleasant or unpleasant.

Be a good listener. Be fair.

Refer individual to other resources for professional help, as needed.

Keep the individual's problem confidential.

Help the individual grow in self-understanding.

DO NOT lose your self control. The results could be disastrous.

DO NOT make promises you can't keep.

DO NOT be quick to decide; not all problems are solvable in a single counseling session.

DO NOT forget to document the counseling and have the counselee sign the counseling sheet.

You will be involved with four major types of advising and counseling sessions:

1. Personal
2. Career
3. Performance
4. Disciplinary

For each type of session, you should understand the nature of the problem and the purpose or intent of the meeting with the counselee. You should also understand the desired results, actions, or behaviors from the counselee as a result of a session.

TYPE OF PROBLEM	DESCRIPTION OF PROBLEM	PURPOSE OF ENCOUNTER	DESIRED OUTCOMES
PERSONAL	The person has difficulty coping with situations either on or off the job. Problems could be financial, legal, interpersonal, educational, moral, religious, etc.	Explore situation Clarify events and feelings Give support Share Refer to other resources	Generation and evaluation of alternatives Action plans Problem solutions Increased trust Counselee takes responsibility for situation Clarification of feelings or understanding Feeling strong
CAREER	The individual may be (1) seeking options or ideas to plan career paths, (2) making a significant decision towards change, or (3) considering further education and training.	Give information Explore opportunities for promotion and/or training Analyze (informally) skills, experience, and training Refer to trained career counselor	More informed choices Action plans for change Increased alternatives
PERFORMANCE: Ineffective	The individual is not performing at a level consistent with unit or command standards.	Explore factors behind low performance Inform individual of negative evaluation Set mutual standards and expectations	Mutual understanding of agenda for improvement Motivation towards improvement
PERFORMANCE: Effective	The individual is performing in an average or above average manner.	Reward Provide performance feedback Motivate Suggest areas for further improvement	Increased self-worth Feeling strong Desire to do better

TYPE OF PROBLEM	DESCRIPTION OF PROBLEM	PURPOSE OF ENCOUNTER	DESIRED OUTCOMES
DISCIPLINARY	The individual has violated a specified rule or regulation	Inform of action being taken	Understanding of violation
		Determine if the behavior is indicative of related problems	Plans for preventive action
		Legal notification	
		Inform individual that standards have not been met	

ADVISING AND COUNSELING PROCESS. —The advising and counseling process requires you to take five-steps:

1. Start the session.
2. Create suitable conditions for the session.
3. Explore and understand the real (how the situation is now).
4. Move toward the ideal (where the counselee would like to be).
5. Monitor and follow up.

Remember that as a leader you're not considered or trained to be a professional counselor. You should refer personnel with problems requiring professional counseling to the right helping resource.

Start the Session. —To start the advising and counseling process, let the counselee know that you want to talk to him or her. In some cases, the counselee might come to you, in which case, he or she would be starting the session. Next choose a suitable place to meet; choose a place where you will have the least amount of interruptions. Then agree on a time to meet; allow enough time to conduct a proper and effective session.

Create Suitable Conditions for the Session. — To create suitable conditions for a session, prepare ahead of time. Try to ensure you won't have to stop during the session to do something else. Make sure the meeting place will be physically comfortable; the office should have a quiet atmosphere and a comfortable place to sit. Help the counselee feel at ease; for example, you could serve coffee. Guarantee confidentiality within your legal bounds, and be attentive.

Explore and Understand the Real. —Start your session off by stating the reason for the counseling session. Let the counselee know of your concern about the situation. Try to elicit information that might help you and the counselee understand the real (how the situation is now). Discuss the situation as fully as possible so that you both understand it.

Move Toward the Ideal. —Have the counselee state his or her ideal goal (how the counselee would like the situation to be) in solving the problem. State your realistic expectations about the counselee by expressing doubts and concerns; then identify any blocks that might prevent the counselee from solving the problem.

Suggest sources of outside help. When you can, provide additional and professional help. Identify optional actions; for example, set an appointment at a helping outside resource or call the chaplain for an appointment. If you handle the situation correctly, the counselee will feel good about the session and feel resolving the situation is possible. Encourage the counselee to commit to the optional actions by keeping his or her appointments. Stress that the counselee must follow through on the actions he or she agrees to. State your positive expectations by stating the counselee's abilities; that will build the counselee's strengths and help him or her succeed in reaching the goal.

Monitor and Follow Up. —Agree on who is responsible for monitoring any changes that will occur throughout the counseling process. Your counselee has committed himself or herself to improve or make a change. Agree on what action you will take if the counselee carries out the commitment as planned. Also agree on what

actions you will take if the counselee does not follow through. Give the counselee some time to resolve the problem, but agree on a follow-up session. Be sure to set a time and a place for the follow-up session.

Applying Concepts to Job Situations

The applying concepts to job situations skill group involves one skill—conceptualizing. To become an outstanding petty officer and leader, conceptualize in the following way:

- Look at the situation.

- Rigorously search for and identify the available facts.

- Organize the facts and draw conclusions.

SUMMARY

In your role as a learner or a teacher, you should be aware of the four learning styles: concrete experience, reflective observation, abstract conceptualization, and active experimentation. To be an effective leader and instructor, you need to know your own dominant learning style.

A motive is a need or want based on desires or goals. A motive will cause you to think about what is needed to reach that goal and how to reach those needs.

When you have concern for efficiency and effectiveness, you will perform tasks in the least wasteful manner to produce the intended results.

Superior leaders have 16 basic leadership skills:

- Setting goals and performance standards

- Taking initiative

- Planning and organizing

- Optimizing use of resources

- Delegating

- Monitoring

- Rewarding

- Disciplining

- Self-controlling

- Influencing

- Team building

- Developing subordinates

- Developing positive expectations

- Developing realistic expectations

- Understanding

- Conceptualizing

Although leaders have one primary leadership style, they sometimes use a combination of the six styles: coercer, authoritarian, affiliator, democrat, pacesetter, and coach. The effectiveness of a leadership style depends on the people being led, the requirements of the task, and the situation.

You will conduct four types of advising and counseling sessions: personal, career, performance, and disciplinary. Each session involves five steps:

1. Starting the session
2. Creating suitable conditions for the session
3. Exploring and understanding the real (how the situation is now)
4. Moving toward the ideal (where the counselee would like to be)
5. Monitoring and following-up

The Navy needs professional leaders who have high standards, possess great skills, and who are willing to study and learn to achieve their full potential. As a petty officer it's your job to become an effective leader. Effective leaders use the knowledges and behaviors involved in the 16 leadership skills. The extent to which you, as a Navy leader, apply these leadership skills depends, in part, on your level in the chain of command or your specific job situation.

REFERENCES

Navy Leader Development Program Leading Petty Officer Course, Student Guide, NAVEDTRA 38224-A, Chief of Naval Technical Training, Memphis, Tenn., 1991.

CHAPTER 3

PROGRAMS AND POLICIES

LEARNING OBJECTIVES

Upon completion of this chapter, you should be able to do the following:

1. Explain the programs and policies of Command Managed Equal Opportunity (CMEO).

A new nation . . . dedicated to the proposition that all men are created equal.

—Abraham Lincoln, 1863

The United States Navy has a special set of moral, ethical, and behavioral standards; those standards form the foundation of the Navy's Personal Excellence Program goals. One of those goals is the Navy's commitment to achieving an environment that supports equal opportunity. The Navy strives to guarantee equal opportunity and treatment for all, regardless of race, color, religion, gender, age, or national origin within constraints of the law. The Navy does not tolerate discrimination.

All Navy men and women should strive to maintain the highest personal standards. They should create a model environment where the opportunity to succeed depends only on each person's aspirations, abilities, and talents.

The pursuit of an environment free from discrimination is an element of leadership. Leaders at all levels of the chain of command are responsible for creating and maintaining a climate that fosters equal opportunity. That includes the Chief of Naval Operations (CNO); the Chief of Naval Personnel, with assistance by the Human Resource Management Department; and the fleet commanders in chief and their chains of command down through unit commanding officers.

You too, as a petty officer and leader, have an important role in the Navy's equal opportunity (EO) efforts. You should make every effort to prevent sexual harassment and to enforce EO among command personnel.

Although EO covers a wide range of day-to-day practices and routines, you will be involved in specific areas. Those areas include discipline, duty assignments, grievance procedures, training and advancement, and awards and recognition.

COMMAND MANAGED EQUAL OPPORTUNITY (CMEO)

Command Managed Equal Opportunity (CMEO) is a program through which the Navy guides commands in carrying out equal opportunity. It is a management system that is responsible to higher echelons but with control primarily at the command level.

PURPOSE OF CMEO

The purpose of CMEO is to establish the EO program for each command. CMEO directs the chain of command to take the following EO actions:

- Create and maintain a positive EO climate within the command

- Identify and resolve EO/sexual harassment problems and concerns

● Monitor the command's EO climate

● Ensure that merit, ability, performance, and potential are the only factors that affect individual promotion, training, duty assignments, and any other action

CMEO AS AN EO MANAGEMENT SYSTEM

CMEO is a management system that has the flexibility to respond to command-specific needs. CMEO draws resources from outside the command as necessary. Figure 3-1 shows the interrelationship of all segments of the EO management system.

COMMAND REQUIREMENTS

Within any command, CMEO consists of the following minimum elements:

● Command training team (CTT)

● Command assessment team (CAT)

● Action planning

● Inspections

COMMAND TRAINING

The Navy tries to ensure all personnel have a clear understanding of their military rights and responsibilities. It does that by requiring them to attend a Navy Rights and Responsibilities (NR&R) workshop. Each NR&R workshop provides training on basic EO principles, policies, and procedures.

Command Training Team (CTT)

The command training team (CTT) consists of a group of command personnel trained to present the NR&R workshops. Prospective CTT members receive formal training in conducting NR&R workshops. They receive the training from a Chief of Naval Education and Training (CNET) activity, mobile training team (MTT), or by an equal opportunity program specialist (EOPS) from a major command or staff. The following guidelines apply to the CTT:

● Each Navy command, except those with less than 50 military personnel, appoints
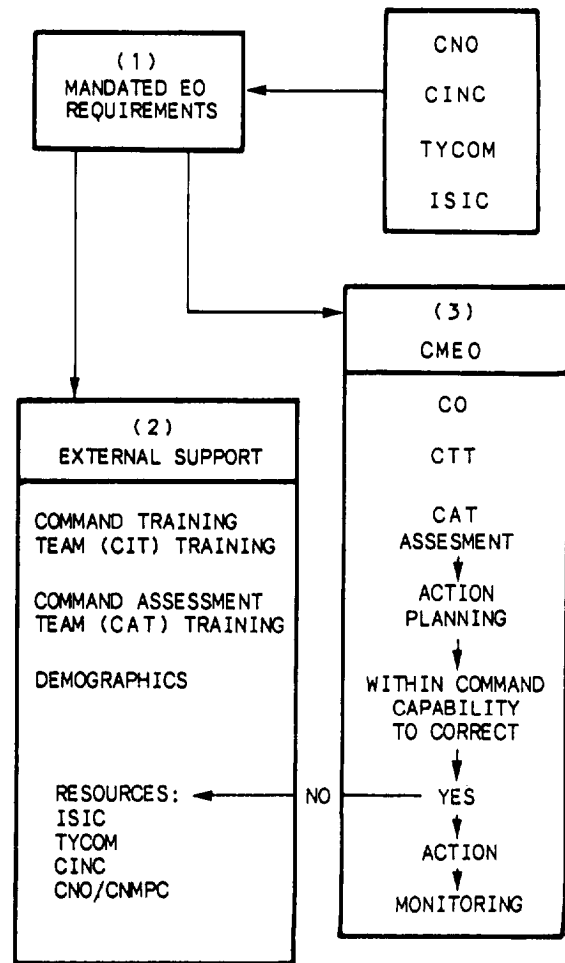

Figure 3-1.- Interrelationship of the EO management system.

a CTT consisting of a minimum of at least two members in paygrade E-6 or above with training in conducting NR&R workshops. Minimum CTT size is as follows:

COMMAND SIZE	CTT
50-100	2
101-200	3
201-300	4
301-above	5

● Commands with less than 50 military personnel have no requirement to have a formally trained CTT if they can make

arrangements to participate in the NR&R workshops of a host or neighbor command, They are still responsible for addressing command-specific issues and policy updates.

- Commands must document formal CTT training in the member's service record.

- Members of the CTT who are inactive for over 24 months must repeat the formal training.

- Members of the CTT should complete the *Equal Opportunity in the Navy* nonresident training course (NAVED-TRA 13099-D) within 3 months of assignment to the training team.

- Prospective CTT members must have a minimum of 18 months remaining before their planned rotation date (PRD) from their assignment date.

Navy Rights and Responsibilities (NR&R) Workshops

All personnel must attend an NR&R workshop within 90 days of reporting to a new permanent duty station. Commands must conduct training frequently enough to keep the class size below 20 people. All lesson topics follow an NR&R workshop course guide provided by CNET. Everyone fills out a critique sheet as a means of feedback on workshop effectiveness.

Commands hold an annual all-hands NR&R workshop. The annual workshop includes sexual harassment prevention training, review of the latest Navy EO policies and the Navy EO climate, and a forum for discussing CNO and command-specific issues. The annual workshop, held in conjunction with the annual command assessment, uses the training guide that CNET provides.

COMMAND ASSESSMENT

Conducting a successful and effective EO program requires each command to accurately assess its current EO status. The command assessment focuses on the treatment and achievements of individuals. It also looks at the overall effectiveness of command EO programs and the follow-up actions on previous EO issues. The assessment uses command demographic information (factors such as age, race, ethnicity, gender, rank,

paygrade, designator, and rating). This is a formal assessment that includes the command assessment team (CAT) and data sources.

Command Assessment Team (CAT)

The command assessment team (CAT) is a group of command personnel trained to plan and conduct a command assessment. They are also trained to analyze the data they collect. CATs receive training from a CNET activity, MTT, or EOPS from a major command or staff. The command must record this training in the member's service record. The following sidelines apply to the CAT:

- Mandatory membership includes the executive officer (XO), at least one department head, and the command master chief (CM/C) (or equivalent). When a command has a command career counselor and/or personnel officer and/or legal officer, they should be members. Remaining members should be a cross-section of paygrades, genders, races, and departments of command personnel. All CAT members, including those who have mandatory membership, must receive formal training. The commander has the prerogative to increase the size or scope of the CAT. Regardless of team composition, final responsibility for CAT effectiveness remains with the commander.

- Members of the CAT who are inactive for over 24 months must repeat the formal training.

- Members of the CAT should complete the *Equal Opportunity in the Navy* nonresident training course (NAVED-TRA 13099-D) within 3 months of assignment to the assessment team.

- Prospective CAT members must have a minimum of 18 months from their assignment date remaining before their PRD (does not apply to mandatory membership).

Data Sources

The CAT receives specific training in using the following resources to conduct command assessments:

- Command training records, records on the sailor of the month/quarter/year award

file, meritorious mast records, records on discrimination and sexual harassment complaints, and retention files

- Interviews to gain valuable information, such as what is actually happening in a command as well as what people perceive is happening and how they feel about it

- Observations (made without disturbing the environment or injecting a bias) to determine what people actually do or how they behave and interact

- Surveys to detect the command climate

Collection and Maintenance of Demographic Data

One of the primary functions of the annual command assessment is collection of demographic data on retention, advancement, and discipline. Each command determines the most effective method of data collection for its organization. All commands take the following steps in the collection and maintenance of demographic data:

- Classify all demographic data collection and analysis by race/ethnic group, gender, paygrade, rating, division, and department.

- Collect and analyze all reenlistment and separation data (raw numbers and percentages). Retention data include personnel who are eligible to reenlist as well as those who are ineligible. Separation data show types of separations by race/ethnic group.

- Analyze advancement data on personnel in zone for advancement. Data show those personnel who are eligible for advancement, are recommended for advancement, were advanced, passed but were not advanced, and failed.

- Analyze military justice data, including the number and proportion of persons put on report, screened by the executive officer (XO), dismissed, and assigned extra military instruction (EMI). Also analyze the number and proportion of persons referred to commanding officer's mast and to courts-martial and the results of those masts and courts-martial. Analyze types of punishment for similar offenses between race/ethnic groups and by gender for disparities in severity of punishment.

- Retain demographic data and the results of the command assessment for at least 36 months and then destroy them.

Frequency of Assessment

Commands perform EO assessments annually. However, commands may perform an assessment more often if a particular incident requires a special assessment.

ACTION PLANNING

Once commands identify specific issues, they can address those problems systematically. The CAT first defines and analyzes the problem and then generates and evaluates courses of action. Finally, it recommends to the commander the most appropriate courses of action. The command then develops plans of actions and milestones (POA&Ms) to monitor its effectiveness.

INSPECTIONS

Immediate superiors in command (ISICs) inspect the CMEO program as a special interest item during subordinate command inspections. ISICs have a thorough knowledge of all aspects of CMEO. ISICs must conduct CMEO inspections at least every 36 months.

SUMMARY

CMEO is a Navywide program that requires individual commands to use their own personnel to assess their own equal opportunity (EO) status. It also requires individual commands to take corrective actions as often as needed to ensure equal opportunity.

CMEO makes the chain of command responsible for achieving and maintaining a positive EO condition within the command. It also provides that personnel receive promotions, training, duty assignments, and other personnel actions based only on their merit, ability, performance, and potential.

The elements of CMEO are a CTT, a CAT, action planning, and inspections.

REFERENCES

Navy Equal Opportunity, OPNAVINST 5354.1C, OP-151, Office of the Chief of Naval Operations, Washington, D.C., 1989.

CHAPTER 4

PROFESSIONAL DEVELOPMENT

LEARNING OBJECTIVES

Upon completion of this chapter, you should be able to do the following:

1. Describe the procedures to prepare draft inputs for enlisted performance evaluations.

2. Describe the use of performance recordkeeping and its relation to performance evaluations.

3. State the purpose of the petty officer quality control review board.

4. List the incentives for reenlistment, education, and special duty.

5. Identify the sources of information concerning financial management for junior personnel.

6. Describe the different types of money management used by junior Navy personnel.

7. Describe the use of credit by junior Navy personnel.

Sign on with me. The stature of our homeland is no more than the measure of ourselves. Our job is to keep her free. Our will is to keep the torch of freedom burning for all. To this solemn purpose we call on the young, the brave, the strong, and the free. Heed my call. Come to the sea. Come sail with me.

—John Paul Jones

The purpose of this chapter is to help you in your professional development. We will begin by discussing your responsibilities in rating the performance of subordinates. We will discuss the Report of Enlisted Personnel Evaluations along with the Navy's performance standards, procedures for rating personnel, performance recordkeeping, and the petty officer quality control review board.

This chapter will tell you how to develop yourself professionally. By now you are well into your enlistment; you might be considering reenlisting, changing your rating, or continuing toward other goals. These concerns and many more form the basis for your long-range career planning. You should also take interest in career opportunities to improve yourself professionally.

We will discuss career-enhancing programs such as the Selective Conversion and Reenlistment (SCORE) Program, the Selective Training and Reenlistment (STAR) Program, and the Guaranteed Assignment Retention Detailing (GUARD) Program. We will present brief descriptions of incentives for a Navy career such as special programs, special-duty assignments, and reenlistment bonuses.

Finally, we present the sources of information concerning financial management for junior naval personnel. Ask your division chief, your educational services officer (ESO), your command career counselor (CCC), or your command master chief (CM/C) for more information and material on subjects discussed in this chapter.

PERFORMANCE AND EVALUATIONS

As a P02 you may have to rate your assigned personnel on how well they work as a group and

	EVALUATION SECTION *Requires Comment	NOT OBS	4.0	3.8	3.6	3.4	3.2	3.0	2.8*	2.6*	2.0*	1.0*
PROFESSIONAL FACTORS	27 MILITARY KNOWLEDGE/ PERFORMANCE											
	28 RATING KNOWLEDGE/ PERFORMANCE											
PERSONAL TRAITS	29 INITIATIVE											
	30 RELIABILITY											
	31 MILITARY BEARING											
	32 PERSONAL BEHAVIOR											
	33 HUMAN RELATIONS INCL EQUAL OPPORTUNITY											
SELF EXPRESSION	34 SPEAKING ABILITY											
	35 WRITING ABILITY											
LEADERSHIP	36 DIRECTING											
	37 COUNSELING											
	38 MANAGEMENT (E-7/8/9 Only)											
	39 OVERALL EVALUATION		*									
	40 SUMMARY (Required for E-4 & Above)											

1 NAME (Last, First, Middle or Middle Initial)   **2 RATE/RATING**   **3 SSN**

BRANCH/CLASS 4 ☐ USN 5 ☐ USNR   **STATUS** 6 ☐ ACTIVE 7 ☐ INACTIVE 8 ☐ TEMAC 9 ☐ ACDUTRA

10 MEMBER'S SHIP OR STATION   **11 MEMBER'S UIC**   **12 DATE REPORTED**

OCCASION FOR REPORT 13 ☐ Periodic 14 ☐ Transfer 15 Other   **PERIOD OF REPORT** 16 From   17 To

TYPE OF REPORT 18 ☐ Regular 19 ☐ Con-Current   **20 HEIGHT & WEIGHT/PHYS. QUAL.**   **21 RESERVE PART**   **22 EFF DATE OF RATE**

23 REPORTING SENIOR'S NAME (Last and Initials)   **24 RANK**   **25 TITLE**   **26 SSN**

ADVANCEMENT RECOMMENDATION 41 ☐ Recommended 42 ☐ Progress Toward 43 ☐ Not Recom *

45 SIGNATURE OF REPORTING SENIOR

44 SIGNATURE OF MEMBER
I acknowledge that I have seen this evaluation report and understand my rights under Article 1110, U.S. Navy Regulations (1973) to submit a statement.

Statement Desired Not Desired (cross out as appropriate)

46 ADDRESS OF REPORTING SENIOR

47 TYPED NAME AND SIGNATURE OF REGULAR REPORTING SENIOR ON CONCURRENT REPORT   **48 DATE FORWARDED**   **49 DATE FWD** (If 47 Used)

NAVPERS 1616/24 (5-82) SN 0106-LF-016-1720
Report NMPC 1616-1   *GPO 1983-687-021/1325

Figure 4-1.-Enlisted Performance Evaluation Report (front).

how each works within the group. You may simply need to provide an input to the evaluations of your personnel, such as a list of tasks accomplished or short sentences or paragraphs describing tasks accomplished. You may need to submit a "rough" evaluation, including tentative marks in all areas and narratives in appropriate blocks of the evaluation form. No matter what the submission requirements are, you can expect guidance from your leading petty officer or chief.

You rate the performance of personnel for several reasons. For example, you check people to single out the best worker for each job. You also want to recognize those with the potential for accepting increased responsibility, to determine who is eligible and who warrants advancement in rate, and to provide feedback to personnel on the quality of their performance. As a petty officer, you will be responsible for providing your subordinates with fair evaluations of their performance.

To make personnel evaluations as fair as possible, the Navy has set up the Enlisted Performance Evaluation System. This system helps the Navy do the following:

● Determine eligibility of an individual for reenlistment, honorable discharge, and Good Conduct awards

● Permit the commanding officer to influence the advancement opportunities of

outstanding personnel or to identify unsatisfactory performers

● Select personnel for advancement, appointment to commissioned status, assignment to special duties, and for special educational programs

The commanding officer or officer in charge is responsible for the performance evaluations of all assigned personnel; but the immediate supervisor, such as yourself, usually makes the initial input. Review of this initial input is through the chain of command. We prepare final reports on evaluation forms (figs, 4-1 and 4-2) for the signature of the commanding officer or a delegated officer.

REPORT OF ENLISTED PERFORMANCE EVALUATION

We complete evaluations on all personnel once each year and make special evaluations on certain occasions. Three general types of reports exist: periodic, transfer, and other. Periodic reports are those submitted on the reporting dates set by NAVMILPERSCOMINST 1616.1A. We submit transfer reports upon a member's permanent change of station, including detachment to and from temporary duty. We submit other reports to fulfill a requirement other than a periodic or transfer report. The occurrence of any of the

Figure 4-2.-Enlisted Performance Evaluation Report (back).

following actions may result in submission of another report:

Advancement

Special discharge (to document superior or substandard performance)

Release from active duty

Retirement

Transfer to the Fleet Reserve

To be effective, evaluations must be uniform. For this reason NAVMILPERSCOMINST 1616.1 gives guidelines for making the reports.

We rate personnel on professional factors, personal traits, self-expression, and leadership. (We also rate E-7s, E-8s, and E-9s on management.) We rate personnel within a paygrade against the performance of others in the same paygrade. The evaluation of the several factors should accurately reflect the performance of each Navy member as an individual and that member's worth to the Navy. You should look at each person carefully and mark in the box after each trait that most nearly reflects the person's performance, ability, or attitude. You should consider all facts about the person. Write your report with as little bias as possible. Keep in mind that the evaluation is for an entire period and not for just a few days preceding the evaluation.

THE NAVY'S STANDARDS
OF PERFORMANCE

The Navy has always tried to recruit and keep the best personnel. This policy results in a high caliber of Navy personnel. The evaluation system assumes that each command has a competent crew and that most of the people perform their duties well. Only those that are exceptionally outstanding or unsatisfactory should receive evaluations in the highest or lowest areas.

Each higher paygrade requires a higher standard of performance. We require a higher standard because of the increased experience of the personnel and the decreased number of people against which we rate a person's performance. However, we should rate individuals within each paygrade against the performance of others in the same grade and NOT against that of persons in higher or lower grades. Therefore, you should

take the following factors into consideration when rating your people:

1. All naval personnel are high-caliber personnel and are generally competent in the performance of the duties of their rate.

2. You must assume that all crews have their share of excellent, good, and poor personnel.

3. Personnel in each paygrade must be rated on the basis of their own merit in relation only to the performance of others in the <u>same rate and rating</u>. When a person has an assignment outside the normal duties of his or her own rate or rating, we compare that person with others of the same paygrade performing similar duties.

4. A command should be sure the number of personnel who we rate very high, in the middle, and very low approximate the numbers expected of average crews. This means your superiors may from time to time adjust the evaluations you give your personnel. This should NOT be done randomly. It should be done objectively to make sure the command's evaluations show patterns that ensure the success of the system.

The following section contains specific hints to guide you in rating your subordinates.

DO'S AND DON'TS OF EVALUATIONS

You must be objective when you assign marks. Friendships are not evaluation factors. Your duty requires you to report performance as accurately as possible.

● Learn to observe your personnel. Know their strong points. Recognize their weaknesses and help them overcome them.

● Compare each person you rate with the rest of those you know in the same paygrade.

● Assign marks you think your people deserve. Don't let rumors and gossip influence you about your personnel.

● Be impartial. Avoid personal likes and dislikes.

● Be factual. Make your comments reflect what your people have actually done.

● Don't let your marks on one trait influence your marks on the other traits. Remember, just because a person is good in one area doesn't mean that person is automatically good in other areas.

- Don't form opinions of your people from isolated incidents. One good job does not make a good worker, and one bad job does not make a bad worker.

- Don't guess when you mark evaluations. Get other people's inputs if necessary.

EVALUATING PERSONNEL

When preparing an input to evaluations, you should have a clear understanding of the method of rating used by the Navy. The Navy uses numerical values from 1.0 to 4.0 to rate personnel in several groups. The numerical values and their meanings are shown below:

4.0-3.8	First rate
3.6-3.4	Above expectations
3.2-3.0	Satisfactory
2.8-2.6	Below expectations
2.0-1.0	Unsatisfactory

Evaluations consist of four major groups, each consisting of two or more subgroups. The major groups are (1) professional factors, (2) personal traits, (3) self-expression, and (4) leadership. The subgroups are either marked with a numerical value or marked Not Observed. You should rate each subcategory objectively. The following sections describe the traits rated by each subgroup.

Professional Factors

Military knowledge/performance measures knowledge and performance of military customs; watch-standing duties; responsibilities within the chain of command; and knowledge of, and contribution to, the command's mission.

Rating knowledge/performance measures knowledge and performance of job-related duties, application of technical and professional skills, problem-solving abilities, and ability to accept instruction and direction.

Personal Traits

Initiative rates the ability to act appropriately, independently, and without specific direction, and the ability to exercise sound judgment. It also measures the ability to set goals and performance standards.

Reliability rates whether we can depend on a person to perform assigned tasks successfully and in a timely manner. It rates whether we can depend on a person to be at the assigned place of duty when needed. It rates the degree of support shown for policies of the command and the Navy. It is also a measure of a person's integrity.

Military bearing rates personal appearance, including physical fitness; the wearing of the uniform; and, when appropriate, the neatness of civilian clothing. It also rates a person's knowledge and practice of military courtesies and the way a person presents himself or herself as a member of the Navy.

Personal behavior assesses a person's behavior and conduct, both on and off duty.

Human relations, including equal opportunity, measures the ability to work successfully with subordinates, peers, and superiors. It measures a person's contributions to the morale of the unit and the support of the Navy's Equal Opportunity Program.

Self-Expression

Speaking ability rates the ability to use the English language to express oneself orally. It is a measure of the correct use of the language, clarity of speech, and organization and presentation of thoughts.

Writing ability rates the ability to use the English language effectively to write. It measures the quality of written work, the presentation of thoughts, and the correct use of English grammar.

Leadership

Directing rates leadership skills in the achievement of common goals. The ability to delegate, to gain commitment from others, and to challenge and inspire subordinates while maintaining positive and realistic expectations are all taken into account.

Counseling rates skill in counseling people. We rate the ability to confront, where warranted, and to praise, where justified. We also rate their ability to help subordinates in resolving professional and personal problems. We also rate support of the Navy's retention efforts.

Overall Evaluation

The overall evaluation mark is an assessment of a person's overall value to the Navy. The mark is a judgment by the reporting senior.

RECORDKEEPING AND EVALUATING

Good supervisors use a system for recording performance on a continuous basis. If you are a supervisor, you should consistently use some type of system for logging good and poor performance or conduct. Such a system will be a help to you in meeting a variety of responsibilities, including writing performance evaluations.

Another benefit of recordkeeping is that it helps you notice when a subordinate's actions or behavior patterns change, either negatively or positively. You can then intervene in the early stages of personal problems to reduce their negative effects by providing help.

The methods for recordkeeping vary with each supervisor, but you should include the following basic elements if your records are to be useful:

1. Subordinate's name
2. Date of the observation
3. Behavior observed
4. Action taken or planned

When you maintain personal records on your personnel, you should take several actions to be sure of compliance with the Federal Privacy Act of 1974 and the Freedom of Information Act. First you must inform subordinates that you are maintaining a log on their performance and conduct. You should explain that this is a means of helping you carry out your responsibilities and develop their required evaluations. You should also inform subordinates that they have the following rights:

● They may examine and make copies of all entries and notations that apply to them.

● They may review the log with you and discuss any differences of opinion they may have with your entries.

● They may request an amendment or a change, by following set procedures, if we cannot settle differences. You may refer them to the legal officer for aid in following the correct procedures.

PETTY OFFICER QUALITY CONTROL REVIEW BOARD

The Navy established the petty officer quality control review board to help develop and maintain a highly professional enlisted career force.

This board, in the Bureau of Naval Personnel (BUPERS), automatically reviews the records of petty officers E-5 and above whose performance is not in keeping with the traditionally high standards of the Navy.

GENERAL CATEGORIES OF PERFORMANCE

The following general categories of performance are considered by the board in their evaluations and recommendations:

● Financial responsibility

● Sobriety

● Leadership

● Military/personal conduct

● Performance of duty

● Willful racism, sexism, or acts that deny equal opportunity to others

● Appearance and compliance with Navy fitness standards

FUNCTION OF THE REVIEW BOARD

If the board determines that the performance of a petty officer is below standard in one of the above groups, it will take one or more of the following actions:

1. Advise the petty officer that it would be to his or her personal benefit to request either a transfer to the Fleet Reserve or the U.S. Navy retired list or Naval Reserve retired list.

2. Process the petty officer for administrative separation.

3. Issue a letter of warning into the permanent service record of the petty officer (the member would then require approval from the Chief of Naval Personnel before reenlistment or extension of current service or before other appropriate administrative action).

4. Reduce the petty officer to the next inferior paygrade.

The function of the board is to assure that there is recognition throughout the Navy of the high professional standards and competence of

career petty officers. The board also wants to make sure the peers of these petty officers have the same requirements.

The U.S. Navy supports its members personally and professionally. If a member becomes ill, the Navy provides care; if the member becomes disabled, the Navy provides help through various programs. If you seek improved professional and military skills through higher studies, the Navy will support your ambition.

INCENTIVE EDUCATIONAL SPECIAL-DUTY PROGRAMS

As we go along in this chapter, we will be discussing the following topics:

● Planning your career

● Career opportunities

● Incentive programs

● Educational programs

● Special-duty programs

PLANNING YOUR CAREER

Many of us spend the greater part of our lives doing something that does not bring out our best qualities or give us the greatest satisfaction. We often start our careers in jobs we think we will enjoy. We then discover that job isn't what we really want. For example, a boy builds model airplanes as a hobby. When the boy becomes an adult, his interest in airplanes influences him to become a pilot. To his shock, he may then discover that his heart isn't in machines but in the management of people. Another example would be a woman who volunteers as a Mess Management Specialist, only because she did that type of work in her father's restaurant. However, her main interest in life has been reading and writing; therefore, she wishes she had sought a naval career as a Journalist.

These examples show that finding the right type of work is mainly a problem of searching, self-examination, personal decision, and opportunity. Finding the most suitable job is not a matter of How do I look to someone else? It is a matter of What do I know about myself? What kind of work do I like best? What kind of work can I do with the greatest ease? What

vocational study would I like to pursue because it provides me satisfaction? What talent did I have as a child but put aside because of the pressures of current responsibilities? What job was appealing, but I lacked either the chance or the courage to try my hand at it? These are clues to the types of jobs you should seek.

Unlike your civilian counterpart, your daily routine changes periodically. The variety of assignments in the Navy are ever-expanding. You may not like a job, but if you perform it faithfully, next time you may get an assignment you like better.

After enlisting in the Navy, your duty is to strive to better yourself, move ahead, grow more knowledgeable,   become better qualified. You can request duty that you believe will further your advancement. If you work hard, do a good job, and are ambitious, your seniors will try to approve your request. In few other organizations are seniors so ready to encourage a willing junior.

This opportunity to change jobs is an advantage belonging to all sailors in the U.S. Navy. Civilians regard a person who moves from job to job as an unstable drifter. In the Navy, the ability to adjust from job to job and duty assignment to duty assignment is a desirable trait. Your ability to adjust to new situations provides you with greater all-around qualifications and varied experiences.

CAREER OPPORTUNITIES

To help you develop professionally, the Navy provides you with many opportunities. Some of them are shown below:

● Incentive programs

● Educational programs

● Special-duty assignments, programs, and projects

● Commissioned officer programs

● Naval Reserve programs

Incentive Programs

Why does a person reenlist in the Navy? Chances are if you asked 10 career Navy people this question, you'd get 10 different answers. You'd get similar results if you asked 10 civilians why they stayed in a career with a particular company.

Many incentives, tangible and intangible, attract a person to a particular career. The job is important. A job becomes enjoyable because it's in line with a person's interests and abilities. The opportunities for advancement may be good. Perhaps the person can get more education and, later, a better job through the organization.

Then there are other personal considerations: job security, paid vacation, travel, family protection plans, and retirement. Many other factors enter a person's decision to reenlist, including loyalty. Usually, a person chooses a career based on a combination of these factors. The same is true for those who choose a career in the Navy. A decision to reenlist is a personal choice.

The Navy offers various incentive programs to its members; some have the aim of reenlisting people and some to provide a means to satisfy the needs of both the Navy and its members. An incentive program meets the member's personal needs and generates the member's interest in continuing a naval career. You can find general information about incentive programs in the *Enlisted Transfer Manual,* NAVPERS 15905D, and the *Retention Team Manual,* NAVPERS 15878. For more information you should talk with your division officer, leading petty officer, or command career counselor.

SELECTIVE REENLISTMENT BONUS. — The Selective Reenlistment Bonus (SRB) is a retention incentive. Members serving in certain selected ratings/NECs who reenlist or extend their enlistments for a given number of years receive this pay. The bonus works to increase the number of reenlistments in ratings that are undermanned.

SELECTIVE CONVERSION AND RE-ENLISTMENT PROGRAM. —The Selective Conversion and Reenlistment (SCORE) Program offers career incentives to members who reenlist for conversion to critically undermanned ratings and assignment to an appropriate class A or C school.

SELECTIVE TRAINING AND REENLIST-MENT PROGRAM. —The Selective Training and Reenlistment (STAR) Program offers career designation, career incentives, and school assignments to first-term members who reenlist.

GUARANTEED ASSIGNMENT RETEN-TION DETAILING PROGRAM. —The Guaranteed Assignment Retention Detailing (GUARD III) Program provides guaranteed assignments during a career. GUARD III encourages direct communication between eligible personnel and their detailers. The type of guarantee depends upon billet availability in the general area requested (for example, coastal, home port, and overseas areas).

PERSONNEL EXCHANGE PROGRAM. — The Navy is continuously negotiating with allied countries for the exchange of some enlisted personnel. The aims of the Personnel Exchange Program (PEP) are as follows:

- To get increased opportunity for interesting foreign duty

- To give exchange personnel actual military duties and responsibilities as opposed to functioning strictly as instructors, advisors, liaison personnel, or observers

- To make exchange personnel an integrated part of the host countries so that a member can get a better understanding and appreciation of our allies

- To allow the host nation to become better acquainted with the United States through personal contacts.

LATERAL CONVERSION PROGRAM. — The Navy would like members to serve in the rating for which they have the most aptitude and interest. The Navy allows changes in rating if they do not cause undesirable effects on the overall personnel distribution in ratings and on the advancement opportunity of career petty officers.

ASSIGNMENT TO SCHOOL. —An additional incentive for reenlistments is the possible assignment of a Navy member to a specific school.

Basis of consideration of requests is on the following factors:

- Applicability of training

- Sea/shore rotation

- Paygrade versus skill requirement

- Fleet Reserve eligibility

Assignment to a school normally occurs at a member's projected rotation date (PRD).

NAVY NUCLEAR PROPULSION PRO-GRAM. —This program provides training for qualified volunteers from selected ratings in super-vising, operating, and maintaining nuclear propulsion plants aboard submarines and surface ships. Nuclear qualification also makes other career incentives available, such as special pay and reenlistment bonuses.

STRATEGIC WEAPONS SYSTEM TRAIN-ING PROGRAM. —The Strategic Weapons System (SWS) Program provides highly trained personnel for Poseidon and Trident submarines. Applicants can use the Lateral Conversion or SCORE Program to convert to one of the SWS ratings (ET, FTB, or MT) if necessary.

Educational Programs

Education is the key to self-improvement and a better understanding of the world in which we live. Through new learning experiences, you can come to a greater understanding of your place in our world. In today's Navy, educational opportunities are plentiful, and you should take full advantage of those opportunities. In the following paragraphs we will discuss some of the educational opportunities available to you.

NAVY CAMPUS. —Navy Campus coor-dinates off-duty education for Navy personnel and integrates it with on-duty Navy programs. Navy Campus includes all educational activities, from basic education skills to graduate study. The purpose of Navy Campus is to provide Navy personnel with opportunities to achieve their career and educational goals.

On-Base Navy Campus Program. —This program includes a wide range of courses and programs, from high school completion through college degree. Civilian colleges and universities on board Navy installations offer these courses.

Navy Campus Certificate/Degree Program. — This program provides Navy members with an opportunity to collect college credits through various sources and apply them toward a degree from an accredited college or university. Person-nel can earn both 2- and 4-year degrees through this program. Participating colleges waive state residency requirements. These colleges also accept up to 75 percent of degree credits through college-approved nontraditional means; for example, you may receive credit for examinations taken through

Defense Activity for Non-traditional Education Support (DANTES) and for military training or experience.

Tuition Assistance Program. —The purpose of the Navy's Tuition Assistance (TA) Program is to provide financial assistance to eligible person-nel who attend educational institutions on a voluntary, off-duty basis. Sailors may use TA for high school completion, vocational and technical training, and college courses leading toward undergraduate and graduate degrees. Under certain conditions, members may also use TA for correspondence courses.

Program for Afloat College Education. —Program for Afloat College Education (PACE) is a part of Navy Campus. Under this program, accredited colleges or universities offer undergraduate courses to you aboard ship. Courses taught under PACE have full funding by the Navy; however, students have a requirement to purchase necessary books.

Instructor Services Program. —Commanding officers may organize classes for naval personnel on almost any subject. Classes may help students prepare for college-level courses, learn a foreign language, gain vocational skills, or achieve any number of other goals. Professional instructors conduct these classes. Students pay no tuition for these classes and earn no academic credit.

Basic Skills Program. —This fully funded on-duty program is available at most Navy bases and on board some surface ships. Courses are to improve individual competency in reading, mathematics, English, and writing skills. It also provides either on-base or off-base classes needed to earn a high school diploma or an equivalency certificate.

National Apprentice Program. —Navy people working in certain skill areas may be eligible for journeyman status in a nationally recognized occupation. Under an agreement with the U.S. Department of Labor, enlisted persons in certain ratings can register in and complete an appren-ticeship in related civilian trades. The program's major purpose is to develop highly skilled Navy-oriented journeymen who will continue to use their technical skills and knowledge in the Navy.

Servicemembers Opportunity College, Navy. —Servicemembers Opportunity College,

Navy (SOCNAV) is a special associate degree program that enables active-duty personnel to earn associate degrees in selected fields of study associated with their ratings or military jobs. To date, 25 accredited colleges have combined to form networks in 6 circular areas: data processing, management science, flexible/general studies, communications electronics, digital electronics, and law enforcement. The participating colleges agree to the transfer of credit from other member institutions.

DEFENSE ACTIVITY FOR NON-TRADI-TIONAL EDUCATION SUPPORT. —The functions of Defense Activity for Non-Traditional Education Support (DANTES) are twofold. First, DANTES makes available to military personnel several examinations for validating nontraditional learning for which they grant college credit. Examinations available include the College Level Examination Program (CLEP), general and subject examinations, and DANTES Subject Standardized Tests (DSSTs). In addition to validation examinations, college admission tests are available to service members. Tests available include the American College Testing (ACT) Assessment Program and the Scholastic Aptitude Test (SAT).

DANTES also makes available several examinations from various professional organizations to certify competency in a given professional/occupational area. DANTES also publishes a catalog of correspondence (independent study) courses, available from accredited colleges and universities. These are courses with approval for tuition assistance reimbursement.

ENLISTED EDUCATION ADVANCE-MENT PROGRAM. —The Enlisted Education Advancement Program (EEAP) enables selected active-duty petty officers to attend participating junior or community colleges full time for up to 24 months to get associate degrees in rating-related or management-related fields. The purpose of EEAP is to improve qualifications for advancement, improve general supervisory abilities, and prepare members to assume leadership positions of increased responsibility.

Special-Duty Programs

To provide for the ever-increasing complexity of the Navy's mission, the Navy has set up special programs to perform tasks not identified by ratings. In this section, you can learn about some very interesting programs the Navy offers. Information on the specific requirements and qualifications for special assignments, programs, and projects is in the *Enlisted Transfer Manual,* NAVPERS 15905. Your career counselor can give you further details on these subjects.

HUMAN RESOURCE MANAGEMENT PROGRAMS. —Several separate programs and associated duty assignments fall under this group. These career-enhancing and highly rewarding assignments include Equal Opportunity Program Specialist, NAVLEAD Instructor, and Drug and Alcohol Abuse Program Advisor.

INSTRUCTOR DUTY. —Instructor duty is an important and demanding job in the Navy, requiring the highest caliber of leadership, maturity, and devotion to the Navy and its mission. Petty officers selected for duty as instructors should be mature, emotionally stable people who show aptitude for such an assignment. Only top-quality, highly motivated people receive assignments to this challenging duty.

MILITARY ASSISTANCE ADVISORY GROUPS/MISSIONS. —Assignment in the Military Assistance Advisory Groups (MAAGS)/Missions Program affords you the opportunity to travel and work in parts of the world not normally frequented by U.S. Navy ships. Personnel assigned to billets with mandatory foreign language qualifications are preassigned to a course of instruction at the Defense Language Institute (DLI).

OVERSEAS DUTY. —Overseas duty is military duty performed while assigned to a military installation or activity permanently based outside the continental United States (CONUS). Being overseas can bean exciting adventure, and you will be a visible representative of the United States.

RECRUITING. —Experience has shown that only top-performing petty officers with motivation to "sell" the Navy to others can succeed in the unique and demanding role of a recruiter. Recruiters are frequently on independent duty and are responsible for achieving demanding recruiting goals. They must be knowledgeable about recruiting programs and be able to give this information to applicants. Recruiters and recruiting support personnel develop extensive community relations and are frequently the only

image of the Navy a community has. They are frequently in areas remote from military installations and associated support facilities. Their success requires hard work, exceptional dedication to duty, and a strong belief in the advantages of a Navy career.

SUBMARINES. —Initial submarine training is a basic course of instruction. The purpose of the school is to complete required screening of personnel for duty in the submarine service and provide basic training to help personnel successfully complete the change to submarine duty. Enlisted personnel who volunteer for submarine duty normally receive assignments to this school before reporting to their first submarine.

While high standards of personal conduct and reliability are requirements of all members of the naval service, they are especially important for personnel assigned to submarines.

NAVY DIVER, EXPLOSIVE ORDNANCE DISPOSAL, AND SPECIAL WARFARE. —The Navy Diver (DV), Explosive Ordnance Disposal (EOD), and Special Warfare (Sea-Air-Land [SEAL]) Programs make up the Navy's elite diving force.

Navy fleet divers use scuba and surface-supplied diving equipment and enhanced deep-diving systems to perform underwater salvage maintenance and repair operations. EOD divers are highly skilled technicians trained to identify and dispose of all types of ordnance. SEAL divers receive training in conducting combat operations.

Although the training for each diver program is physically and mentally demanding, successful completion of entry-level training provides ample rewards for those who accept the challenge. Graduates will be members of a professionally demanding community, entitled to special-duty assignment pay, hazardous-duty incentive pay (for EOD and SEAL personnel), and entitlement to SRB multiples.

BUPERS CONTROLLED CAREER COUN-SELING PROGRAM. —The BUPERS Controlled Career Counseling Program provides for the assignment of full-time career counselors from ratings other than Navy Counselor (NC). Personnel receive assignments to activities that have no authorized NC billet or to where an NC is not available for assignment.

FINANCIAL MANAGEMENT INFORMATION

As a petty officer second class, you must set the example for your subordinates. This example extends into your personal life as well as your professional conduct.

Setting the standard in matters of personal financial responsibility is particularly important. The policy of the Department of the Navy is "to promote habits of thrift and encourage . . . conduct of financial affairs in such a manner as to reflect credit upon the naval service."

Your commanding officer does not have the authority to act as an agent or collector. The enforcement of the private debts of the service member is a matter for civil authorities.

Before it gets to this point, petty officers must provide the necessary financial information to their troops to avoid any financial problems.

Many commands provide financial counselors to advise sailors in financial difficulties, or you can provide this financial management information.

Family Service Centers and local legal assistance officers also provide counseling. For further financial management information, section 62 of the *Naval Military Personnel Manual* offers some good advice to all paygrades.

PERSONNEL FINANCIAL MANAGEMENT

During your naval career, you will have many occasions to counsel and advise your people on their personal financial management, responsibilities, and debts.

You can expect a continuation, and possibly an increase, in the number of young service members needing your help in managing their financial affairs. The consumer debt—the amount Americans borrow for large purchases such as cars, appliances, and furniture—as well as revolving credit continues spiraling upward. Repayment of these consumer loans and home loans slices more than a quarter from every dollar a wage earner takes home.

Navy personnel are no exception. In fact, a young service member's take-home pay may be less than the national average. You can help your people learn to have foresight about finances that will help them balance their income, savings, and spending.

Navy men and women should adopt a system of accounting to keep their financial matters straight and their affairs solvent. Navy members rarely remain in one location or tied to one group of personnel who know their credit, abilities, past accomplishments, and general reputation. The nature of the Navy requires personnel to reestablish these attributes every time they transfer.

The following section on personal financial management gives you information you will need to help your people keep their financial affairs straight. It will acquaint or reacquaint you with certain factual information. This information will help you when counseling, advising, and training your people on financial affairs. Some of the information may be elementary to you, However, because many young Navy members often do not grasp these facts, they get into financial trouble. If you are thoroughly familiar with these basics, you will be in a better position to help young members with their financial management.

Keep in mind also, Navy Family Service Centers offer confidential financial guidance to Navy personnel. Encourage your people in need of personal financial counseling to use the counseling service provided by the centers. Direct those needing legal or other advice to a legal assistance officer or some other counselor who can provide the needed advice.

Money Management

Navy personnel usually manage their money in one or more of the following four ways; each has advantages and disadvantages:

1. Checking account
2. Savings account
3. Cash
4. Allotments

CHECKING ACCOUNT. —A checking account usually serves as the safest and the most convenient and efficient way for people to keep track of their money. A checking account is a financial arrangement with a bank, savings and loan association, or credit union for safeguarding money.

As persons need money, they draw or transfer funds by writing a check. Persons can issue a check payable to another person or to a company to pay bills or to get cash. This easy-to-maintain method conveniently helps people manage their financial affairs. Navy members on shore duty may authorize the Navy to deposit their paychecks into a savings or checking account via the Direct Deposit System (DDS). If assigned to sea duty, they can use the allotment system to have their pay deposited in a checking or savings account.

The following are some of the advantages of the DDS and allotments:

- Personnel don't have to wait in long payroll lines to cash a paycheck.

- Pay goes directly to a set account even when personnel are on leave or temporary duty.

- Personnel can write checks on payday with the assurance that their pay is in the bank.

- Personnel have access to pay when away from their home stations by the direct deposit of their paycheck into a checking account.

- Personnel can mail checks to pay bills. Personnel do not have to buy money orders.

- In case of a lost or stolen wallet, persons do not lose their entire pay. The balance remains safely in an account.

- Canceled checks serve as receipts and records of paid bills.

- The proper use of a checking account shows a person's financial reliability and serves as a good reference for creditors.

SAVINGS ACCOUNT. —One way for personnel to manage their money is to have a savings account. Savings accounts draw interest, while checking accounts sometimes do not. A savings account is an excellent way to gather interest and to keep from spending money.

CASH. —Once personnel withdraw money from a checking or savings account or cash their paychecks, they operate on a cash basis. Operating on a cash basis offers the advantage of ready money but also the chance of theft or loss of cash.

Operating on a cash basis results in low costs, but it has some disadvantages. The use of cash requires personnel to stand in lines to cash paychecks and to buy money orders to pay bills.

When paying bills with cash, people have no systematic method of payments. In addition, they must use receipts as their only record of payment. (A checking account provides a canceled check as a receipt of payment. Also, checks are available with carbon duplicates of the original check.)

Working on a cash basis can also create problems if personnel are on leave or temporary duty. In such a case, members must make arrangements to forward their paychecks. This often results in delays in the receipt of a check.

ALLOTMENTS. —Allotments provide a good method for Navy members to handle their financial affairs. The following paragraphs describe voluntary and involuntary allotments.

Voluntary Allotments. —Voluntary allotments are requests by personnel to make a certain amount of their paycheck payable to someone else for the following reasons:

- Purchase of U.S. savings bonds
- Payment of premiums for life insurance
- Repayment of loans to the Navy Relief Society
- Allotments to dependents and relatives
- Voluntary liquidation of debts to the United States
- Payment to a banking institution or association for credit to the account of the allottee
- Repayment of loans for the purchase of a home or mobile home used as a residence by the allottee
- Payment of pledges for the Combined Federal Campaigns

Involuntary Allotments. —Involuntary allotments from a Navy member's pay are usually made when the person shows financial irresponsibility. Involuntary allotments are usually garnishments of a member's pay.

BUDGETING. —Preparing and using a budget is the key to successful money management. A budget is a plan to spend money or a plan of money management. Many Navy members have erroneous images of the meaning of a budget. They often associate budgets with detailed bookkeeping, stacks of papers, ledgers, and so forth. Many young members lack the discipline to follow a budget and dislike the chore of budgeting. If you can convince them to follow a budget, they are the winners. They will have a record of their income versus expenses, which will help them better manage their financial affairs. This provides them with the security of knowing their financial status rather than the insecurity of not being sure.

To give your people the desire to budget their money, put budgeting into simple terms for them. Explain how a budget serves as a simple tool for the businesslike management of their finances. Explain that budgeting provides an advance general plan for organized spending and savings instead of a record of payment set down afterward.

Budgeting involves the spouse as well as the wage earner. For married couples, handling money matters should be a joint effort. With two-income families, money management is a different ball game. The "yours-mine-ours" approach usually arises, requiring definite understandings. Certain inherent expenses become greater when both husband and wife earn wages. Couples also need to have an understanding as to what expenses they will pay from what funds. A written budget, properly prepared and followed, helps couples work out these problems.

In counseling and advising your people on financial management, you may have to help them prepare their budgets. In budget preparation, you determine income and expenses; examine spending habits; and see what, if anything, you need to correct or improve. If personnel have financial problems, you help them find ways to improve their spending habits. To do this, you need to familiarize them with the following terms used in financial management:

Gross income. The total amount of salary before any deductions

Deductions. The amount of money taken from pay for income tax, social security, and other reasons

Allotments. Those sums of money deducted from gross income to pay debts such as insurance premiums, debts due the United States, and family support

Net Income. The total amount paid a member after all deductions and allotments are paid, often called take-home pay

Fixed expenses. Expenses that are the same each month

Flexible expenses. Expenses that change from month to month; sometimes called variable expenses

Fixed expenses include rent and mortgage payments and time payments for expenses such as autos, furniture, and insurance. The difference between fixed expenses and net income is discretionary income. This is the income available for planning purposes, which personnel can apply to variable or flexible expenses. These expenses include items such as savings, food, entertainment, clothes, and gifts.

When preparing a budget, personnel first need to consider savings. Planning first for savings is important. When personnel plan to pay expenses first, they usually find they have no money left for savings.

Everyone needs a savings program for unforeseen expenses in the future. In addition, using a systematic, planned savings program will help personnel achieve set goals. In helping your people determine how much to save, recommend they save a realistic percentage of their discretionary income. This percentage could be as little as 5 to 10 percent or as high as 20 percent of the discretionary income.

After savings comes fixed expenses, followed by variable expenses. The U.S. Department of Labor suggests these percentages of take-home pay for budget preparation:

FIXED EXPENSES		VARIABLE EXPENSES	
Housing	25%	Food	23%
Transportation	9%	Clothing	11%
		Gifts and contributions	5 %
		Miscellaneous	5%
		Savings and unforeseen expenses	22%

These percentages are approximate and will vary from area to area and person to person.

To prepare a personal budget, personnel should keep close track of their income, expenses, and savings for several months. This information will help them understand their spending habits. It will also help them determine average nonfixed expenses. Understanding their spending habits puts personnel in a position not only to budget their income, but also to correct undesirable spending habits.

Plans for spending extend to many areas and vary according to the person's status and requirements. The basics of spending are to spend money wisely and in as small amounts as possible.

Use of Credit

Credit has its base largely on trust. The average person in the Navy is trustworthy and expects to receive a fair deal in business and financial dealings. Conversely, the way personnel handle their private financial affairs provides a reliable sign of their general character and trustworthiness.

When we speak of credit, we usually think of time payment purchases or charge accounts. Actually credit consists of a much broader scope.

The entire country runs on credit, including industries; banks; and local, state, and federal governments. In fact, if credit were to stop suddenly, the result would be catastrophic. For example, almost no one would be able to buy a home, an automobile, furniture, or a television or stereo set. Without these sales, unemployment would skyrocket. These salaries, not available for the retail market, would in turn adversely affect the sale of other goods. The effect would continue from the highest to the lowest level, and economic chaos would result.

USE OF CREDIT BY NAVY PERSON-NEL. —The Navy expects all its members to discharge their financial responsibilities in a timely manner. The Navy expects its members to strive to avoid any discredit upon themselves or the naval service. A good knowledge of credit will allow them to better handle their financial affairs and often save money.

Navy personnel have special problems not faced by the public in borrowing money. If Navy personnel are to use credit wisely, they need to know the ABCs of credit. They especially need to know how to avoid some of the problems young Navy men and women often have.

PRINCIPLES OF CREDIT. —Credit literally means buy now, pay later. The system permits us to purchase goods as we need them, but pay for them over a certain period. Credit means you receive a loan of money, and you always pay extra when you borrow money. Credit, if you use it wisely, ensures a reasonable standard of living. However, you cannot substitute credit for sound financial planning and a systematic savings plan. Additionally, improper use of credit can create a financial nightmare that can adversely affect your job, family life, and mental and physical health.

Credit plays an important part in the financial world. Navy personnel should use it wisely and carefully, heeding the following principles:

- Use credit for those necessary goods that you cannot afford with one or two paychecks.

- Use credit mainly for goods that have a useful life longer than the time needed to pay for them.

- Make as large a down payment as possible. This reduces the total amount spent because of interest charges.

- Know what your income will be. Set a spending limit equal to the smallest paycheck received to be sure of having enough money to meet the payment when due.

- Don't buy another item on credit just because you have finished paying for one.

- Avoid the temptation to use credit for splurging. For example, buying too much on credit at Christmas becomes a shock in January when you receive the bills.

- Check with consumer affairs offices about local credit regulations. For example, some states allow up to 3 days to change your mind on a credit purchase or a loan received.

You should remind your people that, when using credit, they should remember the following basic principles:

- Credit costs money, but many credit plans exist. Some plans are much less expensive than others. As people shop for the best bargain when buying a car or furniture, they should shop for the best bargain in credit.

- Consider carefully before borrowing from finance companies. These companies often charge higher rates on loans.

- The faster a person pays off a debt, the less interest charges he or she will pay.

- Use credit only for unforseen emergencies and for higher-cost purchases, such as furniture, cars, or houses.

While buying on credit has certain advantages, personnel also need to recognize some problems involved in using credit. The following are some of the problems you may encounter:

- Credit customers may overbuy.

- Credit customers may buy at the wrong time or place.

- Credit prices may be higher than cash prices.

- Credit ties up future income.

- Payments must be made on time.

- Because of the addition of interest charges to the price, the purchase costs more.

CREDIT RATING. —Most people find it advantageous to establish a good credit rating. Some people object to buying anything on credit and insist on paying for everything in cash. They save until they have the cash to make a major purchase, and they often do get better buys for cash. However, a good credit rating is like money in the bank. When people have a good credit rating, it means that they pay their bills on time. Navy personnel usually have a good credit reputation and should have no problem getting a loan or credit when needed. A good credit rating can be priceless in an emergency such as a medical crisis, fire, or death in the family.

You can establish a good credit rating by paying for time purchases according to the purchase agreement. Time purchases include items such as furniture or cars and items bought on credit card accounts. You can also establish credit by repaying a loan from a bank or a credit union according to the loan agreement. Making these payments according to-their agreements means that you pay the amount agreed upon by a certain date. You can then use these companies, banks, or credit unions as credit references if you apply for credit at any future time.

COST OF CREDIT. —Have you ever rented a motorcycle or sailboat? You always know in advance that it will cost you so much an hour or day. The rent or cost of using the bike or boat has its base on length of use.

The rent paid for using borrowed money or credit is interest. You may sometimes have difficulty figuring interest. Some lenders and

businesses quote interest rates plus other charges in a way that conceals the actual figures behind a mask of confusing language. That results in people being unaware of the total cost of their loans or installment purchases.

When you borrow or buy something "on time," you should keep your eyes open for extra charges. Such charges are additions to the interest charge for the use of the money. Some of these additional charges include credit life insurance, fees for credit investigations, loan-handling fees, and health and accident insurance. Often the down payment and the monthly payments are the only figures stated.

Advise your personnel to ask for the total charges in writing, including early repayment penalties and monthly rates. If they do not receive the amount in writing, they can figure it themselves. First, they should find the total amount they will pay for the loan or the purchase. They should then subtract the amount they will actually receive or the actual price of the goods from the total cost. The difference shows the total cost of credit. Taking the time to get the facts pays off.

Indebtedness

The Navy expects its personnel to pay their debts in a proper and timely manner. However, enforcement of the private debts of personnel falls under the control of civil authorities. You do not have the authority to arbitrate claims or controversies about the private financial debts of your personnel. You also do not have the authority to act as an agent or collector for a creditor. Your job is to encourage your people to conduct their financial affairs in a way that reflects credit upon themselves and the Navy.

From start to final settlement, only the creditor and the debtor are responsible for the debtor's financial obligations. You may only help creditors to a limited extent when it involves one of your people. Your authority extends only to referring correspondence to persons involved and advising them to make their intentions known to the creditor. However, you do have authority to act in situations of nonpayment of legal debts by your people. In such situations, you should counsel enlisted persons about the provisions for discharge for misconduct. Follow the procedures in the *Naval Military Personnel Manual,* NAVPERS 15506, article 6210140.

Law prohibits debt collectors (collection agencies) from contacting a third party, such as a commanding officer or division officer, to help collect a debt. The only exceptions are when the collector has a court order or the prior consent of the debtor. The law defines the classes of people prohibited from contacting you. However, persons or firms collecting on their own behalf are exempt from such restrictions. You should refer correspondence from such persons or firms to the person involved.

You should courteously refuse requests to furnish information about the personal credit rating of one of your people. Navy policy limits any replies to verification of the following information:

- The person's membership in the Navy

- The person's station address

- A statement of the person's basic pay

BE SURE YOU UNDERSTAND WHO IN YOUR COMMAND HAS THE AUTHORITY TO PROVIDE THIS INFORMATION—IT MAY NOT BE YOU.

FAMILY SERVICE CENTERS

As the leader of your enlisted personnel, you should be aware of those people and organizations who can help your people. One of those organizations is the Family Service Center (FSC).

The overall mission of FSCs is to improve the lives of Navy personnel. FSCs provide information, resources, and services that support and enrich the lives of Navy personnel and their families.

FSCs serve as the focal point for existing family and personal support and assistance programs. The purpose of the centers is not to duplicate the services provided by other Navy programs, systems, or organizations. However, they offer information and referral on a full range of family-related programs, services, and resources within the Navy and civilian communities. The centers support Navy- and command-sponsored efforts, such as the ombudsman program, wives organizations, sponsor programs, and predeployment briefings. They provide elected services that may differ from center to center.

FSCs provide referrals without assuming responsibility for services that belong to organizations already set up. Referrals include those for housing, personnel, CHAMPUS, and so forth. FSCs are not the ultimate counselors in every case. In cases requiring specialized professional counseling, the centers provide only short-term counseling. The centers make referrals to the proper agencies when personnel need long-term counseling.

Services and Information Available

The services provided by various FSCs may vary from location to location. The services may vary because of the command and community makeup, as well as the needs of personnel. However, most centers provide at least some of the following services:

● Family, marriage, personal, and child counseling

● Pre/during/post deployment programs

● Employment assistance for spouses

● Preventive financial counseling

● Health benefits assistance

● Assistance with ombudsman and sponsor programs

These services are not all-inclusive. You can learn more about your FSCs by referring to local command instructions on the subject as well as OPNAVINST 1754.1A.

Information and Referral

The information and referral (I&R) services of the FSC provide accurate and up-to-date directories of community resources. I&R services also set up a link to all service providers. I&R services quickly and efficiently answer questions, help in problem-solving, and conduct needs assessments. I&R services refer active-duty and retired service members and their families to appropriate military or civilian resources to get the services they need. I&R services decrease the chance of a person being misdirected, not having needs met, or becoming lost among various agencies.

SUMMARY

This chapter provides information useful to you in your continuing professional development.

The Navy's Enlisted Performance Evaluation System provides a system to document an individual's qualifications, performance, conduct, and increased responsibilities. It is the Navy's prime personnel management tool.

Many incentive programs are available for Navy personnel. The purpose of incentive programs is to attract an individual to a rewarding, enjoyable Navy career. Other considerations that often persuade an individual to select a Navy career are job security, paid vacations, travel, family protection plans, retirement, and many other incentives. Often, a combination of these factors causes a person to choose a naval career.

Education is a key to professional development and a better understanding of the world in which we live. The Navy provides personnel with the opportunity to meet their career and educational needs. Navy-sponsored programs, as well as civilian schools, are available to all Navy personnel. As a Navy member, you should take part in academic programs to increase your formal educational background and to further develop your potential for a rewarding career in the Navy.

You can provide various sources of information concerning financial management to Navy junior personnel. As a petty officer second class, you can counsel and advise your people on their personal financial management, responsibilities, and debts. You can also advise them about the different types of money management practices and the types of credit available.

Family Service Centers (FSCs) strive to improve the lives of Navy personnel and their families. FSCs provide information, resources, and services to support and enrich Navy personnel and their families.

REFERENCES

Military Requirements for Senior and Master Chief Petty Officer, NAVEDTRA 12048, Naval Education and Training Program Management Support Activity, Pensacola, Fla., 1992.

CHAPTER 5

TRAINING

LEARNING OBJECTIVES

Upon completion of this chapter, you should be able to do the following:

1. Explain how to conduct proper and effective training.

2. Identify the various methods and techniques of instruction.

3. Explain how to train personnel by using the demonstration, discussion, and lecture methods.

4. Explain how to develop an effective unit training program.

5. Describe the purpose, in general terms, of long-range and short-range training plans and related training schedules.

6. List the procedures for maintaining division training records.

7. Describe how to update training accomplishments in division training records.

The training of our personnel is one of the most important challenges we face as petty officers. We can only expect top performance from our Navy personnel when their knowledge and skills are up to the requirements of their billets. The better trained our sailors are, the more productive they will be.

Training is the process of imparting knowledge to people so that they become capable of performing their assigned duties in an acceptable manner. Training is also used to qualify people to perform in positions of greater difficulty and responsibility.

This chapter covers basic features and requirements of an effective training program, training methods, instructional methods and techniques, and the unit training program.

Have you ever asked yourself, What is the best and most effective way to train my people? Well, a good way to start is to review the guidelines and training policies stated in OPNAVINST 3120.32B, *Standard Organization and Regulations of the U.S. Navy,* chapter 8. You then need to learn the requirements and features involved in setting up effective training. Before you begin to set up training, however, you need to understand its importance.

IMPORTANCE OF TRAINING

As a petty officer second class, you will learn the importance of training. At this level you will probably conduct many training sessions on how to operate and maintain equipment and systems. The manner in which you conduct those training sessions can have a positive or negative effect on the operational readiness and performance of your command.

FEATURES OF EFFECTIVE TRAINING

An effective unit training program has three basic features, (1) compatibility, (2) instruction and evaluation, and (3) analysis. Keep in mind that a training program must have each of those features to be effective.

Compatibility

The training program works within the organization's framework and schedule. As a general rule, training in a work situation is more effective when conducted in small groups early in the day

(before the normal work routine begins). Allowing personnel to learn by doing (skill) is also more effective than giving them group lectures (knowledge).

To be successful, training MUST be a normal, scheduled part of the division routine, while on-the-job training should be continuous in every work center. Allow time for a carefully thought-out, hands-on training program that is free from the ordinary pressure of everyday work. Training should include a certain amount of repetitiveness to be effective. It should also take place for short periods on a frequent basis rather than for longer periods spaced farther apart. Effective training should last 45 minutes to 1 hour and be held three times a week. Training conducted for 2 or 3 hours once a week simply isn't as effective.

Instruction and Evaluation

The training requires instruction of personnel and evaluation of their individual progress and ability to function efficiently and safely as a team.

Analysis

An analysis of training effectiveness involves observing group and individual performance, comparing results with standard criteria, and recognizing deficiencies and methods for improvement.

REQUIREMENTS FOR EFFECTIVE TRAINING

We discussed the three features that make a well-developed and effective training program. Now, we will cover five requirements of effective training. As you read each of the requirements, ask yourself, Am I using this step or requirement in my training now?

1. **Dynamic instruction** —You need to prepare instruction that shows you have a thorough knowledge of the subject and then present the information in a professional manner. Repeat information for emphasis only.

2. **Personal interest** —Persons in authority must show an interest in your training program. Division Officers must ensure the petty officers responsible for training and qualifying subordinates know the subject matter. The petty officers must also possess the practical skills to clearly demonstrate and communicate the subject matter.

3. **Quality control** —The chain of command must reinforce training. A senior member can do that by questioning subordinates about information they are credited with knowing or by requiring them to demonstrate skills they have attained.

4. **Technical support** —Supervisors must ensure manuals, technical publications, operating procedures, safety precautions, and other references required for training are available and current.

5. **Regular schedule** —You must schedule instruction on a regular basis.

TRAINING METHODS

Of the many training methods available, you will find some work more effectively for you than others. You will also find that each method has its pros and cons.

THE SCHOOL OF HARD KNOCKS METHOD

The "school of hard knocks" is the least effective method of training. When using this method, a supervisor places trainees in a work situation and leaves them to learn as best they can on their own. That is a crude and wasteful way to learn. It does not guarantee trainees will learn the skills they need to do their jobs properly. It also encourages the development of bad working habits that are frequently difficult to correct.

THE APPRENTICESHIP METHOD

The apprenticeship method involves on-the-job training of personnel individually or in small groups by experienced workers. The experienced workers show the trainees the ropes and teach them all they need to know about their jobs. Properly used, this method can be extremely successful. Unfortunately, it also has many drawbacks. Its success depends on the quality of the experienced worker as an instructor. Its success also depends on the quality of the training guides the instructor and the trainee use. Without a training guide, the instructor may forget some information or inadvertently pass on bad work habits. Problems arise when the instructor neglects to preplan, is not a good instructor, or resents being saddled with an apprentice to train.

GROUP TRAINING

In group training, trainees receive training in one large group. This method allows a large number of people to learn at the same time, thereby reducing the time devoted to training. The instructors use training aids, demonstrations, lectures, and group discussions, which increase the effectiveness of the training. However, this method is effective only for information that does not require a lot of "hands-on" practice with complex processes or equipment.

THE SCHOOLHOUSE METHOD

Trainees of the schoolhouse method attend a specially organized Navy or civilian training course. This method of training is highly effective, but the person must frequently accept temporary additional duty (TAD) at another location to attend the course. Thus, the command loses the individual for the duration of the training. That drawback, coupled with the expense of sending the person TAD, reduces the effectiveness of this method. Commands can make it effective, however, by using a few people to teach many. That is, commands can send a few people TAD to learn new skills; after those people return, they can then teach the skills to their shipmates.

THE IN-HOUSE TRAINING METHOD

The best training method is an in-house training program that combines the apprentice-ship, group, and schoolhouse methods to meet the needs of your command.

Any effective training method requires carefully planned and properly scheduled lessons. When developing lesson plans and setting up schedules for in-house training, remember two important elements. First, the larger the volume of information, the more time the trainee will require to absorb it. Second, the speed at which people learn varies, though given enough time and enough practice, most people can learn any skill. Through systematic training people can learn jobs in a fraction of the time normally required through self-study. Planning ensures the trainee will receive in-house training in everything required to perform the job. Scheduling provides the time needed for training.

The Navy uses four types of in-housetraining: orientation, on-the-job, refresher, and career or professional development training.

Orientation Training

Orientation training is designed to acquaint Navy personnel with their new organization, their place in the organization, and the part the organization plays in carrying out the Navy's mission(s). Every person entering an organization or unit for the first time needs orientation training. Before people can become enthusiastic about their work, they must know something about the organization and feel a sense of pride in being a part of it. Generally, new people are apt to be more attentive, open-minded, and eager to learn than the "old hands"; and what they learn is more likely to remain indelibly fixed in their minds. Therefore, a good orientation is important to new people.

On-the-Job Training

On-the-job training teaches Navy personnel how to do the jobs to which they have been assigned. Since that is among the most important training supervisors do, they must conduct it with great care. Careless or indifferent training could result in higher operating costs; in extreme cases, it could prevent mission accomplishment or cost someone his or her life or a limb. Untrained personnel are the most expensive individuals on the Navy's payroll. Untrained people always cost more in dollars and operational capability than a trained, mission-capable person, The cheapest, most cost-efficient way to train new personnel is through a regularly scheduled training program.

Refresher Training

Refresher training helps people keep "up to speed." It enables people to brush up on knowledge and skills they already have but do not use often. It also teaches them about any changes in methods or techniques. Refresher training takes place after people have completed job training.

Career or Professional Development Training

Career or professional development training develops and improves the knowledge, skills, and abilities of your people to prepare them to fill positions of greater responsibility. Such training helps people prepare for advancement even though it may not relate to their immediate jobs.

INSTRUCTIONAL METHODS
AND TECHNIQUES

All methods of instruction can be classified as telling, lecturing, or discussing; showing or demonstrating; or any combination of these. Often the best method of teaching combines the various methods. You must decide which methods to combine and the emphasis to place on each unless the curriculum itself dictates the combination needed. In making that decision, consider (1) the nature of the trainees, (2) the subject matter, and (3) the limitations of time.

LECTURE METHOD

The lecture is still the most frequently used method of instruction. However, presenting a lecture without pausing for interaction with trainees can be ineffective regardless of your skill as a speaker. The use of pauses during the lecture for direct oral questioning creates interaction between instructor and trainee. Unfortunately, when classes are large, the instructor cannot possibly interact with all trainees on each point. The learning effectiveness of the lecture method has been questioned because of the lack of interaction; but it continues as a means of reaching a large group at one time with a condensed, organized body of information. Providing trainees with lesson objectives before the lecture will enable them to listen more effectively. It will help them to take concise, brief notes concerning the objectives rather than writing feverishly throughout the lecture.

We discuss the lecture method first because the techniques involved serve as the basis for other methods of training. Those techniques apply not only to lectures, but to many other kinds of presentations in which oral explanations play a secondary, but important, role. Every method depends on oral instruction to give information, to arouse attention and interest, and to develop receptive attitudes on the part of the trainees. Therefore, as an instructor, organize your oral presentations with the following techniques in mind:

1. Maintain good eye contact. As you speak, shift your gaze about the class, pausing momentarily to meet the gaze of each trainee. Make the trainees feel what you have to say is directed to each one personally. Your eyes as well as your voice communicate to them; and their eyes, facial expressions, and reactions communicate to you. Watch for indications of doubt, misunderstanding, a desire to participate, fatigue, or a lack of interest. If you are dealing with young trainees, you may sometimes need to remind them that they must give undivided attention to the instruction.

2. Maintain a high degree of enthusiasm.

3. Speak in a natural, conversational voice.' Enunciate your words clearly. Make certain the trainees can hear every spoken word.

4. Emphasize important points by the use of gestures, repetition, and variation in voice inflection.

5. Check trainee comprehension carefully throughout the presentation by watching the faces of the trainees and by questioning.

Observing facial expressions as an indication of doubt or misunderstanding is not a sure way of checking on trainee comprehension. Some trainees may appear to be comprehending the subject matter when, in reality, they are completely confused. Trainees who are in doubt often hesitate to make their difficulty known. They may hesitate because of natural timidity, fear of being classified as stupid, or failure to understand the subject matter well enough to explain where their difficulty lies.

Frequently ask if the class has any questions, thus giving the trainees an opportunity to express any doubts or misunderstandings on their part. Based on your personal knowledge and past experiences, ask specific questions about those areas which might give trainees the most trouble. Some instructors make the mistake of waiting until the end of the presentation to ask questions. The best time to clear away mental fog is when the fog develops. Mental fog tends to create a mental block that prevents the trainee from concentrating on the subject matter being presented. (Later in this chapter we discuss techniques related to asking questions, calling upon trainees to answer questions, and evaluating answers.)

6. Instruct on the class level. Use words, explanations, visual illustrations, questions, and the like, directed to the needs of the average trainee in the class.

7. Stimulate trainees to think. Think, as used here, refers to creative thinking rather than to a mere recall of facts previously learned. Use a number of instructional devices for stimulating trainee thinking. Among those devices are thought-provoking questions, class discussions,

problem situations, challenging statements, and rhetorical questions (a question to which no answer is expected). Another device is the use of suggestions, such as "I want you to think along with me," and "Consider your reaction to this situation."

DISCUSSION METHOD

Discussion methods are effective in getting the trainees to think constructively while interacting with the rest of the group. Conduct discussions with large or small groups; however, small groups are more desirable. You can control and direct a small group more easily than you can larger groups of 10 or more trainees. If a group is extremely large, break it into smaller groups or teams with a discussion leader for each team.

The use of the terms *class discussion* and *directed discussion* in this text refer to a method in which you direct and control the verbal exchange of the class. To use this method, first lay a suitable foundation for the discussion by asking one or more challenging questions. Then stimulate the trainees to discuss the basic questions; finally, guide the discussion to a logical conclusion.

In the directed discussion, you act as the chairman or moderator. As a result of your questions, suggestions, and redirection of ideas, the trainees in the class become genuinely interested in exploiting all angles of the central problem. They forget the normal classroom restraints and begin to talk to each other as they would when carrying on an ordinary conversation. A true class discussion requires a trainee-to-trainee interchange of ideas. An instructor-to-trainee interchange of ideas during a typical question-and-answer period is *not* a class discussion.

To conduct a class discussion, you must make more extensive and more thorough preparations than you would for a lecture. Although the trainees supply the ideas, you must have a thorough knowledge of the subject matter to be able to sift out pertinent ideas. Be aware of ideas that may lead the trainees off on a tangent; steer the discussion away from these ideas. Guide the trainees away from irrelevant ideas and toward the desired goals without dominating the discussion.

You can adapt certain ideas to discussions more easily than others. The most easily adaptable require trainees to compare, contrast, and weigh facts, concepts, and ideas. They also require trainees to solve problems, particularly those dealing with human relations, and to glean hidden or obscure information from scattered sources. To receive full benefit from the discussion, the trainees should have some previous familiarity with the subject matter. They could be familiar with the subject matter as a result of outside reading, prior Navy training and experience, or civilian training and experience.

To help make the class discussion a success, arrange the classroom in such a manner that you are a part of the group. If possible, arrange for the group to sit around a table so that all of the trainees can see each other and you. Use the discussion method only when classes are small enough to allow everyone a chance to take part.

Use the following techniques in conducting a classroom discussion:

1. Build a background for the discussion. The development of an appropriate background tends to focus the trainees' attention upon the central problem. An appropriate background also limits the problem to an area that can be covered in a reasonable length of time and creates interest in the solution of the problem.

2. Ask thought-provoking discussion questions.

3. Ask questions to keep the discussion in bounds, to bring out the desired aspects of the main problem, and to guide the discussion toward the desired conclusion.

4. Encourage the timid, restrain the talkative, and maintain a standard of discipline in keeping with the maturity level of the trainees.

5. Be willing to accept, temporarily, an incorrect idea. A hasty "No!" or' 'You're wrong!" can bring sudden death to any discussion.

6. Avoid expressing your own ideas until the trainees have had ample opportunity to express theirs.

7. Summarize the discussion at intervals. Use the chalkboard for this purpose. Give due credit to the trainees for their contributions. Clear up misunderstandings and emphasize correct ideas.

DEMONSTRATION METHOD

Use the demonstration or "doing" method to teach skills. Demonstrate step-by-step the procedures in a job task, using the exact physical procedures if possible. While demonstrating, explain the reason for and the significance of each

step. To be effective, plan the demonstration in advance so that you will be sure to show the steps in the proper sequence and to include all steps.

If you must give the demonstration before a large group or if the trainees might have trouble seeing because of the size of the equipment involved, use enlarged devices or training aids. When practical, allow trainees to repeat the procedure in a "hands on" practice session to reinforce the learning process. By immediately correcting the trainees' mistakes and reinforcing proper procedures, you can help them learn the task more quickly. The direct demonstration approach is a very effective method of instruction, especially when trainees have the opportunity to repeat the procedures.

Techniques Used in the Demonstration Method

The basic method of instruction for teaching skill-type subject matter is the demonstration-performance method of instruction. This method is recommended for teaching a skill because it covers all the necessary steps in an effective learning order.

The demonstration step gives trainees the opportunity to see and hear the details related to the skill being taught. Those details include the necessary background knowledge, the steps or procedure, the nomenclature, and the safety precautions. The repetition step helps the average and slow learners and gives the trainees an additional opportunity to see and hear the skill being taught. The performance step gives all trainees the opportunity to become proficient. In short, this method is recommended because it leaves nothing to chance.

For convenience, we discuss the techniques for imparting skills in steps, rather than activities. When setting up an instructional plan, understand that, you don't have to follow these steps in the sequence given below; instead choose the steps in the sequence best suited to the needs of the trainees. Although you will always include a demonstration step and a performance step, you must use judgment in selecting techniques to make the various steps effective.

DEMONSTRATION STEP. —Every Navy skill, mental or physical, has a body of background knowledge the trainees must know to perform the skill properly. You can best teach some kinds of background knowledge in a standard classroom with adequate, comfortable seating and the display of training aids. You will present other kinds of knowledge in ships or laboratories in conjunction with actual demonstrations.

Develop proper attitudes while teaching the skill. Developing the desire to do a perfect job, the desire to exercise economy of time and effort, and the desire to protect the lives of others are all important attitudes.

Use a variety of techniques in presenting background knowledge and in developing proper attitudes. The following techniques relate more to the actual demonstration:

1. Position the trainees and training aids properly. If you direct trainees to gather around a worktable or a training aid, make sure every trainee has an unobstructed view.

2. Show and explain each operation. Perform each operation in step-by-step order. Whenever possible, give the instructions while you demonstrate. Do not hurry; don't emphasize speed in performing operations or in moving from one operation to another during the demonstration step. Make certain the trainees understand the first step before you proceed to the second step, and so on. Repeat difficult operations. Pause briefly after each operation to observe trainee reactions and to check trainee comprehension.

In certain skills a distinction between right and left is important; for example, the manual of arms or knot tying. When teaching the manual of arms, or skills of a similar nature, use an assistant instructor or a well-coached trainee to demonstrate the skill while you give instructions. This method of instruction allows you to observe the reaction of the trainees.

3. Observe safety precautions. By observing safety precautions, you may take a few more seconds to rig a safety line, don a safety mask, or tag an electric cable; but the time is not wasted. You are impressing the trainees with the importance of exercising extreme care in dealing with potentially dangerous equipment.

4. Give proper attention to terminology. Call each part of a training aid by its proper name each time you call attention to it. For trainees to remember the correct nomenclature, however, requires more than your use of the proper names

of parts. The following suggestions should prove helpful:

a. List the names of parts on the chalkboard.

b. Refer trainees to any available chart that shows the parts and names of parts.

c. Conduct a terminology drill on the parts of the training aid while the aid is in its assembled or disassembled condition.

5. Check trainee comprehension carefully. Ask questions during the demonstration step—questions that require the trainees to recall nomenclature, procedural steps, underlying principles, safety precautions, and the like. Watch for class reactions that show a lack of attention, confusion, or doubt; but do not depend solely upon visual observations. Instead, check comprehension after each major step or procedure.

REPETITION STEPS. —Generally, you need to use one or more repetition steps between the demonstration step and the performance step. In deciding how many and what kinds of repetition steps to include, consider several elements, the most important being the complexity of the skill. As a general rule, the more complex the skill, the greater the need for repetition steps. Another element you must consider is the nature of the skill. In some skills, such as visual signaling, speed is an essential element. In other skills, ease of manipulation, conservation of materials, or safety is the essential element. Last, consider the ability of the trainees to acquire the skill and the amount of time available for training.

Try using the following repetition steps; Navy schools have used them with good results:

Instructor Repetition. Repeat the job without noticeable interuptions, restating the procedures and the important safety factors while performing the steps. This step has two important, though secondary purposes. First, it shows continuity (how the procedural steps follow each other under actual operating conditions). Second, it sets standards of ease, speed, and accuracy.

Trainee Repetition. Ask a trainee to act as an assistant instructor by repeating the job and restating the procedure and the important safety factors while performing each step. Important secondary purposes of this step are to motivate the trainees by proving they can do the job with

the instruction you have given and to help you see areas that need strengthening. One of the advantages of this step over the instructor repetition step is the great amount of trainee interest generated.

Group Performance Repetition. Repeat the job slowly, one step at a time, while the trainees watch and imitate your actions, one step at a time. Use this performance repetition step to teach simple, nondangerous physical skills such as knot tying, sending semaphore, and performing the manual of arms. You will also find it effective in teaching mental skills, such as solving mathematical or maneuvering problems or filling in forms.

Coach-and-Pupil Repetition. Divide trainees into small groups. If a group consists of two trainees, one (as a pupil) performs the job while the other (as the coach) checks the performance. After the pupil has acquired a certain degree of proficiency, have the coach and the pupil reverse positions. Use this step to teach skills in which performance involves potential danger to personnel or equipment; for example, firing small arms or troubleshooting electronics equipment.

PERFORMANCE STEP. —Acquaint the trainees with the activity they will complete when using a skill. Then organize the trainees into working groups, supervise their practice of the skills involved, reteach the skills, and evaluate and record the results.

Supervise trainees while they practice the skills you demonstrated during the preceding instruction until they attain the required proficiency.

Some skills (knot tying, welding, machinery repair) require a proficiency in creating a finished product. Therefore, allow trainees to practice those skills until they can meet the required standards of ease and precision needed to make the product. Normally, speed is not important.

Communications skills (typing, visual signaling, radio-code receiving) require a proficiency in speed and accuracy. Allow trainees to practice those skills until they can meet the required proficiency in speed and accuracy.

General Hints

Make every effort to get trainees to observe correct procedures the first time they try a new task. The most effective learning results when trainees use a skill immediately after you have

taught it; so as soon as you teach trainees to do a job, have them practice it.

Teaching applicable safety precautions is especially important. Teach a safety precaution just before reaching the point in your demonstration where it applies. Tell the reason for the precaution so that the trainees will understand the need to comply with it.

Patience is a virtue for any petty officer. If it does not come naturally to you, you must train yourself to be patient. A slow learner may never acquire the knowledge or skill you are trying to impart if you are impatient.

Avoid sarcasm toward a bungler; that person may be trying harder than you suspect. Nothing exhausts the patience of the expert as much as the fumbling attempts of a beginner; however, the instructor must patiently demonstrate and explain until the trainee acquires the needed competence. Good instruction means a more effective crew, and such an asset justifies any amount of patience.

If you find that your trainees have not learned what you tried to teach them, do not react as if they disobeyed orders. If trainees do not understand a certain lesson or operation, that could indicate a poor job of teaching. The old saying, "If the learner hasn't learned, the teacher hasn't taught" might apply in some situations.

RELATED TECHNIQUES

You can use instructional techniques with any of the above methods. These techniques include the use of the lesson *summary, oral questioning,* and *training aids.*

Lesson Summary

The term *summary* as used here refers to that part of the lesson in which the instructor reviews the material covered. In summarizing, keep in mind two major aims. First, you want to help the trainees identify and organize the subject matter. Second, you want to assist the trainees in understanding and, where necessary, in memorizing the subject matter. Use the following techniques in summarizing a lesson:

1. Introduce the summary properly.
2. Summarize the subject matter thoroughly. Plan the summary so that it assists the trainees in organizing the important subject matter into a form more easily learned. Review the actual subject matter, not just the topic, thoroughly enough for the trainees to gain an adequate understanding of the subject. Having the trainees review the topics (class notes) will aid them in understanding the subject.

3. Avoid a strictly oral summary, if possible, Remember, if you need training aids to make the right kind of lesson presentation, then you also need them for the right kind of summary.

4. Summarize at appropriate intervals. If the lesson is long—for example, 2 or 3 hours in duration—you would be wise to summarize at the end of each period or at the end of each significant area of subject matter. Trainees will absorb short summaries better than an unduly long summary at the end of the complete lesson.

Oral Questioning

We cannot place enough emphasis on the importance of questioning in *any* teaching situation. Oftentimes, the difference between a dull, boring lecture and a lively discussion is only a matter of some well-planned, well-directed oral questions. The ability to direct thought through questioning is recognized as one of the most valid proofs of teaching skill. A direct relationship exists between your success as an instructor and the quality and quantity of oral questioning you use in teaching. Therefore, you will find the following techniques of invaluable use to you, as the instructor:

1. **Stimulate trainee thought.** Ask questions that call for the application of facts rather than just facts alone. Facts can easily be committed to memory and require little or no thought on the part of the trainee.

2. **Establish a level of instruction.** Ask questions that require trainees to comment on previous experience in the subject matter you are going to teach. By asking a series of oral questions, you can determine the trainees' level of knowledge in a particular subject matter. That information will enable you to determine the level at which you should begin instruction.

3. **Arouse interest.** Asking a general question, such as, How many of you have fired a .50-caliber machine gun? or How many persons died on the highways last year? will serve to clear trainees' minds of any extraneous thoughts. Such questions aid in motivating trainees as they mentally search

for an answer. This type of questioning is generally used to generate interest in a large block of subject matter, usually a lesson as a whole.

4. **Focus the trainees' attention.** By asking a question about a particular part of a model, mock-up, chart, demonstration piece, or chalkboard drawing, you can direct the trainees' attention to that immediate area.

5. **Review the subject matter.** Devise questions requiring trainees to solve problems that will provide them with an opportunity to apply knowledge. Again, ask questions that emphasize the ability to reason and not the ability to recall mere facts.

6. **Drill on the subject matter.** To help trainees remember certain facts, figures, shapes, formulas, and so forth, use preplanned oral questions to reinforce a subject matter in the trainees' minds. This technique will eventually lead to the trainees' mastery of the subject on which they are being drilled.

7. **Check for comprehension.** Ask questions covering the main points of the lesson to detect and correct errors in thinking and to locate areas you need to reteach.

8. **Increase trainee participation.** Encourage trainees to take an active part in the instruction by allowing them to both answer and ask questions.

9. **Increase trainee learning.** Encourage trainees to ask questions to help them learn. Trainees remember information longer if given in answer to their own questions.

10. **Develop communication skills.** Allow trainees to ask and answer questions to improve their speaking skills. Active involvement in the class discussion increases their listening skills, Asking and answering questions helps trainees organize their thoughts.

Training Aids

To get the best results from training aids, use the following procedures:

1. Always preview the aid. Look at the film, listen to the recording, examine the chart, and check the visibility of the chalkboard drawing before the instruction period. Never lose valuable instruction time and waste the time of the trainees by stopping to learn how an aid works or to adjust it. During your preview, check for points that need clarification or emphasis.

2. Select and prepare aids that emphasize or illustrate points in the lesson. Rarely, if ever, use aids only because they are pretty or nice to look at. Test the usefulness of an aid by asking yourself what important points it reveals or clarifies?

3. Plan how and when you will use aids during the lesson. Mount or prepare the aid, but do not expose it in advance. Exposed aids may distract the group's attention from other steps in the lesson.

4. Plan how you will introduce the aid and what you will say about it. Provide time for the trainees to view, listen to, examine, handle, or operate the aid. However, don't expect them to listen to you at the same time they are reading or studying the aid.

5. When possible, have a trainee take over as the instructor by going through the explanations and steps you have given. That will help clear misconceptions and keep the trainees' attention.

6. Be sure every trainee can see and hear the aid and has the opportunity to handle it if required.

7. When using an aid, stand so that you do not block the trainees' view; use a pointer to locate parts on the aid; and above all, talk to the trainees, not to the aid.

UNIT TRAINING PROGRAM

We will now discuss short-range and long-range training plans. We will also briefly discuss training accomplishment records.

LONG-RANGE TRAINING PLAN

The long-range training plan consists of your command's training goals and operating schedules. It provides the framework for the

development of the short-range training plan. The long-range training plan should include the following information:

1. The Annual Employment Schedule (similar to fig. 5-1)
2. A list, including frequency, of all required examinations, inspections, certifications, and assist visits (similar to fig. 5-2)
3. A list of all type commander (TYCOM) required exercises including periodicity and the date they were last conducted (similar to fig. 5-3)
4. A list of off-ship school and Navy enlisted classification code (NEC) requirements, including the names of the personnel who hold these qualifications (similar to fig. 5-4)
5. A list of all lectures and seminars appropriate to each training group (similar to

fig. 5-5) (This list should include, as a minimum, the Fundamental and Systems topics from applicable personnel qualification standards [PQS].)

The training officer and department heads are responsible for developing and maintaining the long-range plan. The department head consolidates the information required for the long-range plan for all the training groups within the department and forwards the department long-range training plan to the training officer. The training officer consolidates the long-range plans received from each department and adds all unit level training requirements (e.g., general military training [GMT]), indoctrination training). The training officer then consolidates this information into one package and presents it to the executive officer for review and the commanding officer for

ANNUAL EMPLOYMENT SCHEDULE FISCAL YEAR ___
COMMANDER NAVAL SURFACE FORCE
CONFIDENTIAL (WHEN FILLED IN)   U. S.   FLEET   PREPARED

Figure 5-1.-Example of an Annual Employment Schedule.

5-10

ENGINEERING DEPARTMENT

REQUIRED EXAMINATIONS, INSPECTIONS, CERTIFICATIONS, AND ASSIST VISITS

DESCRIPTION	DATE DUE	DATE SCHEDULED
OPERATIONAL PROPULSION PLANT EXAM	11/86	10-11 OCT 86
3-M INSPECTION	01/87	
COMMAND INSPECTION	03/87	03/87
INSURV UMI	05/88	

Figure 5-2.-Example of a Required Examinations, Inspections, Certifications, and Assist Visits list.

ENGINEERING DEPARTMENT

TYCOM REQUIRED EXERCISES

EXERCISE NUMBER AND TITLE	PERIODICITY	DATE(S) CONDUCTED
M08-E-1-R LOSS OF MAIN FEED CONTROL	TRX - QUARTERLY SELEX - ONCE/CYCLE	TRX- 1/19/86 SELEX- 7/3/85
M08-E-2-R HIGH WATER IN BOILER	TRX- QUARTERLY SELEX- ONCE/CYCLE	TRX- 1/19/86 SELEX- 12/20/85
M08-E-3-R LOW WATER IN BOILER	TRX- QUARTERLY SELEX- ONCE/CYCLE	TRX- 2/10/86 SELEX- 7/3/85
M08-E-5-R LOSS OF BOILER FIRES	TRX- QUARTERLY SELEX- ONCE/CYCLE	TRX- 2/10/86 SELEX- 12/20/85
M08-E-7-R BOILER EXPLOSION/FLAREBACK	TRX- QUARTERLY SELEX - ONCE/CYCLE	TRX- 2/10/86 SELEX- 12/20/85
M08-E-8-R MAJOR FUEL OIL LEAK	TRX- QUARTERLY SELEX- ONCE/CYCLE	TRX- 2/11/86 SELEX- 12/19/85
M08-E-9-R FIRE IN BOILER AIR CASING	TRX- QUARTERLY SELEX- ONCE/CYCLE	TRX- 2/11/86 SELEX- 7/3/85
M08-E-10-R LOSS OF CONTROL AIR	TRX- QUARTERLY SELEX- ONCE/CYCLE	TRX- 1/19/86 SELEX- 12/20/85
M08-E-11-R WHITE SMOKE	TRX- QUARTERLY SELEX- ONCE/CYCLE	TRX- 2/12/86 SELEX- 7/17/85
M08-E-12-R LOSS OF VACUUM/HOT CONDENSER	TRX- QUARTERLY SELEX - ONCE/CYCLE	TRX- 2/11/86 SELEX- 12/20/85
M08-E-13R UNUSUAL NOISE/VIBRATION IN MAIN ENGINE	TRX - QUARTERLY SELEX - ONCE/CYCLE	TRX - 1/19/86 SELEX- 7/3/85
M08-E-14R JAMMED THROTTLE	TRX - QUARTERLY SELEX- ONCE/CYCLE	TRX- 2/12/86 SELEX- 12/20/85
M08-E-15-R HOT BEARING	TRX - QUARTERLY SELEX- ONCE/CYCLE	TRX- 2/11/86 SELEX- 12/19/85
M08-E-16-R LOSS OF LUBE OIL PRESSURE	TRX- QUARTERLY SELEX - ONCE/CYCLE	TRX- 2/12/86 SELEX- 7/17/85
M08-E-17R MAJOR LUBE OIL LEAK	TRX - QUARTERLY SELEX- ONCE/CYCLE	TRX- 1/19/86 SELEX- 12/20/85
M08-E-18-R	TRX- QUARTERLY	TRX- 2/10/86

Figure 5-3.-Example of a TYCOM Required Exercises form.

SCHOOL/NEC REQUIRED	NO. REQ.	WHO ATTENDED	EAOS/PRD
ENGINEERING DEPARTMENT			
OFF SHIPS SCHOOLS AND NEC REQUIREMENTS			
P4505 STM PROP MAINT SUP (SCHOOL: A-653-0083)	2	BTCS A.A. ALFA	4/90
		BT1 C.C. CHARLIE	9/88
S4512 HAGAN MAINTENANCE (SCHOOL: A-651-0041)	2	BTC B.B. BRAVO	3/87
		BT1 D.D. DELTA	1/89
S4532 ABC CONSOLE OPERATOR (SCHOOL: A-651-0049)	6	BT1 E.E. ECHO	2/89
		BT1 C.C. CHARLIE	9/88
		BT1 D.D. DELTA	1/89
		BT2 F.F. FOXTROT	3/90
		BT2 G.G. GOLF	4/87
		BT2 H.H. HOTEL	7/88
P4291 REEFER & AC (CENTRIFUGAL) (SCHOOL: A-710-0025)	2	MM1 R.R. ROMEO	9/91
		MM2 S.S. SIERRA	12/89
S4954 GEN MAINT WELDER (SCHOOL: A-701-0026)	2	HT2 T.T. TANGO	1/88
		HT2 W.W. WHISKY	5/90

Figure 5-4.-Example of a required schools/NEC list.

TRAINING GROUP LECTURE TOPICS

FOR B DIVISION

B1 MECHANICAL THEORY	B27 SHORE SERVICE STEAM
B2 BOILER THEORY	B28 FLASH TYPE DISTILLING PLANT
B3 ENGINEERING SAFETY	B29 MAIN SHAFTING, BRGS, PROPS
B4 BASIC STEAM CYCLE	B30 MAIN DRAIN SYSTEM
B5 BOILER SYSTEMS	B31 FIREMAIN SYSTEM
B6 FUEL OIL SERVICE SYSTEM	B32 POTABLE WATER SYSTEM
B7 COMBUSTION AIR	B33 BALLAST, DEBALLAST, STRIPPING
B8 MAIN STEAM SYSTEM	B34 RESERVE FEED
B9 1200 PSI AUX STEAM SYSTEM	B35 F.O. STORAGE & TRANSFER
B10 600 PSI AUX STEAM SYSTEM	B36 HP AIR SYSTEM
B11 REDUCED PRESSURE STEAM	B37 BROMINE FEED
B12 PROPULSION TURBINES / RED GEAR	B38 ABC SYSTEM
B13 MAIN CONDENSERS	B39 TECH MANUAL USE
B14 SW CIRC SYSTEMS	B40 VALVE MAINTENANCE
B15 MAIN CONDENSATE SYSTEM	B41 PAINTING & PRESERVATION
B16 MAIN AIR EJECTORS	B42 EOSS USE
B17 MAIN & AUX GLAND STEAM	B43 LAGGING

Figure 5-5.-Sample Training Group Lecture Topics list.

approval. Once approved by the commanding officer, this consolidated package will become the unit long-range training plan.

When you receive your unit's copy of the long-range training plan, provide a copy of applicable portions to each training group. Since the training officer keeps the unit's long-range training plan up to date, provide him or her with updated information periodically at the Planning Board for Training. The long-range training plan, when updated regularly, provides the unit with a dynamic management tool.

SHORT-RANGE TRAINING PLAN

The short-range training plan contains the planning and scheduling of training. Effective scheduling requires careful attention by the chain of command to minimize conflicts and to maximize opportunities. The short-range training plan should include the following information:

1. The Quarterly Employment Schedule (similar to fig. 5-6)

2. The Quarterly Training Plan (similar to fig. 5-7)
3. The Monthly Training Plan (similar to fig. 5-8)
4. The Weekly Training Schedule (similar to fig. 5-9)

Quarterly Training Plan

During the Planning Board for Training in the month before an upcoming quarter, the training officer distributes copies of the Quarterly Employment Schedule to the board members. Using this schedule as a guide, the Planning Board for Training develops broad unit training plans for the upcoming quarter. The purpose of this Quarterly Training Plan is to make training groups aware of unit plans that may affect the scheduling or conduct of group training. Once the Planning Board for Training has developed the unit Quarterly Training Plan, department heads add any additional broad departmental plans and provide a copy to each training group within the

QUARTERLY EMPLOYMENT SCHEDULE
QUARTER, FISCAL YEAR

Figure 5-6.-Example of a Quarterly Employment Schedule.

QUARTERLY TRAINING PLAN
2ND QUARTER, FISCAL YEAR 1986

	JANUARY				FEBRUARY				MARCH				
	6	13	20	27	3	10	17	24	3	10	17	24	31
FIRST AID LECTURES	1ST-DIV / 2ND-DIV	B-DIV / R-DIV	A-DIV / E-DIV	H-DIV / S1-DIV	S2-DIV / S3-DIV	OE-DIV	OI-DIV / OC-DIV	Q-DIV / 4TH-DIV	1ST-DIV / 2ND-DIV	B-DIV / R-DIV	A-DIV / E-DIV	H-DIV / S1-DIV	S2-DIV / S3-DIV
ALL HANDS LECTURES (CCTV)	CAPTAINS CALL		COMBINED FEDERAL CAMPAIGN		SAILOR STANDDOWN/STEAM BY PAC				ELECTRICAL SAFETY				
GENERAL MILITARY TRAINING (CCTV)	BLOOD DONORSHIP PROGRAM	CAREER COUNSELING			CARCINOGEN EDUCATION			CODE OF CONDUCT		DEPENDENT ASSISTANCE			
SHIPWIDE EVOLUTIONS	UNDERWAY FLEETEX	DC OLYMPICS (COS-2)	PERSONNEL INSPECTION / SHI		SAFETY STAND-DOWN					MTT VISIT (UNLUN)			
ENGINEERING DEPARTMENT PLANS			A/E/R DIVISION PREPS FOR SHI			MM/BT/EM ORAL BOARDS (PRIOR TO MTT WEEK OF 3/17)	CASUALTY CONTROL DRILLS PQS EVOLUTIONS						

Figure 5.7.-Example of a Quarterly Training Plan.

MONTHLY TRAINING PLAN

MONTH OF __MARCH 1986__ TRAINING GROUP __B-DIVISION__

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
						1
2	3 B9-1200# AUX STEAM SYSTEM BT2 HOTEL	4 EHOW ORAL BOARDS	5 B35-F.O. XFER AND STORAGE BT2 GOLF	6 BT L/L ORAL BOARDS	7 B38-ABC SYSTEM BT1 DELTA	8
9	10 B42 EOSS USE LT WILCOX	11 MMOW ORAL BOARDS	12 B46-COLD/HOT CHECKS BTCS ALFA	13 BTOW ORAL BOARDS	14 B45 MLOC PROCEDURES LT WILCOX	15 LIGHT-OFF UNDERWAY AM 3/17 FOR MTT
16	17 B50-HEAT STRESS BT2 FOXTROT	18 UNDERWAY ENGINEERING MOBILE TRAINING TEAM VISIT	19 PQS EVOLUTIONS & CASUALTY CONTROL DRILLS	20	21	22
23	24 B52 BOILER LAMP BT2 BRAVO 30	25 EOOW ORAL BOARDS 31	26 B48-EEBD BT1 ECHO	27 MM MESS ORAL BOARDS	28 B40-VALVE MAINTENANCE BTCS ALFA	29

SUBMITTED BY: __W. W. Wilcox, LT, USN__
B-DIVISION OFFICER

APPROVED BY: __J. P. Jones, LCDR, USN__
CHIEF ENGINEER

Figure 5-8.-Example of a Monthly Training Plan.

WEEKLY TRAINING SCHEDULE

WEEK OF: 9-15 MARCH 1986   DEPARTMENT ENGINEERING

SUNDAY 3/9	MONDAY 3/10	TUESDAY 3/11	WEDNESDAY 3/12	THURSDAY 3/13	FRIDAY 3/14	SATURDAY 3/15
DUTY SECTION I DUTY ENGINEER EXERCISE BOTH FIRE PARTY AND R{A TEAM	OBIS FIRST AID LECTURE R-DIV MESS DECKS - HMI PILL 1230- DIV TRNG A- A13 AC&R BOAT SHOP HMI ROMEO B- B42 EOSS/EOCC COPL LT WILCOX BERTHING COMP H- H42 EOSS/EOCC LT WILCOX BERTHING COMP E- E12 SP PHONES IC SHOP IC2 MIKE R- R14 P-250 HT SHOP HT3 TANGO	1000-ALL HANDS ELECT SAFETY ON CCTV 1300- CAPTAIN'S MAST 1600-MMOW ORAL BOARDS IN CHIEFS MESS	1230- DIV TRNG A-A11 REEFERS BOAT SHOP HM2 SIERRA B- B46 COLD/HOT CHECKS BTCS ALFA BERTHING COMP. H- H46 COLD/HOT CHECKS HMCM SMITH CWO B-R. E- E31 GYROS IC SHOP IC3 PAPA R- R5 HKV GASKASK HT SHOP HTFN OSCAR	OBIS FIRST AID LECTURE B-DIV MESS DECKS - HMI PILL 1500- DUTY EUB COMMENCE HLOC PROCEDURES FOR SATURDAY LIGHT OFF 1600-BTOW ORAL BOARDS IN CHIEFS MESS	1230- DIV TRNG A- A37 MAIN DRAIN BOAT SHOP EN1 PETERS B45 HLOC BERTHING COMP LT WILCOX H- H45 HLOC BERTHING COMP LT WILCOX E- E17 SSTGS IC SHOP EHI DOLAN R- R40 TAU HT SHOP LTJG WILLIAMS	DUTY SECTION III DUTY ENGINEER EXERCISE BOTH FIRE PARTY AND RfA TEAM 1500 LIGHT FIRES IN IA BOILER- HTT VISIT NEXT WEEK - ALL DIV OFFS ENSURE PERSONNEL ARE BRIEFED ON SCHEDULE

PROMULGATED BY: J. P. Jones, LCDR, USN
CHIEF ENGINEER

Figure 5-9.-Example of a Weekly Training Schedule.

department. Training, planning, and scheduling for periods shorter than the quarter take place at the departmental level.

Monthly Training Plan

Using the Quarterly Training Plan as a guide, each training group submits a proposed Monthly Training Plan to the cognizant department head not later than the last week preceding the upcoming month. This plan indicates the training to be conducted on specific days and who the instructor will be. The department head reviews and approves each training group monthly plan. The department head keeps copies of all the department's training group monthly training plans and uses the compiled package as the primary tool for scheduling training at the Planning Board for Training.

Weekly Training Schedule

Each week after the Planning Board for Training, the department head provides each training group within the department a copy of a single Department Weekly Training Schedule. The single schedule includes all training applicable to the Department. Don't make changes to this weekly schedule without the approval of the cognizant department head. This schedule should indicate the time of the training and where it will be conducted.

TRAINING ACCOMPLISHMENT RECORDS

Scheduling of training requires careful attention to reduce conflict in activities and to ensure training time is used to the best advantage.

Keep training records to an absolute minimum; maintain only those needed to show what training has been accomplished and what remains to be done. The true measurement of training effectiveness is the job performance of personnel. Training records help you measure job performance in the simplest way possible. You may record all training on a General Record (Type II),

OPNAV Form 1500-31 (fig. 5-10). You can also use it as an attendance sheet. Each training group supervisor maintains records for personnel assigned to his or her group. Keep training records on your personnel as long as they are assigned to your unit.

You may prepare training plans, schedules, and records by typing, handwriting, or using an automatic data processing (ADP) or word processing system. Individual commands or type commanders, as appropriate, may specify the retention period for training plans and records. Training plans should be retained long enough to assist with planning for the training cycle. For additional information on training, refer to OPNAVINST 3120.32B, *Standard Organization and Regulations of the U.S. Navy,* chapter 8.

SUMMARY

The more senior a petty officer, the greater are his or her responsibilities for training. As a second class petty officer, you need to know various techniques for conducting a proper and effective training program. You must understand the importance of effective training. Inadequate training practices can affect the operational readiness and performance of your command.

Various features and requirements make a unit's training program efficient and effective. The three basic features are compatibility, instruction and evaluation, and analysis. The basic requirements of effective training include dynamic instruction, positive leadership, personal interest, quality control, technical support, and regular training schedules. For a training program to be positive and effective, it must meet those requirements.

Training is more effective if conducted in small groups. The most effective training method is an in-house training program tailored to the needs of your command. The different types of in-house training methods include orientation, on-the-job, refresher, and career or professional development. Other instructional techniques include lectures, discussions, and demonstrations. Give lectures when you are teaching a large volume of information. Begin class discussions to get trainees to interact. Use the demonstration method to teach skills. You will find the use of a lesson summary, oral questioning, and training aids helpful in most situations.

Once you set up a unit training program, routinely schedule and plan training. Become familiar with long-range and short-range training

Figure 5-10.-Example of training record.

5-16

plans and all of the other schedules that affect training schedules.

Use the division schedule to plan and record the accomplishment of all training. Training petty officers should use the weekly schedule to schedule, record, and report completed training.

REFERENCES

Standard Organization and Regulations of the U.S. Navy, OPNAVINST 3120.32B, Office of the Chief of Naval Operations, Washington, D.C., 1988.

CHAPTER 6

PERSONNEL SAFETY AND DAMAGE CONTROL

LEARNING OBJECTIVES

Upon completion of this chapter, you should be able to do the following:

1. Identify the duties of the electrical safety petty officer.

2. Describe the responsibilities and the elements of an electrical safety program.

3. Describe the electrical safety precautions associated with hand tools and portable electrical power tools.

4. Explain how to effectively supervise personnel in work center and job site safety.

5. Explain the work center supervisor's role in occupational safety and health awareness.

6. Identify the various methods used on the job to enforce safety.

7. Explain how to apply the Navy Occupational Safety and Health Program within the work center.

8. Explain how to instruct personnel on the use and maintenance of personal protective equipment and clothing.

9. Describe the different parts of the ND Mk V and MCU-2/P chemical, biological, and radiological (CBR) protective masks.

10. Explain how to fit, test, and don the ND Mk V protective mask.

11. Explain how to replace mask canisters on the ND Mk V protective mask.

12. Describe how to care for and maintain the ND Mk V protective mask.

13. Explain how to check for leaks on the MCU-2/P protective mask.

14. Explain how to fit and don the MCU-2/P protective mask.

15. Explain how to select the correct size of MCU-2/P protective mask.

16. Describe the different types of CBR protective clothing.

17. Describe how the M258A1 skin decontamination kit should be used during a CBR attack.

It is the policy of the Navy to enhance operational readiness and mission accomplishments by establishing an aggressive occupational safety and health program which will reduce injuries, illnesses or death, material loss or damage, and maintain safe and healthy working conditions for personnel.

—OPNAVINST 5100.19B

This chapter provides information about safety in the work center, the duties of the electrical safety petty officer, and chemical biological and radiological (CBR) protection equipment. Hopefully, reading about these topics will cause them to remain fresh in your mind as you go about your daily routine.

SAFETY IN THE WORK CENTER

The goals of the Navy safety programs are to create and maintain safe and healthful working

conditions for military and civilian personnel and to reduce mishaps. A mishap is an event or a series of events that lead to injuries, occupational illnesses, death, or material damage or loss. Safety and occupational health concepts and procedures should be made part of every person's professional approach to a job—from top management through the first-line supervisor to the worker. You, as a petty officer second class, may be that first-line supervisor.

ROLE OF THE SUPERVISOR

The safety-minded supervisor is the key to a successful mishap prevention program. First-line supervisors should know the most about their areas of responsibility. Supervisors normally have daily contact and are familiar with the personnel, equipment, and materials involved. They should know the standard practices and circumstances in the work area as well as the hazards involved. They have a personal and professional interest in identifying factors that cause mishaps. Supervisors should take immediate action to prevent a mishap from occurring or recurring. They can usually communicate effectively with their people because they speak their language and understand them better than anyone else.

Supervisors should make mishap prevention a part of the job. They should motivate their people to develop and use safe work habits and to believe in mishap prevention. Supervisors should insist on safe practices at all times, recognize hazardous methods and procedures, and take corrective (mishap preventive) measures immediately. Experience has shown that a lack of knowledge or skill is the single biggest cause of mishaps. Teaching a person the RIGHT way to do a job includes teaching the person the SAFE way. That is why on-the-job training and supervision are important parts of safety programs.

TRAINING AND EDUCATION

A comprehensive training and education program is essential to mishap prevention. Safety training develops people's skills in using mishap prevention methods and in applying safe practices in all activities. Safety education develops people's awareness of the importance of mishap prevention and their ability to recognize and correct potential mishap conditions and practices. Thorough, high-quality training and education is needed to achieve the Navy's safety program objectives.

One of the most effective methods of safety training is to have trainees do a job repeatedly, following set procedures. When trainees repeatedly follow correct and safe procedures to do a job, safe practices become a part of their daily routine. Such practices develop and reenforce good safety habits and allow the instructor to correct unsafe habits on the spot. Testing and periodic retesting of the operator and the maintainer should be conducted to ensure they remember set procedures. This provides feedback and validation of instruction and allows detection and correction of unsafe habits.

As a result of changing technology, new developments and equipment are constantly being introduced into the work environment. In spite of conscientious mishap prevention, new developments and equipment present new hazards. Our environment, the mistakes of others, and our own carelessness also present hazards. Because the potential for hazards is so great, hazard awareness training is necessary.

Supervisors and managers should use formal and on-the-job training to teach hazard awareness. They should also share personal experiences to develop hazard awareness in their personnel. Safety-related magazines, pamphlets, posters, films, closed-circuit television (CCTV), and other training aids should be used as an integral part of the training program.

Magazines and periodicals relating to safety and mishap prevention are available from the Naval Safety Center. These publications should be ordered by each naval activity and routed to all hands. Published articles are excellent training aids for mishap prevention presentations and training sessions.

Posters are designed to promote awareness of a specific hazardous action or event and, through this awareness, reduce the possibility of a particular mishap. They are effective in increasing mishap prevention awareness on a short-term basis. However, if left displayed too long, they can quickly become a part of the background and fail to generate the desired interest. Posters should be located where the greatest number of personnel will see them. Also when possible, they should be located in the vicinity of the potential hazard or action denoted by the poster. Pages taken from publications such as *Fathom* make good safety posters.

Films and CCTV are highly effective training aids. They must be carefully selected to emphasize the particular phase of mishap prevention being promoted. Showing films at random, with little

or no thought in their selection, can have a negative effect on the viewer. Films selected with care can increase mishap prevention awareness. Viewers will remember what they have seen in the films in future situations.

Continual monitoring of the mishap prevention program at each level of responsibility will reveal problem areas. Once the problem areas have been recognized, further training that deals with these areas can be carried out. This training can be conducted at the work center or command level, as required.

SAFETY INSPECTIONS

Safety inspections must be organized on a regular, systematic basis because unsafe conditions are always being created. First, all things wear out with use. Pipes corrode, cable strands break, insulation rots away, and hand tools develop defects. In the process, unsafe conditions are born. Secondly, the actions of people create unsafe conditions. Materials are occasionally left in hazardous locations. Tools are occasionally abused and rendered unsafe for the next person to use. Guards are sometimes removed and not replaced. Safety devices are sometimes made inoperative. Wherever people work, unsafe conditions are created.

Unsafe conditions may be created through honest ignorance, gross neglect, or deliberate action. The result is a steady trickle of unsafe conditions into virtually every place of work. The situation is somewhat like a boat with a leaky bottom. Unless the water is bailed out regularly, the boat is soon flooded. Similarly, unless regular safety inspections are held, most workplaces are soon flooded with unsafe conditions. That is when mishaps begin to occur.

Inspections are one of your most important tools for maintaining mishap-free work conditions. Inspections also help you ensure proper work habits and follow job progress. Types of formal and informal inspections include the following:

Special. Those which focus on a specific problem

Periodic. A thorough and systematic inspection of an area on a regular basis

Continuous. A constant inspection as part of the daily routine

Intermittent. Unannounced or unscheduled inspections

Several points should be considered when making an inspection. Know what to look for by knowing the job and the worker's responsibilities. Practice observation. Think about what you see—or should see. Keep an open mind at all times. Do not be satisfied with general impressions. Guard against habit and familiarity. Prepare and use a checklist. Start corrective action immediately.

Inspections provide several important benefits. They are a means of checking on the adequacy of past training. They promote on-the-spot corrections and develop cooperative attitudes toward mishap prevention. They can reveal better job methods. They make personnel aware of unsafe acts and conditions. They can also be used to promote awareness of hidden hazards that have become part of the daily routine and are no longer recognized as hazards. Inspections by outsiders can also have many benefits. These inspectors will see habits and other things ignored or unrecognized by the personnel who live with the hazards on a day-to-day basis. These outside inspections may be conducted by personnel from another work area or from a higher level of command, such as a squadron staff. Informal safety surveys are also conducted by the Naval Safety Center.

Daily informal inspections should be conducted with the aim of discovering hazards and preventing damage or injury. First-line supervisors should conduct inspections during the course of the workday on a random basis to identify hazards. Inspections should be conducted by all levels of management, formally and informally. Inspections should always be made in the presence of personnel normally associated with the space. That will make them immediately aware of all unsafe practices or conditions.

SAFETY PROGRAMS

In 1974 the President of the United States adopted safety programs consistent with Occupational Safety and Health Administration (OSHA) standards for government employees. During recent years the Navy has set up specific programs using OSHA standards as guides. That has resulted in most Navy safety programs being even stricter than OSHA requirements. Remember that OSHA has the authority to inspect naval activities. Basic guidance for Navy Occupational Safety and Health (NAV-OSH) is contained in OPNAVINST 5100.23B. In this section, we will discuss some of the safety programs developed to provide us with safe working conditions in sometimes not-so-safe environments.

Navy Hearing Conservation Program

Exposure to high-intensity noise is usually associated with the impulse blasts of gunfire or rocket firing or the continuous or intermittent sounds made by aircraft and marine engines. But other more common work-related sources, such as grinders, saws, and similar high-speed tools and machines, also present noise problems. The goal of the Navy Hearing Conservation Program is to prevent occupational noise-related hearing loss among Navy personnel. Accomplishing the objectives of this program requires several actions:

• Work environments should be surveyed to identify noise levels that are potentially hazardous to personnel. Equipment producing such noise should be modified to reduce the noise level to acceptable levels. Unfortunately that may not always be economically or technologically feasible. When it is not feasible, administrative control and/or hearing-protective devices should be used.

• Periodic hearing testing must be conducted to monitor the effectiveness of the program. Early detection of temporary changes in minimum hearing levels is important. That allows for further testing and for preventive measures to be taken before permanent hearing loss occurs.

• Since education is vital to the overall success of a hearing conservation program, an understanding of the permanent nature of noise-induced hearing loss is necessary. The command's hearing conservation program and the individual's responsibilities under the program are all essential for program effectiveness. Consequently, Navy personnel should be encouraged to use hearing-protective devices both on and off duty. Wearing of such devices should include activities such as mowing the lawn or using chain saws and firearms.

Hazardous noise areas and equipment must be so designated and appropriately labeled. Areas and equipment that produce continuous and intermittent sound levels greater than 84 decibels (dB) or impact or impulse noise levels of 140 dB peak are considered hazardous, NAVMED 6260/2, Hazardous Noise Warning Decal, and NAVMED 6260/2A, Hazardous Noise Labels (displayed on hand tools), are the approved decals and labels for marking hazardous noise areas and equipment.

Hearing-protective devices should be worn when entering or working in an area where noise levels are greater than those described above.

A combination insert-type (ear plug) and circumanual-type (ear covering) hearing-protective device that provides double protection should be worn in all areas where noise levels exceed 104 dB. In addition, all personnel should wear hearing-protective devices when exposed to gunfire in a training situation or to artillery or missile firing under any circumstances.

Personal hearing-protective devices should be issued to suit each situation. All personal hearing-protective devices must reduce effective sound levels to less than 84 dB or 140 dB peak.

Where protective devices do not provide noise reduction to a level below 84 dB, administrative control of exposure time is necessary.

Hearing-protective devices used by the Navy are identified in the following list. Also shown are the appropriate stock numbers and effective dB reductions.

EARPLUG TYPES:

Single Flange (V51R) Ear Defender

Size	NSN	Effective dB Reduction
Extra Small (white)	6515-00-442-4765	23 dB
Small (green)	6515-00-467-0085	23 dB
Medium (Int'l orange)	6515-00-467-0089	23 dB
Large (blue)	6515-00-442-4807	23 dB
Extra Large (red)	6515-00-442-4813	23 dB

Triple Flange (Comfit)

Size	NSN	Effective dB Reduction
Small (green)	6515-00-442-4821	26 dB
Regular (Int'l orange)	6515-00-442-4818	26 dB
Large (blue)	6515-00-467-0092	26 dB

Disposable

Silaflex (Blister Pack)	6515-00-133-5416	21 dB
Ear or Deci-Damp	6515-00-137-6345	29 dB

Headband, Universal

Size	NSN	Effective dB Reduction
Sound Sentry Type	6515-00-181-8058	9 dB
Sound Ban Type	6515-00-392-0726	18 dB

Earplug Case

Plastic Type	6515-00-299-8287	N/A

Circumaural Muff Types:

Straightaway Muffs	4240-00-759-3290	23 dB
Overheadband	4240-00-691-5617	23 dB
Type H Napeband (for use with hard hat)	4240-00-022-2946	20 dB

Associated Equipment

Replacement Filter, dome	4240-00-674-5379	N/A
Replacement Seal, dome	4240-00-979-4040	N/A
Gauge, Earplug sizing	6505-00-117-8552	N/A

NOTE: ALL EARPLUGS SHOULD BE WASHED BEFORE AND AFTER EACH USE.

Sight Conservation Program

Navy policy requires that personnel working in eye-hazardous areas of operations wear appropriate eye-protective equipment. Examples of those operations include pouring or handling of molten metals or corrosive liquids and solids, cutting and welding, drilling, grinding, milling, chipping, and sandblasting or other dust-producing operations. Persons in the vicinity of such operations, including other workers, supervisors, or visitors, must also wear eye-protective equipment.

Various designs of eye protection are available for protection against flying objects, fine dust particles or liquid splashes, and glare and radiant energy. As a minimum, those devices should provide adequate protection for the hazards specified, be reasonably comfortable, and fit snugly without interfering unnecessarily with movement. They must be durable, capable of being disinfected, and easy to clean.

In addition, American National Standards Institute (ANSI) specification Z87.1-1979 outlines reasonable ways to select the right equipment and prescribes its safe use. It defines special terms in the eye- and face-protection field, such as absorptive lenses, bridge size, and cover plate. It also establishes requirements for welding helmets, hand shields, face shields, and shields for eye protection. The standard includes an illustrated selection chart of recommended protectors and an applications chart showing what equipment or combinations of equipment best suit each hazardous operation.

Appropriate warning signs should be posted in all eye-hazardous areas. Also emergency eyewash facilities should be provided and made easily accessible wherever personnel may be exposed to corrosive materials.

The prevention of eye mishaps requires all persons who may be in eye-hazardous areas to wear protective eyewear. That applies to workers, visitors, instructors, or others passing through an eye-hazardous area. Activities should provide protection for those personnel by procuring a sufficient quantity of heavy-duty goggles and plastic eye protectors. Personnel who wear personal glasses to correct their eyesight should be provided with a suitable eye protector to wear over them. Arrangements should always be made for the issue, care, sterilization, and reissue of these "common use" eye protectors and goggles.

Respiratory Protection Program

Many repair and maintenance environments in the Navy are subject to air contaminants that can be dangerous if inhaled. Most air contaminants can be classified as follows:

Dust. Small solid particles created from the breaking up of larger particles by machine shop tools and by processes such as paint chipping, sanding, woodworking, or abrasive blasting.

Fumes. Very small particles of condensation of vaporized solids. This term is generally applied to metal oxides.

Smoke. Carbon or soot particles resulting from the incomplete combustion of coal, wood, and oil products.

Mist and fog. Finely divided liquid droplets suspended in air by condensation or atomization. Examples include solvent sprays and spray painting.

The best way to protect personnel against these contaminants is through the use of engineering controls such as local exhaust ventilation. When these controls are not practical or do not provide sufficient protection, appropriate respirators are required to assure the protection of personnel.

How often have personnel used surgical masks when a respirator was required for painting, chipping, or grinding? That practice should be stopped. Surgical masks are designed to stop only the flow of oral discharges. They are *not* designed to impede the flow of organic vapors or metal fumes. Organic vapors and fumes pass through the mask and into the wearer's respiratory system.

Three general types of respirators are authorized:

Air-purifying respirator. This respirator removes contaminants by filtering or adsorbing them as the air passes through a cartridge. (Adequate oxygen must be present in all spaces where these respirators are used.)

Supplied-air (or air-line) respirator. This respirator is used when there is insufficient oxygen, the contaminant has no odor, or when the contaminant is of such a high concentration or toxicity that a cartridge filter is inadequate.

Self-contained breathing apparatus (SCBA). This apparatus allows the user complete independence from a fixed source of air and offers the greatest degree of protection, but it is also the most complex.

WARNING

The OBA and emergency escape breathing device (EEBD) are to be used *only* in damage control and emergency escape situations, respectively.

Respirator cartridges and gas mask canisters are color-coded as to the type of contaminant they provide protection against. Respirator and cartridge selection guidance and information is provided in OPNAVINST 5100.23B, *NAVOSH Program Manual*

Heat Stress Program

Heat stress may occur in engineering spaces, laundries, and many other work spaces in the Navy. In many cases, it is the result of inadequate or clogged ventilation systems, damaged or missing thermal insulation, or excessive steam or water leaks.

Heat stress is defined as any combination of air temperatures, thermal radiation, humidity, airflow, and work load that may stress the body as it attempts to regulate body temperature. Heat stress becomes excessive when the body cannot adjust to the temperature of its environment. That results in an increase in body temperature. This condition can readily produce fatigue, severe headaches, nausea, and poor physical and mental performance. As the body's temperature continues to increase because of prolonged exposure, heat exhaustion or heatstroke may occur. Severe impairment of the body's temperature-regulating ability also may occur. Heat stress can be life-threatening if not immediately and properly treated. Recognizing heat stress symptoms and obtaining prompt medical attention for affected personnel is an all-hands responsibility, but is of special concern to supervisors.

Further information and guidance on the Navy Heat Stress Program is contained in OPNAVINST 5100.20, *Shipboard Heat Stress Control and Personnel Protection.*

Electrical Safety

Whatever your job in the Navy, chances are great that you and your personnel will be working with or near electrical or electronic equipment during the normal workday. Persons working around electric circuits and equipment must always observe safety precautions to avoid injury from electric shock and short circuits. Detailed safety precautions are contained in the *Naval Ships' Technical Manual (NSTM),* chapter 300, and the Electronics Installation and Maintenance Book (EIMB), NAVSEA SE000-00-EIM-100, section 3. They may also be found in type-command instructions. For purposes of this discussion, the terms *electrical* and *electronic* should be considered interchangeable.

The danger of shock from 220-volt or 450-volt ac service is well recognized by operating personnel. Relatively few reports of serious shock are received from these voltages despite their widespread use. On the other hand, a number of fatalities have occurred because of contact with 115-volt circuits. Low voltage (115 volts and below) is very dangerous, despite a fairly widespread but totally unfounded belief to the contrary. Contact with low voltage can cause

death when the resistance of the body is lowered by moisture. Because of the above conditions, extra care and awareness of this hazard are needed.

Short circuits can be caused by placing or dropping a metal tool, rule, flashlight case, or other conducting articles across an energized line. The arc and fire that result on even relatively low-voltage circuits may cause extensive damage to equipment and serious injury to personnel.

WARNING

All live electric circuits must be treated as potential hazards at all times.

You and your personnel should constantly be on the alert for any indication of an equipment malfunction. The senses of sight, hearing, smell, and touch all serve to make a person aware of possible electrical malfunctions. You should be alert to following signs:

- Unusual sound from an electric motor

- Fire, smoke, sparks or arcing

- Frayed or damaged cords or plugs

- Receptacles, plugs, and cords that feel warm to the touch

- Slight shocks felt when handling electrical equipment

- Odor of burning or overheated insulation

- Electrical equipment that either fails to operate or operates irregularly

- Electrical equipment that produces excessive vibration

If you or your personnel notice any of the above signs, report them immediately to the electric shop supervisor. Do not delay. Do not operate the equipment or attempt to make any repairs yourself. Stand clear of any suspected hazard, and instruct others to do likewise.

You should ensure that personnel working on electrical circuits are provided with appropriate rubber protective equipment as necessary. These include rubber insulating gloves, sleeves, hoods, blankets, and rubber floor matting.

Foot Protection

Navy policy requires that all employees (military and civilian) exposed to designated occupational foot-hazardous operations or areas be furnished appropriate safety shoes or boots at government expense. Each activity commander designates local foot-hazardous areas and specifies the type of foot protection required. The commander makes those designations based on advice from the safety and health professionals of the activity's safety office.

Foot-hazardous operations are those that have a high incidence of, or potential for, foot or toe injuries. Occupations involving construction, materials handling, maintenance, transportation, ship repair and operation, aircraft overhaul and repair, and explosives manufacturing and handling generally have a high incidence of foot injuries.

Safety shoes with built-in protective toe boxes provide protection from heavy falling objects. General-purpose safety shoes (chukka style) are issued in boot camp and are available through normal supply channels.

Head Protection

Helmets and hats are used for protection against falling and flying objects and limited electric shock and burns. They must meet American National Standards Institute (ANSI) specification Z89.1-1981, Head Protection.

Helmets should be worn by Navy personnel in all industrial environments. Warnings signs should be posted in all places requiring the use of hard hats.

Toxic Material Hazards

Supervisors have always been concerned with the prevention of property damage and mishaps causing injury to personnel. Now OSHA requires supervisors to recognize and eliminate industrial hazards by enforcing local regulations and federal standards. Supervisors must be concerned with hazards caused by combustible materials, flammable liquids, pollution, and toxic materials. They also must be concerned with industrial-related diseases.

In the routine activity of running the work center, supervisors should be able to identify health hazards arising from production activities. In some instances, they must survey the raw materials and the by-products that may be

Figure 6-1.-Hazardous material label.

HEALTH HAZARD

4. Deadly

3. Extreme Danger

2. Hazardous

1. Slightly Hazardous

0. Normal Materials

FIRE HAZARD

4. VERY FLAMMABLE--Gases, dusts or mists; flashpoint below 73°F ether class

3. READILY IGNITED LIQUIDS--Under normal temperature conditions. Shredded or fibrous solids that may spontaneously ignite; gasoline-alcohol class. Flashpoint below 100°F

2. LIQUIDS OR SOLIDS that must be moderately heated before ignition; kerosene--JP-4 class. Flashpoint below 200°F

1. Most combustible solids. Materials that must be preheated to burn. Flashpoint above 200°F

0. Will not burn.

RED

BLUE

YELLOW

WHITE

SPECIFIC HAZARD

OXIDIZER   OXY

ACID   ACID

ALKALI   ALK

CORROSIVE   COR

USE NO WATER   -W-

REACTIVITY

4. May detonate

3. Shock and heat may detonate

2. Violent chemical change

1. Unstable if heated

0. Stable

produced either intentionally or unintentionally. They must also determine the source and the methods of dispersion of airborne contaminants. Since hazards exist in almost all jobs, supervisors should examine all tasks to ensure a potentially unsafe condition is not overlooked.

All hazardous materials used in the Navy must be labeled. That applies to buckets or cans of hazardous materials taken from bulk containers. All hazardous materials received from the Navy supply system should already be marked with a label similar to the one shown in figure 6-1. Hazardous materials used in the work center are often bought locally, so they are not properly labeled. In such cases, the supervisor is responsible for properly labeling the material. You can order hazardous material labels through the supply system using stock number 7690-00-152-0030. For more information on hazardous material labeling, refer to NAVSUP Publication 4500.

Electromagnetic Radiation Hazards

Almost everyone is constantly subjected to nonionizing radiation in varying degrees. Nonionizing radiation is electromagnetic radiation restricted to the frequency spectrum commonly referred to as the radio-frequency (rf) region up to and including laser radiation (visible light). Common types of rf-producing equipment are radio transmitters, radars, microwave ovens, and gun and missile directors.

The development of systems with high-power rf transmitters and high-gain antennas has increased the possibility of biological injury to personnel working in their vicinity. Presently, the only known effects of overexposure to rf radiation are an increase in body temperature or a temperature rise in specific organs of the body. Nonthermal effects (such as sterility) are not certain at this time.

The Naval Medical Command established safe limits for exposure to radiation in BUMEDINST 5470.13. Those limits are based on the power density of the radiation beam and the exposure time of the human body in a radiation field. The following precautions should be taken to ensure that personnel are not exposed to radiation that exceeds the established safe limits:

- Keeping radar beams pointed away from personnel working areas

- Observing warning signs that indicate the existence of rf radiation hazards in a specific location or area

Another hazard of rf radiation is rf burns. An rf burn hazard exists if sufficient rf voltage is induced on a metallic object to cause pain, visible skin damage, or involuntary reflex action to a person who contacts the object. Any burn injury that occurs is the result of the heat produced by a current flow through the skin at the contacted area. The rf voltages on metallic objects can be induced by radiation from nearby transmitting antennas. Hazardous voltages have been found on crane hooks, running rigging, booms, antisubmarine rocket (ASROC) launchers, and parked aircraft. Attempts to reduce these hazards are being managed by the Naval Sea Systems Command (NAVSEA) and involve equipment design modifications. However, the most important deterrent is personnel training and awareness.

CBR PROTECTIVE EQUIPMENT

Personnel protective equipment used in chemical warfare (CW) defense includes masks, clothing, decontaminating kits, and antidotes for certain chemical agents. Depending on your duty station and actual combat assignment, you may be issued certain items of this equipment. Knowing the correct procedures for the use of the equipment is vital. The following paragraphs provide descriptions of these procedures, but only practice can assure that you follow them properly. *Chemical, Biological, and Radiological Defense, Handbook for Training,* S-5080-AA-HKB-010, and *NSTM,* chapter 470, list detailed procedures for the use and maintenance of CW protective equipment.

CBR PROTECTIVE MASKS

The protective mask is your personal first line of CBR defense since it protects vulnerable areas such as the eyes, face, and respiratory tract. The protective mask removes airborne radioactive material and biological warfare (BW)/chemical warfare (CW) agents from the air before they are inhaled. However, the mask does not provide protection against some common gases, such as carbon monoxide, carbon dioxide, tritium, and ammonia. It also does not protect against oxygen deficiency. If you must enter areas or compartments that have a deficiency of oxygen, the Navy's oxygen breathing apparatus (OBA) must be used.

The general operation of all types of protective masks is essentially the same. As the wearer inhales, air is drawn through a filtering system. This system consists of two filters: a mechanical filter, which clears the air of solid or liquid particles, and a chemical filter, usually activated charcoal, which absorbs or neutralizes toxic and irritant vapors. The purified air then passes to the region of the mask where it can be inhaled. Exhaled air is expelled from the mask through an outlet valve constructed to open only to permit exhaled air to escape.

The useful life of any filter element depends on four conditions: (1) the type and concentration of the toxic agent or agents in the air, (2) the duration of exposure to the contaminated air, (3) the breathing rate of the wearer, and (4) the temperature and humidity. A change in any of these conditions may affect the useful life of a filter element; it can hold only a definite weight of a toxic agent under given circumstances. Minor
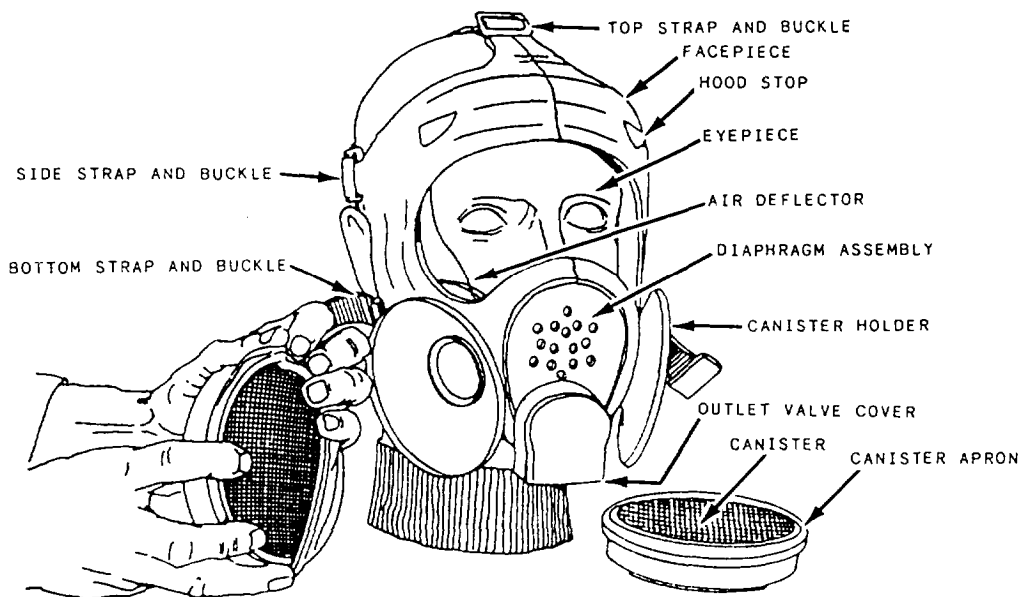
Figure 6-2.-The ND Mk V protective mask.

sensory effects, such as a continuous flow of tears, might indicate that replacement is needed.

Two types of protective masks have been in general use in the Navy: the M17A1, issued to shore-based personnel, and the ND Mark (Mk) V, issued to forces afloat. Both of these, however, are being phased out and replaced by the MCU-2/P mask. All masks consist of a facepiece and filter system. The facepiece provides a gastight seal around the face, protecting the eyes, lungs, and facial skin. The filter system is attached to the facepiece; it filters out or absorbs airborne radioactive material and BW/CW agents before air enters the facepiece for inhalation. The main purpose of the mask is to purify the air being breathed by its wearer. To effectively purify the air, the mask must meet two requirements. First, the facepiece must fit snugly over the face to provide a perfect seal. Second, the filter system must prevent any contaminated material or chemical agent from entering the mask.

ND Mk V Protective Mask

A unique design feature of the ND Mk V protective mask makes it ideally suited for shipboard use. A pneumatic cushion located around the underside edge of the facepiece allows the facepiece to conform to the wearer's face; therefore, an airtight seal is possible for virtually all facial shapes. This feature permits the issue of the mask in only one size and, thus, eliminates the need for stowing and issuing various sizes of protective masks aboard ship.

The major components of the ND Mk V protective mask are shown in figure 6-2. The mask facepiece is made of a black, flexible rubber compound formulated to retard the penetration of chemical agents. The wide-vision eyepiece is a clear, flexible, one-piece plastic lens curved to the shape of the facepiece. Voice transmission is permitted by a thin plastic membrane in the diaphragm assembly. Other features of the facepiece include the air-inlet and exhaust valves and the canister holders. Air deflectors, located inside the mask, create a flow of air from the air-inlet valves across the eyepiece to reduce fogging.

Filtration for the mask is provided by filter canisters mounted on the two canister holders on the facepiece. Each of these filter canisters contains a treated paper filter and an activated charcoal filter. The treated paper filter removes particulate matter, and the activated charcoal filter absorbs toxic vapors and aerosols from the inhaled air. A rubber apron affixed to each canister attaches the canister to the holder on the facepiece. The rubber apron provides an airtight seal around this connection when it is rolled over the back of the canister holder.

The head harness consists of a thin rubber pad from which the inelastic top strap, two elastic side straps, and two elastic bottom straps extend. These straps, secured to buckles on the facepiece, hold the facepiece against the face.

The mask is issued with a carrier in which the mask should be stowed when not in use. The carrier is equipped with straps that keep the carrier snug against the body to prevent interference with normal work routine. The flap on the carrier pouch is held closed by a snap latch that can be quickly and easily opened in emergency situations. A metal shield is sewn into the front of the carrier to protect the eyepiece of the mask when the mask is properly placed in the carrier. The only authorized equipment that should be placed in the carrier with the mask is nerve agent antidote (when issued) and antifogging solution. The antifogging solution reduces fogging of the mask eyepiece when properly applied to its interior.

FITTING AND TESTING THE ND MK V MASK. —The amount of protection provided by the Mk V mask depends greatly on the wearer. Careful attention to proper fitting of the mask is required to provide maximum protection and comfort.

The following steps outline the procedure for properly fitting the protective mask:

1. Let the harness straps out to their full length.
2. Don the mask by inserting your chin in the lower end of the facepiece and pulling the head harness over your head.
3. While holding the head harness pad against the center of the back of your head, pull back on the top strap tab until the mask rests lightly under your chin.
4. Pull back on the two side strap tabs until the upper sides of the mask rest lightly against your face.
5. Pull back on the bottom strap tabs until the lower sides of the mask rest lightly against your face.
6. Check the mask for an airtight seal by placing your hands over the canisters so that no air can enter and by inhaling normally until the mask collapses. Hold your breath for about 10 seconds to see if the mask remains collapsed. If the mask does not collapse, or does not remain
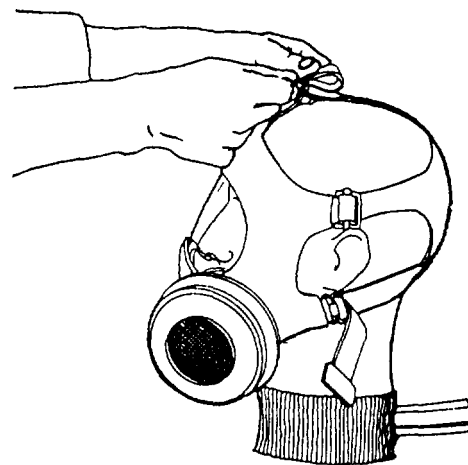
Figure 6-3.-Securing the top and side straps for permanent fit.

collapsed, the mask is defective or the straps are not properly adjusted.

NOTE: A leakproof fit cannot be expected unless the wearer is smooth shaven.

After the foregoing tests have been made and the strap adjustments are correct, adjust the top and side straps for a permanent fit. Permanently fit the mask by threading the loose ends of the top and side straps through the buckles between the body and the sliding member, as shown in figure 6-3. These straps will then be permanently adjusted to the individual. Only the two bottom straps will have to be loosened each time the mask is removed or donned. Both the mask and the carrier should be securely marked with the name of the person on whom the mask has been fitted.

DONNING THE ND MK V MASK. —To train your personnel in the proper procedures for donning and removing the mask, you should conduct periodic drills. During these drills, you should emphasize speed as well as accuracy in donning the mask. The general procedures for donning and removing the mask are as follows:

At the command "GAS," take the following actions:

1. Stop breathing and remove your headgear.
2. Yank open the carrier flap and remove the mask from the carrier.
3. Insert your thumbs under the head harness straps and grasp the top of the facepiece.

4. Raise the mask to your outthrust chin and bring the head harness over the back of your head.

5. Center the head harness pad on the back of your head and adjust the bottom straps as necessary for proper fit.

6. Close the outlet valve with the heel of the hand and exhale forcibly to clear the mask of contaminated air.

7. Test the mask for possible leakage by placing your palms over the canisters and inhaling normally until the mask collapses against your face and remains collapsed for approximately 10 seconds.

8. Resume normal breathing.

9. Replace headgear and close the carrier flap.

The protective mask outlet valve sometimes sticks closed because saliva or sweat has dried on it. If this occurs, you may loosen the valve by blowing into the valve or by massaging the valve. The valve may be massaged with the valve cover partially removed as shown in figure 6-4.

CANISTER REPLACEMENT. —A pair of replacement canisters for the ND Mk V mask is provided in a hermetically sealed "coffee can" container. While sealed in this container, the canisters have an indefinite shelf life. Therefore, the container seal should not be broken until the

Figure 6-4.-Correcting sticking outlet valve with cover partially removed.

canisters are to be mounted on the mask. Once unsealed, the container should not be resealed, and the canisters should be permanently removed from it.

The following procedures are used for removing and replacing canisters on the ND Mk V mask. To remove each canister from the facepiece, you should take the following actions:

1. Roll approximately one-third of the rubber apron back over the edge of the canister.

2. Slide the canister off the holder.

To install new canisters on the facepiece, you should proceed as follows:

1. Remove the canisters from the hermetically sealed container.

2. Roll the rubber apron of each canister completely over the outer edge of the canister.

3. Position each canister snugly against its holder so that the holder contacts the perforated plate of the canister at all points of its outer edge.

4. Roll the rubber apron of each canister over the back of the canister holder.

CARE OF THE ND MK V MASK. —Because of the importance of the mask, it should be maintained in an efficient operating condition. Careful attention should be given to stowing, cleaning, handling, and inspecting the mask to prolong its useful life.

The mask should be stowed in a cool, dry, dark area free from solvents and their vapors. Oil and gasoline vapors weaken the rubber and are especially damaging to the activated charcoal in unsealed canisters. The mask must be kept dry. Moisture causes rotting of parts, corroding metal, deteriorating canisters, and mildewing carriers.

The mask should be thoroughly cleaned with soap and water and dried before it is stowed. If the mask was previously used and is to be issued to another person, it should be sterilized with a

disinfectant solution; the canisters should be replaced with new ones.

The mask must be handled carefully to prevent any mechanical damage to the metal parts, tears in the delicate portions, or scratched or broken lenses. If you must stack unpackaged masks, they should not be stacked more than five high. You must also take measures to prevent stowage of heavy material on the stack.

By following proper handling, cleaning, and stowage procedures, you can expect the mask to provide designed protection for 5 to 10 years.

MCU-2/P Protective Mask

The MCU-2/P protective mask is designed to provide full protection and is intended to replace other previously used masks, including the Mk V and M17A1. This new mask has improved performance and storage characteristics. It provides protection against tactical concentrations of chemical and biological agents, toxins, and radiological fallout particles. The MCU-2/P mask also accommodates the use of the tri-service/ NATO canisters.

The MCU-2/P protective mask (fig. 6-5) is built with a silicone rubber facepiece. Features include two voicemitters; a drinking tube; a flexible lens that permits the use of binoculars, gunsights, and other optical equipment; and the option to put the filter canister on either side. The mask can be worn over approved mask-compatible spectacles, which can be ordered through your medical department using DD Form 771. The large lens size provides the user with a good all-around view.
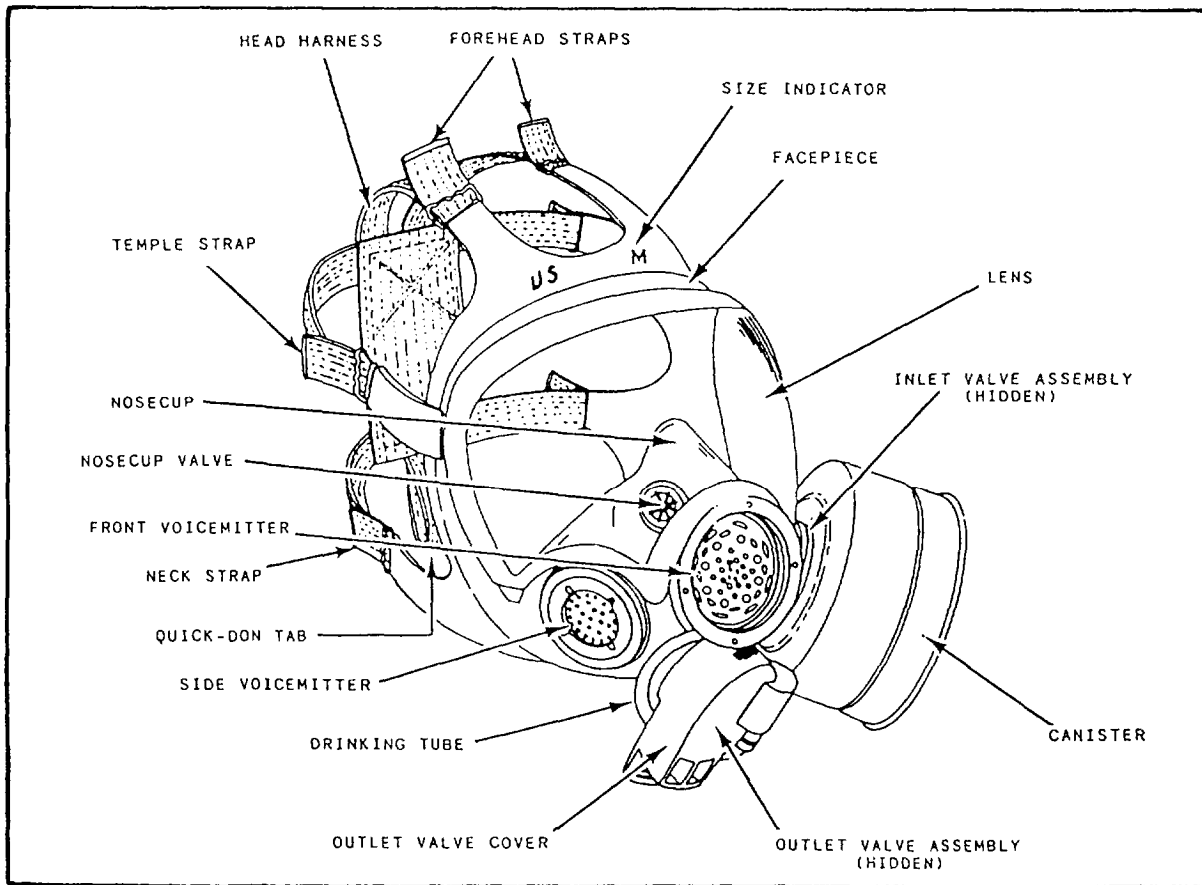
Figure 6-5.-MCU-2/P protective mask.
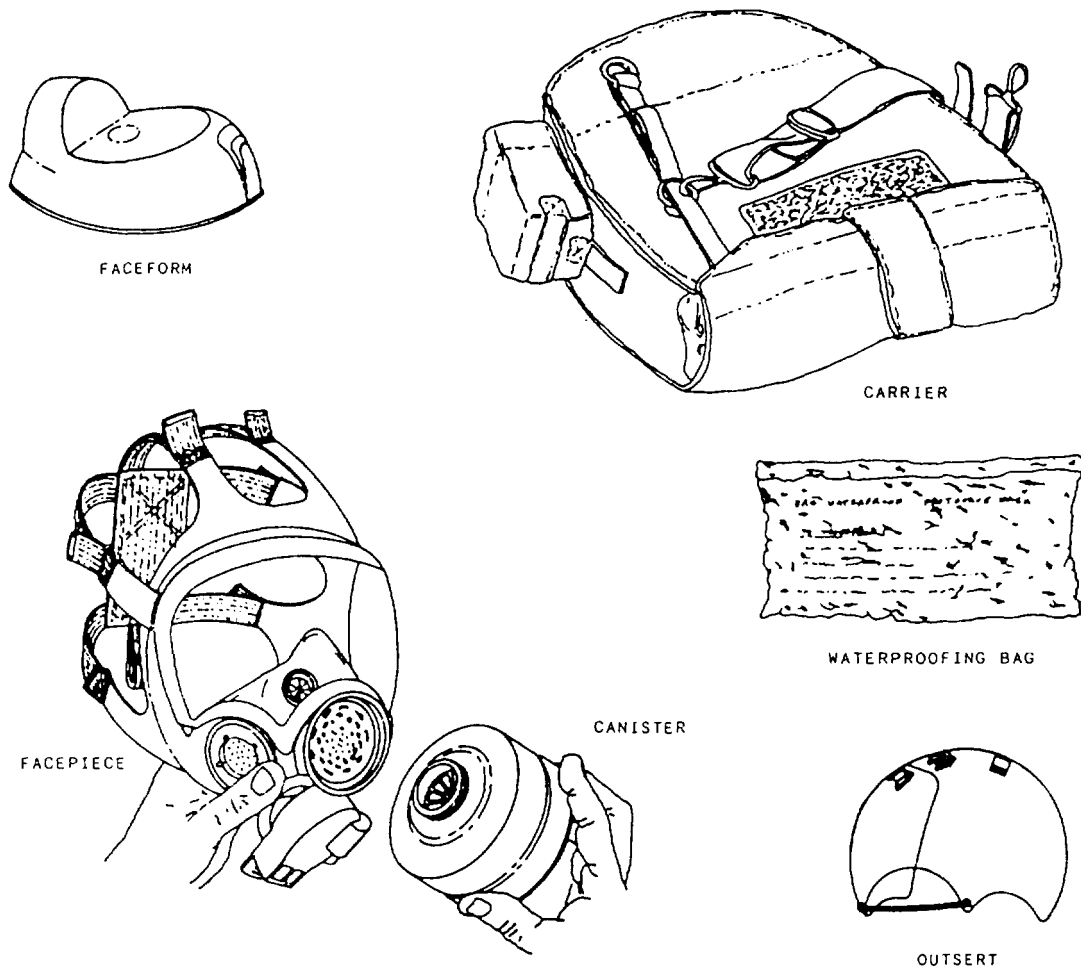
Figure 6-6.-MCU-2/P mask and accessories.

Mask accessories (fig. 6-6) include a carrier, outserts, a waterproofing bag, and a faceform.

SELECTION OF MASK SIZE. —The MCU-2/P mask comes in three sizes: small, medium, and large. Correct selection of the proper mask size is essential for maximum protection. A face length measurement using a special caliper is made before the mask is issued.

MASK ADJUSTMENT AND PREPARATION. —A correctly adjusted mask is necessary for a proper fit that will prevent leaks and be as comfortable as possible. To adjust the mask and prepare it for use (upon issue), you should use the following procedures:

1. Remove one canister from the shipping container and screw it onto the facepiece.

2. Loosen the straps of the head harness. Be sure the strap end tabs are about 1 inch from the buckles.
3. Remove the outsert, if mounted.
4. Pull the head harness over the front of the mask.
5. Hold the outlet valve assembly in the palm of one hand. Using the free hand, push any forehead hair aside or back. Place the mask against the face, forcing the chin cup very tightly against the chin. Pull the head harness over the head using the quick-don tab.
6. Using a circular massaging motion, push the mask as high on the face as possible. Ensure that the mask is centered. Hold in this position with one hand while tightening the temple straps.
7. Ensure that the head pad is centered at the high point of the rear of the head.

TEMPLE TAB

HEADPAD

TEMPLE
STRAP

NECK
STRAP

NECK TAB

FOREHEAD TAB

FOREHEAD
STRAP

Figure 6-7.-Adjusting straps.
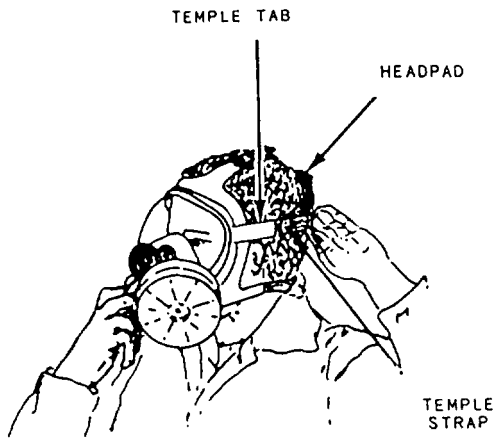
8. Tighten one temple strap (fig. 6-7) until the mask feels snug on that side. Tighten the other temple strap until both sides feel the same. (Tighten all straps toward the rear of the head with small jerks vice a long pull.)
9. Run a finger under each temple tab front-to-back to check for snugness and to remove stray hair from sealing area.
10. Grasp a neck strap in each hand and tighten.
11. Grasp a forehead strap in each hand and tighten.
12. Shake head quickly from side to side and up and down. Retighten mask straps as necessary.

NOTE: In subsequent donnings, only the neck straps should need adjusting.

LEAK CHECK AND REMOVAL. —You must check the mask for leaks when it is fitted and each time you put it on. A leaky mask will not protect you from toxic agents that can cause sickness or death.
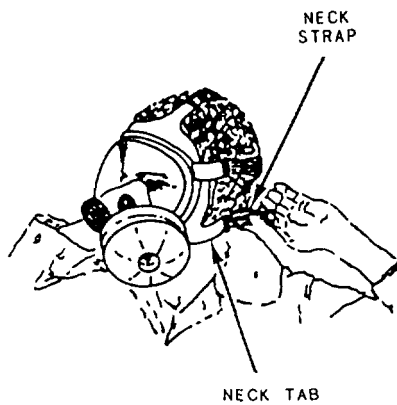
WARNING

Do not hold a mask by its canister. An unscrewed canister is the most common cause of leaks.

Use the following procedures to test for leaks

1. Steady the mask and pull the external end of the drinking tube (a quick-disconnect coupling) out of the outlet valve cover.
2. Grasp the outlet valve assembly with the thumb at the bottom and the forefinger at the top. Push the forefinger toward the mouth to get the internal end of the drinking tube between the teeth.
3. Test the drinking tube for leaks by blowing into the tube. If resistance is not felt, the drinking tube is leaking; repair or get a replacement.
4. Push the coupling firmly back into its socket.
5. Make sure the canister is screwed in tight.
6. Press the palm of the hand over the end of the canister. Breathe in until the lens collapses, Hold your breath for 10 seconds. If the lens remains collapsed, the mask is

airtight; if not, the mask straps need readjusting.

7. Remove the mask by loosening the neck straps. Use your fingers to rotate the rear of the buckle forward. Grasp the mask by the outlet valve assembly and pull the mask down, outward, and up. Adjust the mask neck straps so that the ends are within 1 inch of the buckles.

8. Install an outsert (if prescribed).

The mask is now ready for quick donning. Stow your mask carefully to avoid any damage or deformation by ensuring that accessories are installed in their proper order and position, as follows:

1. Stow the waterproofing bag in the large inside pocket at the front of the carrier.

2. Install the outsert (if available) in the carrier.

3. Put a second outsert in the outsert bag and place over the first outsert.

4. Put a faceform in the mask. (Place the open end towards the bottom of the face-piece.)

5. Stow the M258A1 Decontaminating Kit, if issued, in the outside side pocket.

6. Stow the M8 or M9 paper, if furnished, with the waterproofing bag.

7. Slide the mask, top first, into the carrier, with the opening of the mask against the short side of the carrier.

8. Place the carrier in a cool, dry place. Hang it by the shoulder strap or D-ring if possible.

DONNING PROCEDURES. —Perform the following steps for putting on your mask quickly and correctly. (These procedures are based on the presumption that unapproved eyeglasses have been removed.) When given the command, take the following steps:

1. **STOP BREATHING.**
2. Close your eyes tightly.
3. Remove any headgear.
4. With the left hand, grasp the carrier flap tab and open. Reach into the carrier with the right hand and grasp the mask by the front portion of the facepiece in the area of the voicemitter outlet valve assembly. Withdraw the mask.

5. Hold the outlet valve assembly in the palm of one hand. Using the free hand, push any forehead hair aside. Place the mask on the face, forcing the chin cup very tightly against the chin. Pull the head harness over the head, using the quick-don tab.

6. Hold in this position and tighten each neck strap snugly.

7. Expel the air that has been held in the lungs.

8. Press the palm of one hand over the canister and inhale to check seal.

9. Open your eyes and **RESUME NORMAL BREATHING.**

CBR PROTECTIVE CLOTHING

Basically, any clothing or coverall that covers the body can provide a degree of protection from CBR contaminants. However, the type of clothing and its proper wear will determine the amount of protection. Three types of clothing are useful, to varying degrees, in CBR defense: impregnated (permeable) clothing or the newer chemical-protective overgarment, wet-weather clothing, and ordinary work clothing.

Impregnated Clothing

Impregnated clothing and rubber overshoes are supplied to ships in quantities sufficient to outfit 25 percent or more of the ship's personnel. An impregnated clothing outfit consists of impregnated socks, gloves, trousers with attached suspenders (overalls), and a jumper (parka) with an attached hood. These items have been treated with a CW agent-neutralizing chemical, CC2, plus a viscous binder, chlorinated paraffin. The presence of these two chemicals results in a faint odor of chlorine and a slightly greasy or clammy feel. Figure 6-8 shows a person dressed in a suit of impregnated clothing with an ND Mk V protective mask, rubber gloves, and overboots.

Impregnated clothing is primarily effective against the blister agents; it provides little protection against the G-nerve agents. It offers limited protection against other types of CW/BW contaminants. If this clothing is contaminated by large drops or splashes of blister agents, clean clothing should be put on as soon as possible.

Impregnated clothing alone is effective against CW agent vapors or very fine aerosols. However, large aerosol particles or droplets can partially penetrate the fabric when carried by a strong wind. In addition, clothing cannot be impregnated
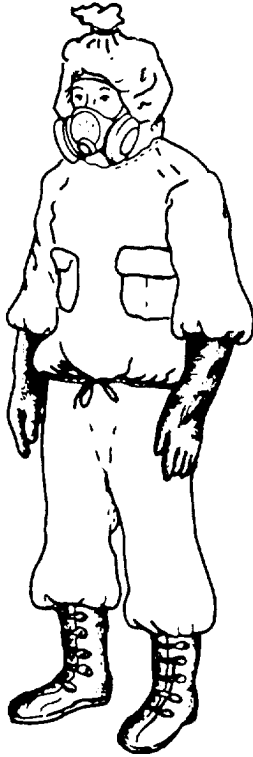
Figure 6-8.-Impregnated clothing with Mk V mask, gloves, and rubber footwear.

with enough CC2 to neutralize agent drops of sizes that can soak through the fabric. Therefore, impregnated clothing is not worn topside without the additional protection given by wet-weather clothing worn as the outside garment. The wet-weather clothing protects the impregnated clothing from large drops or quantities of CW agents; the impregnated clothing neutralizes CW agent vapors and aerosols that may enter the wet-weather clothing.

DONNING IMPREGNATED CLOTHING. —

To obtain the maximum protection afforded by impregnated clothing, you must properly don the clothing. The procedures for donning impregnated clothing, rubber boots, and gloves, using the buddy system, are as follows:

1. Under extremely hot conditions, or if desired, remove all regular clothing except underwear. Always remember, however, the more clothing, the better the protection,
2. Put on socks.
3. Put on the overalls; fasten all straps for a snug fit by crossing them across the chest.

4. Put on the butyl rubber boots and bring the pant legs of the overalls down over the tops.
5. Raise the pant legs up to within 2 inches of the top of the boots and wrap them with two turns of masking tape. Leave tabs so that the tape can easily be removed. Blouse the excess pant legs over the tape.
6. Pull on the jumper, leaving the hood thrown back.
7. Blouse the jumper approximately 2 inches below the top of the overalls. Wrap with two turns of masking tape around the jumper. Be sure that the jumper is securely taped down, but leave a tab for easy removal later. Take up the slack by folding the jumper over the back. Blouse the jumper over the tape.
8. Don the undergloves and the butyl rubber overgloves.
9. Pull the jumper arms down over the rubber gloves to within 2 inches of the top of the gloves. Wrap jumper arms twice with masking tape, leaving a tab for easy removal. Blouse the excess material of the arms over the tape.
10. Tape closed all pocket openings and zippers (optional).
11. Don the protective mask.
12. Pull the jumper hood over the head. Secure the neck of the jumper with the drawstring.
13. Take up the slack around the neck and facepiece of the mask with the drawstring provided at the top front of the hood. Then fold over any extra material at the top of the hood and secure with tape.
14. Tape the edges of the hood securely to the mask.

CARE OF IMPREGNATED CLOTHING. —

You should not wear impregnated clothing for general-purpose coveralls or for any purpose other than CBR defense training or actual CBR defense operations. The effectiveness of the impregnant is reduced by contact with oil, grease, moisture, or dirt and by exposure to sunlight. After the clothing is worn in drills, it should be thoroughly dried in a warm current of air; moisture is the principal factor in the deterioration of the CC2 impregnant.

The clothing is to be stowed in a clean, dark, thoroughly dry location, and in the original package if possible. In cool-to-warm stowage and

in the absence of sunlight or daylight, the impregnation treatment should remain effective for 5 to 10 years or more.

NOTE: Impregnated clothing is being phased out and will be replaced with the chemical-protective overgarment.

Chemical-Protective Overgarment

The chemical-protective overgarment consists of two pieces—a smock and trousers (fig. 6-9). The smock has two layers of materials: inner (antigas) and outer (modacrylic/nylon). The smock is generously cut to allow complete freedom of movement. It has a large front flap pocket for gloves and so forth and a sleeve patch where you can place detector paper for easy visibility. You can make quick and easy adjustments with hook-and-pile fasteners at the wrist and waist. The trousers are made of the same two layers of material and have suspender-type fittings located at the waist and across the shoulders. Hook-and-pile fasteners are located at the base of each leg for adjustment.
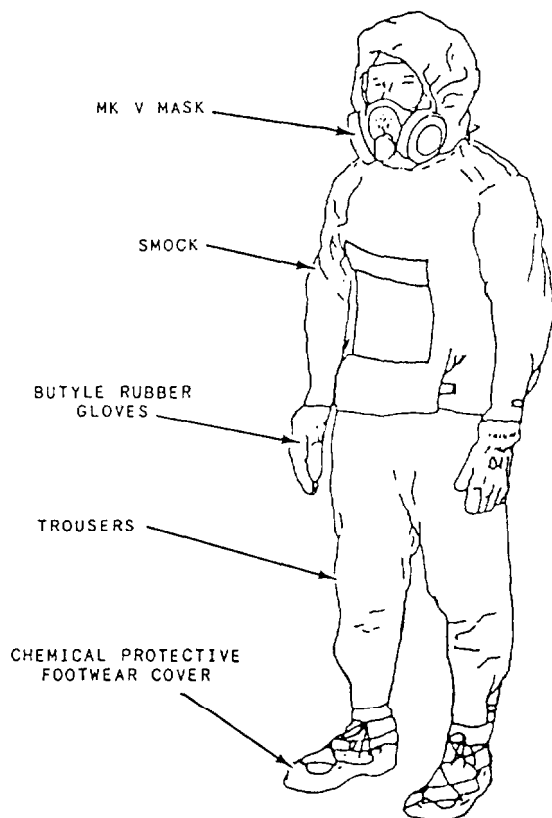
Figure 6-9.-Chemical-protective overgarment.

The chemical-protective overgarment is issued in a plastic envelope that is pressure packed, air evacuated, and heat sealed. It is then placed in a polyethylene bag and heat sealed. The overgarment has a shelf life of 5 years when unopened.

The protective overgarment protects against all CBR agents and is permeable to water vapor. Once removed from its protective envelope, it has a shelf life of 14 days in a nonchemical environment. If it is opened but uncontaminated, keep it for training purposes. Once exposed to chemical contamination, the overgarment provides 6 hours of continuous protection, after which it should be discarded.

The following donning procedures include the use of the chemical-protective glove set and footwear covers (overboots):

1. Don the trousers. Tighten the waist by using the hook-and-pile fasteners.
2. Bring the straps over the shoulders and cross them at the chest. Insert the straps into the belt loops and secure snugly.
3. Don the parka.
4. Secure the bottom of the parka with hook-and-pile straps.
5. Raise the trouser legs.
6. Don the chemical-protective footwear cover (see fig. 6-10).
   a. Attach tie laces (in the center) to the toe loop. Be sure the laces are even (see fig. 6-10, view 1).
   b. Put one lace through A and one through B from the inside to the outside and pull until snug. Make sure the toe loop is over the top of your shoe (see fig. 6-10, view 2).
   c. Put one lace through C and one through D (on the opposite side of the foot, crossing the instep) from inside to outside. Pull until snug (see fig. 6-10, view 3).
   d. Cross the laces over the instep.
   e. Thread the laces through A and B again, from inside to outside (see fig. 6-10, view 4).
   f. Cross the laces over the instep again and pull them until snug.
   g. Wrap the laces behind the ankle and back to the front. Pull until snug and tie securely (see fig. 6-10, view 5).
7. Pull the trouser legs down over the footwear covers and secure with the hook-and-pile fasteners.
8. Don the mask.
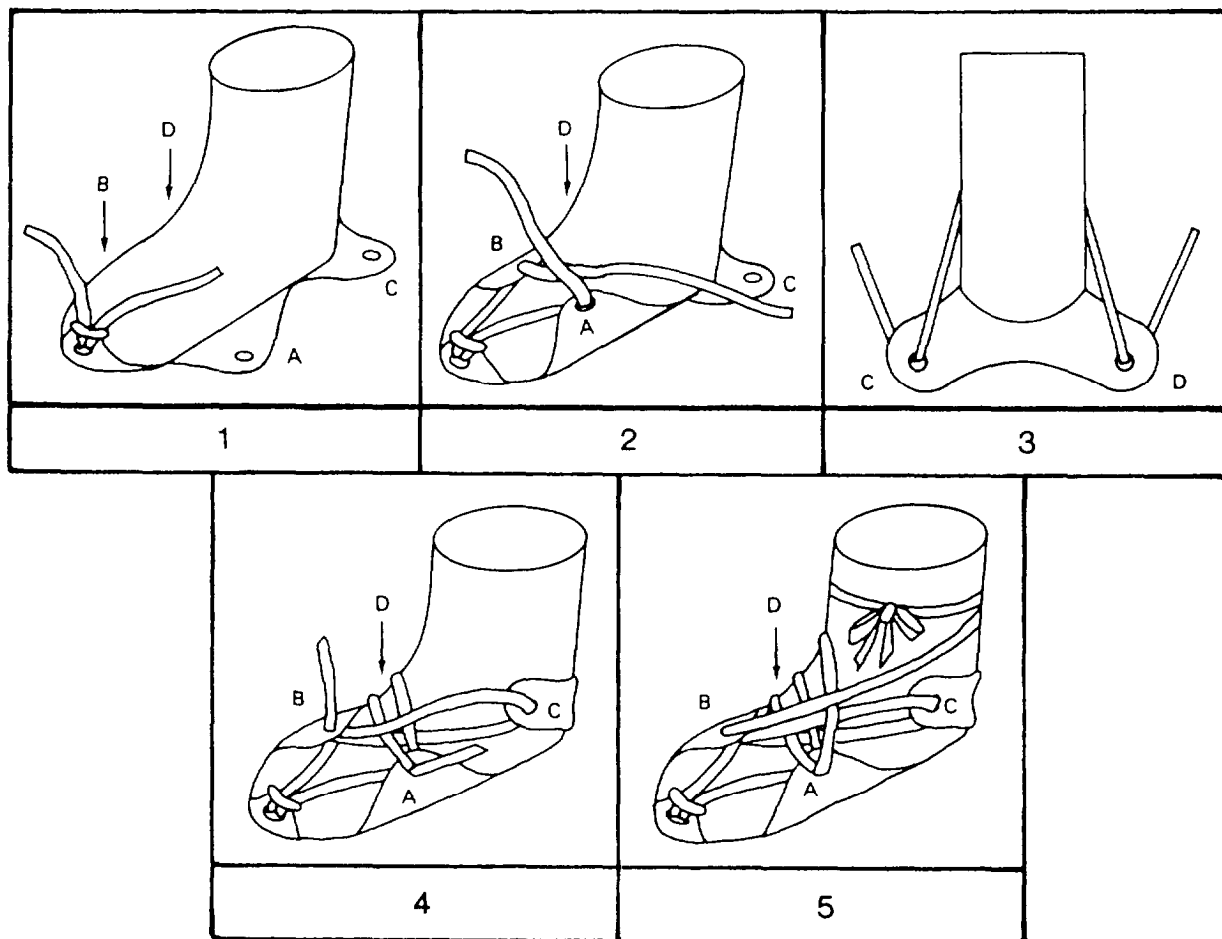
Figure 6-10.-Lacing the chemical-protective overboots.

9. Pull the hood over the mask and secure under the chin with the slide on the draw strings.

CAUTION

Make sure that the hood is pulled down securely around the mask and canisters so that no skin is exposed.

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10. Pull the sleeves up to the elbows.

11. Don the white cotton undergloves and the black, butyl rubber chemical-protective gloves.

12. Pull the sleeves down over the rubber gloves and secure with the hook-and-pile fasteners.

WARNING

Be sure that you are able to move with relative ease without the suit binding or pulling apart the fasteners.

Chemical-Protective Footwear Covers

The chemical-protective footwear covers (overboots) are worn over the standard work shoe and provide protection to the feet against exposure to all known concentrations of nerve and blister agents. The overboots are made of loose-fitting, impermeable, butyl sheet rubber and have a pre-molded, nonslip, butyl rubber sole. The overboot is approximately 16 inches high with a grommet lace closure, including five eyelets to allow lacing around the foot. The overboots are

available in two sizes and can be worn on either foot. They are issued in a polyethylene bag with two pairs of laces and an instruction sheet.

The undamaged overboots provide protection to the feet against chemical agents. Upon contamination, the overboots provide 6 hours of protection from agent penetration.

Donning procedures are listed with the chemical-protective overgarment.

Chemical-Protective Glove Set

The chemical-protective glove set is worn to protect the hands against nerve and blister agents, liquids, and vapors. The set consists of an outer glove to provide chemical protection and an inner glove to assist in absorption of perspiration. The 5-finger outer glove is made of impermeable, unsupported, black butyl rubber and is manufactured for both the right- and left-hand. The thin, white cotton inner glove can be worn on either hand. The glove set is issued in a clear polyethylene bag with an instruction sheet.

The black outer glove protects against chemical agent vapors, aerosols, and small droplets. Upon contamination, the set provides at least 6 hours of protection from agent penetration. These gloves, in good condition, can be decontaminated and reissued,

Wet-Weather Clothing

Wet-weather clothing is often described as impermeable or rubberized clothing. Its value results from the fact that the previously described impregnated/protective clothing can be partially penetrated by all but the smallest droplets of liquid agents, especially in relatively high winds. Moreover, the impregnated/protective clothing is not equally efficient in neutralizing all liquid CW agents. Wet-weather clothing, on the other hand, is for a limited time resistant to all liquid CW agents, provided that the closures at the neck, wrists, and protective mask are well adjusted or taped.

Wet-weather clothing provides a measure of protection against CBR contaminants when worn over ordinary clothing; but as was previously stated, it provides the most complete protection when worn over impregnated or protective clothing. Gradual penetration of the synthetic rubber layer of the wet-weather clothing will eventually occur unless CW agent contaminants are promptly removed. The contaminants are removed by frequent and thorough flushing of the surface with a seawater washdown or an equivalent, such as jury-rigged topside seawater showers, or by swabbing with liquid hypochlorite.

In warm weather or during periods of increased physical activity, wet-weather clothing has a major disadvantage in that it can only be tolerated for relatively short periods of time. Tolerance is limited because no air can pass through the clothing to cool the wearer's body by the evaporation of perspiration.

Perspiration is normally accumulated inside an impermeable suit. Underclothing, gloves, socks, and shoes may become saturated. Sweating can be reduced and tolerance times lengthened by reducing the exercise rate, by using water-spray cooling, and by reducing exposure to direct sunlight.

Ordinary Work Clothing

Special protective clothing is not required for all personnel. Ordinarily, it is worn only by the personnel of monitoring and decontamination teams who must work in or near hazardous areas. All other personnel working near these areas should wear two layers of ordinary clothing, which provide partial protection against agents and radioactive particles.

M258A1 SKIN DECONTAMINATING KIT

The M258A1 kit will decontaminate skin and selected personal equipment that has been contaminated with chemical agents. The kit is housed in a plastic waterproof case with a metal strap hook for easy attachment to clothing or equipment such as the mask carrier. The kit consists of three Decon 1 towelette wipes and three Decon 2 towelette wipes that are sealed in tear-away, impermeable foil packets.

The Decon 1 packet has a tab for immediate identification at night. The Decon 1 packet contains a pad prewetted with hydroxyethyl phenol, sodium hydroxide, ammonia, and water. The Decon 2 packet consists of a pad impregnated with chloramine-B and sealed glass ampules filled with a solution of hydroxyethyl, zinc chloride, and deionized water. The glass ampules are enclosed in a mesh bag to prevent injury to fingers or hands when crushing the ampules. The M258A1 kit is used to remove and decontaminate blister and nerve agents from the exposed skin. It can be used to decontaminate the face (except eyes and mouth), mask interior, rubber gloves, or rubber

overboots. The kit contains supplies for three complete skin decontamination. (The older kit, M258, cannot be used on the face.)

The procedures for using the M258A1 kit vary slightly depending on whether or not the face is being decontaminated. We will look at general procedures first and then at how they are modified for use on the face.

General Skin Decontamination

The procedure for using the M258A1 kit to decontaminate skin other than facial skin is as follows:

1. Snap open the container. Pull out one Decon 1 wipe packet by its tab.
2. Fold the packet on the solid line marked BEND; then unfold.
3. Tear open quickly at the notch; remove the wipe and fully unfold.
4. Wipe the skin for 1 minute.
5. Deposit the wipe in a suitable place.
6. Pull out one Decon 2 wipe packet. Crush the enclosed glass ampules between the thumb and fingers.
7. Fold the packet on the solid line marked CRUSH AND BEND; then unfold.
8. Tear open quickly at the notch and remove the wipe.
9. Fully open the wipe. Let the encased crushed ampule fall to the ground or into a suitable container.
10. Wipe the contaminated skin for 2 to 3 minutes.
11. Deposit the wipe in a proper container.

Facial Skin Decontamination

A modified procedure is used to decontaminate the face. That is because of the protective mask, which should be donned immediately when a decontaminating agent is detected or suspected. The facial decontamination procedure is as follows:

STEPS 1-3. Same as for general use.

4. Hold your breath, close your eyes, and lift the mask from your chin. While continuing to hold your breath, wipe your face and the inside of your mask *quickly* with the Decon 1. Dispose of the wipe. Reseal, clear, and check the mask.

STEPS 5-9. Same as for general use.

10. Same as step 4 except use Decon 2 and wipe *only* the face and *not* the mask.
11. Deposit the wipe in a proper container.

The M258A1 kit is an improvement over the old M258 kit in that it provides for three complete skin decontamination and can be used on the face and interior of the mask. Also, an M58A1 training kit (NSN 6910-01-101-1768) and a training refill kit (NSN 6910-01-113-2434) are available.

ELECTRICAL SAFETY
PETTY OFFICER DUTIES

As an electrical safety petty officer, you will be responsible for electrical safety within your division. The following information will assist you in the performance of this task.

ELECTRICAL SAFETY PROGRAM

The Navy's Electrical Safety Program has two purposes. The first purpose is to provide guidance in the identification of electrical hazards. The second is to prevent mishaps that could cause fatal injuries to personnel and extensive damage to shipboard equipment. Electrical mishaps could compromise the ship's mission capabilities.

To provide you with a better understanding of the program, we will discuss program responsibilities and elements.

Program Responsibilities

The Electrical Safety Program responsibilities, as outlined in OPNAVINST 5100.19B, are as follows:

- **Commanding Officer** —The commanding officer assigns the electrical safety officer.

- **Safety Officer** —The safety officer ensures the Electrical Safety Program is evaluated for compliance and effectiveness.

- **Electrical Safety Officer** —The Electrical Safety Officer ensures an up-to-date ship's electrical safety instruction exists. Copies of the ship's electrical safety instruction are distributed to all departments and divisions and are available in the electrical tool issue room. Upon request, the electrical safety officer provides qualified Electrician's Mates and training aids for divisional electrical safety training. The electrical safety

officer also coordinates with the electronics material officer to provide qualified personnel of other rates to conduct electrical safety training.

● **Supply Officer** —The supply officer ensures all electrical tools received aboard the command are turned over to the electrical tool issue room for a safety inspection before they are issued. The supply officer must ensure items received through open purchase or from SERVMART comply with that requirement.

● **Division Officers** —Division officers ensure assigned personnel are trained, that training records are maintained, and that electrical equipment tools are properly maintained. They ensure portable electrical equipment, such as vacuum cleaners, buffers, and coffeepots, are electrically checked at proper time intervals. They also ensure portable electrical tools drawn from the portable electrical tool issue room are returned at the end of each workday.

● **Medical Department** —The medical department ensures that electrical first aid training, especially cardiopulmonary resuscitation (CPR), is provided to divisions when requested.

● **Electrical Safety Petty Officer** —The electrical safety petty officer works for the electrical safety officer. Before a person can be assigned as an electrical safety petty officer, he or she must meet the following qualifications:

—Complete a basic electrical/electronics school or equivalent training

—Be fully qualified in personnel qualification standards (PQS) as ship's maintenance and material management (3-M) (NAVEDTRA 43241E) watch station (301) maintenance personnel

—Be fully qualified in PQS as a division safety petty officer/electrical safety petty officer (NAVEDTRA 43460-3A)

Type commanders (TYCOMs) and the ship's electrical safety instructions can provide additional information about the Electrical Safety Program and your responsibilities.

Electrical safety is the responsibility of all hands. All Navy members must request permission from their division officer to bring personal electrical/electronic equipment aboard. This equipment must be safety inspected.

Program Elements

The Electrical Safety Program consists of the following seven elements:

● Proper installation, maintenance, and repair of electrical equipment

● Routine and periodic testing to detect and correct unsafe equipment

● Setting of portable electrical standards

● Setting of electrical safety standards

● Training

● Proper use of equipment tag-out procedures

● Control and safety testing of personal electrical/electronic equipment

ELECTRICAL HAZARDS AND PRECAUTIONS

Recognizing a hazardous condition and taking immediate steps to correct it is important. Safety posters (fig. 6-1 1) help warn of dangers in working areas or remind personnel to be safety conscious. Warnings signs (red) and caution signs (yellow) should be located where hazardous conditions exist. Be aware of areas that are wet or oily or have stumbling hazards. Wear rubber gloves and protective clothing wherever working conditions warrant it. Make it a habit to look for and to correct defective tools and equipment, improper grounding, and rotating machinery hazards.

Handtools

Normally, you should have no problems when working with handtools. In all likelihood, however, you have seen some dangerous practices in the use of handtools that should have been avoided. One unsafe practice involves the use of tools with plastic or wooden handles that are cracked, chipped, splintered, broken, or otherwise unserviceable. This practice is sure to result in accidents and personal injuries, such as cuts, bruises, and foreign objects being thrown in the eyes. If unserviceable handtools are not repairable, they should be discarded and replaced.

When necessary (in an emergency only) to improvise an insulated handtool, use the following approved method to protect the user against the
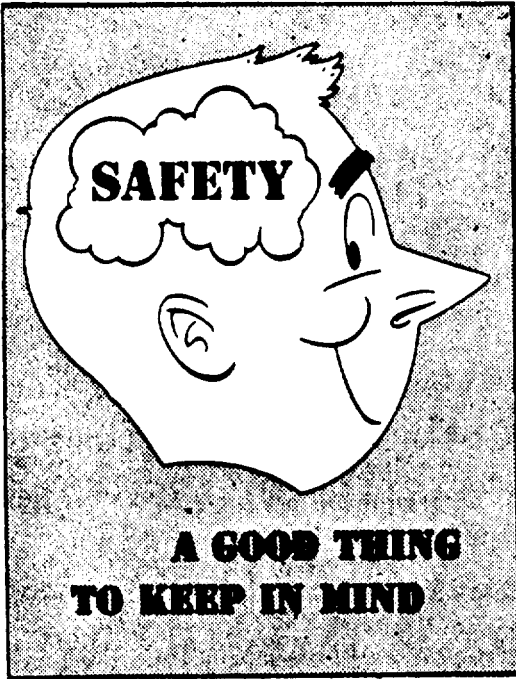
Figure 6-11.-Safety posters.

effects of electric shock: First, apply several layers of approved rubber insulating tape on the metallic handle. Next, apply a layer or two of friction tape over the insulating tape, Friction tape when used alone does not provide adequate protection from electrical shock. It should be used only for griping purposes and to protect the insulating tape. For other instructions on the safe use of handtools, consult *Tools and Their Uses,* NAVPERS 10085-B.

Portable Electric Power Tools

Portable electric power tools should be clean, properly oiled, and in good repair. Before they are used, inspect them to see that they are properly grounded. The newer, double-insulated, plastic framed tools do NOT have ground wires and have only a 2-prong plug.

If a tool is equipped with a 3-prong plug, it should be plugged into a 3-hole electrical receptacle. Never remove the third prong. Make absolutely sure the tool is equipped with a properly grounded conductor. If the tool has a metal case, be sure to ground it according to chapter 300 of *NSTM.* Observe safety precautions and wear rubber gloves when plugging tools into any 110-volt circuits or operating any portable electric equipment under particularly hazardous conditions. Also observe safety precautions and wear rubber gloves in environments such as wet decks or bilge areas or when working over the side in rafts or small boats.

Before issue, any portable electrical equipment, with its associated extension cords connected, should be tested for resistance from the equipment housing to the ship's structure (the resistance must be less than 1 ohm). Equipment should be tested with an approved tool tester or plugged into a dummy (or deenergized) receptacle and tested with an ohmmeter. The cable should be moved or worked with a bending or twisting motion. A change in resistance will indicate broken strands in the grounding conductor. If this is found, the cable must be replaced. At the discretion of the commanding officer, a list may be established of portable equipment requiring testing more or less often than once a month. When the planned maintenance system is installed, tests should be conducted based on the maintenance requirement cards.

When using portable electric power took, you should take the following precautions:

● Inspect the tool cord and plug before using the tool. Do NOT use the tool if its cord is frayed or its plug is damaged or broken. Do NOT use spliced cables except in an emergency that warrants the risk involved.

● Before using the tool, lay all portable cables so that you and others cannot trip over them. The length of extension cords used with portable tools should not exceed 25 feet. Extension cords up to 100 feet are authorized on flight and hangar decks. Extension cords up to 100 feet are also found in damage control lockers, but are labeled for Emergency Use Only.

● Do not use jury-rigged extension cords that have metal "handy boxes" for receptacle ends of the cord. All extension cords must have non-conductive plugs and receptacle housings.

● Connect the tool cord into the extension cord (when required) before inserting the extension cord into a live receptacle.

● After using the tool, first unplug the extension cord (if any) from the live receptacle before unplugging the tool cord from the extension cord. Do not unplug the cords by yanking on them.

● Stow the tool in its assigned place after you are through using it.

SUMMARY

The Navy's safety programs strive to maintain safe and healthy working environments. The keys to successful mishap prevention are a safety-minded supervisor and a comprehensive training program. Safety inspections are an important tool for maintaining mishap-free working conditions.

Some of the Navy's major safety programs are the Hearing and Sight Conservation Programs, Respiratory Protection Program, Heat Stress Program, Electrical Safety Program, Foot and Head Protection Program, and Toxic Material and Electromagnetic Radiation Hazard Programs. As a supervisor, you should be familiar with these and other safety-related programs.

Personnel safety includes an awareness of the possibility of chemical warfare and its associated countermeasures.

You should ensure that your personal are adequately trained in the use of whatever CBR protective equipment they are issued. This includes protective masks, overgarments, foot-wear, and gloves as well as the personal skin decontaminating kit.

Electrical safety petty officers report to the electrical safety officer when performing their duties. Before a person is assigned as an electrical safety petty officer, he or she must complete certain qualifications. After being assigned, the division electrical safety petty officer is responsible for the electrical safety within his or her division.

REMEMBER, PERSONAL SAFETY IS SERIOUS BUSINESS.

REFERENCES

Chemical Biological Mask Type MCU-2/P, T.O. 14P4-15-1/NAVFAC P-463, Secretary of the Air Force, 1984.

Naval Safety Precautions for Forces Afloat, OPNAVINST 5100.19B, Chief of Naval Operations, Washington, D.C., 1989.

Navy Occupational Safety and Health (NAVOSH) Program Manual, OPNAVINST 5100.23B, Chief of Naval Operations, Washington, D.C., 1983,

United States Navy Chemical, Biological, and Radiological Defense Handbook for Training, NAVSEA S-5080-AA-HBK-010, Naval Sea Systems Command, Washington, D.C., 1985.

CHAPTER 7

CHEMICAL, BIOLOGICAL, AND RADIOLOGICAL DEFENSE/DAMAGE CONTROL

LEARNING OBJECTIVES

Upon completion of this chapter, you should be able to do the following:

1. Describe the use of chemical, biological, and radiological (CBR) protective clothing and equipment for each level of Mission Oriented Protective Posture (MOPP).

2. List the procedures for instructing personnel in the correct use of CBR protective clothing and equipment for each level of MOPP.

3. Explain the types of risk assessments used to evaluate the appropriate levels of MOPP.

4. Describe the four levels of MOPP and the associated countermeasures.

5. Describe the duties of the duty division damage control petty officer (DCPO).

In this chapter we will discuss the use of chemical, biological, and radiological (CBR) protective clothing and equipment for each level of Mission Oriented Protective Posture (MOPP) and the types of risk assessments used to evaluate the appropriate levels of MOPP. In addition we will discuss the duties of the division damage control petty officer (DCPO).

MISSION ORIENTED PROTECTIVE POSTURE

MOPP procedures are used to establish levels of readiness for a chemical agent attack. The procedures are flexible. They allow the commanding officer (CO) to adapt the requirements for protective clothing and equipment to the degree of the threat and working conditions at any given time. As an example, personnel doing heavy work in hot weather may suffer heat exhaustion in heavy protective clothing and gas masks. Therefore, unless an attack is actually under way, the CO may relax the protective clothing requirements to prevent certain injury or sickness from heat. Other examples include personnel who cannot do their work wearing protective gear, those who need to eat or attend to body functions,

and those who must meet other requirements not possible in protective clothing. The command decision to implement each level of MOPP must be the result of a risk assessment.

RISK ASSESSMENT

Risk is defined as the assessed difference between the threat level and the activation of appropriate levels of shipboard countermeasures. The risk of casualties and contamination must be evaluated and weighed against the ability of personnel to perform their duties while being hindered by individual protective equipment and the effects of heat stress.

MOPP LEVELS AND ASSOCIATED COUNTERMEASURES

The risk of a CBR threat can be categorized into four levels of probability:

1. **SUSPECTED.** An adversary who has CBR-capable delivery systems within the operations area (OPAREA) presents a suspected threat. Implementation of MOPP-1 countermeasures is indicated.

2. **POSSIBLE.** The expressed affirmation or assessed political will of an adversary to use CBR warfare increases the threat potential to a possible involvement in a CBR environment. Implementation of MOBB-2 countermeasures is indicated.

3. **PROBABLE.** Statements of intent to employ CBR warfare, directed at U.S. forces or allies, changes in political or military posture of an adversary possessing CBR capabilities, or use of CBR warfare within the OPAREA present a chance of probable involvement in a CBR environment. This threat level requires an estimate of the earliest time the CBR environment will be encountered. This estimate must be based on the strike ranges of delivery systems and the time it takes the strike to arrive at the nearest range limits. Implementation of MOPP-3 countermeasures is indicated.

4. **IMMINENT.** Confirmation of increased activity involving delivery systems, recognized platform attack patterns, electronic or visual indication of employment of delivery systems, or the immediate proximity of known CBR hazard areas present an imminent danger of contamination and/or casualties. Implementation of MOPP-4 countermeasures is essential.

RISK MANAGEMENT AND IMPLEMENTATION OF MOPP

The decision to initiate or upgrade the ship's MOPP begins with determining the threat level, ship's mission, and the corresponding MOPP-level countermeasures that provide the minimum acceptable degree of risk. An increase in the threat level does not necessarily justify immediate execution of all countermeasures included in the corresponding MOPP level.

The next step is to determine the time at which the countermeasures comprising that MOPP level should begin. The time required to take countermeasures must be compared to the time remaining until either the threat level increases or the risk becomes unacceptable. Waiting too long to start countermeasures increases the risk to the ship's mission because of the risk to personnel survivability. Alternately, starting countermeasures too early will degrade the crew's performance for sustained operations in the CBR environment and will ultimately limit the ship's ability to complete the mission. All countermeasures must be in effect immediately before the ship becomes involved in a CBR environment.

Immediately following the attack, an assessment of the ship's involvement in the CBR hazard is required to determine which countermeasures should remain in effect to enhance survivability and sustain operation. Frequent reassessments should be made to identify the earliest practical time(s) to secure the countermeasures and upgrade crew performance for optimum mission capability.

MOPP Level-1 (Suspected Threat) Protection

During MOPP level-1 the following actions must be taken:

1. Individual Protection—Issue the following individual protective equipment and medical supply items to shipboard personnel and maintain them at respective battle stations:

   ● Protective masks (fitted for immediate use)

   ● Chemical protection

     —Protective masks (with new, unopened canister)

     —Chemical protective overgarments (2 piece)

     —Chemical protective overboots

     —Chemical protective glove set

     —Personnel decontamination kit

   ● Medical supply items

     —Atropine auto-injectors (3)

     —2-PAM-\Cl auto-injectors (2)

     —Pyridostigmine pretreatment tablets (21)

   ● Biological protection—Consists of the same protective equipment required for chemical protection, minus the medical items. Chemical threat is assumed to be "worst case," unless reliable intelligence indicates otherwise.

   ● Radiological protection—Requires the mask only (with new, unopened canisters).

2. Collective Activities

● Review survival standards and basic operating standards for CBR environments as described by the ships's CBR defense bill.

● Verify that personnel are assigned to CBR defense teams and review required procedures.

● Inventory stowed detection and monitoring equipment, as applicable, for maximum authorized levels, current shelf life, presence of all components, and function within normal limits.

● Inventory stowed supplies for personnel decontamination stations, shipboard decontamination teams, and biological sampling.

● Inventory stowed water canteens to ensure adequacy of allowance serviceability.

● Replace expired, missing or consumed equipment, components, and supplies to maximum authorization levels.

● Set readiness Condition III (wartime steaming).

● Set material condition YOKE.

3. Shipboard Systems

● Operationally test collective protection systems, where available.

● Test installed detection and monitoring systems.

MOPP Level-2
(Possible Threat) Protection

During MOPP level-2 the following actions must be taken:

1. Individual Protection—For all CBR threats, maintain protective mask in carrier and on person.
2. Collective Activities

● Designate primary and secondary personnel decontamination stations with respective weather-deck and internal access/exit routes.

● Pre-position decontamination supplies in decon stations and at respective repair lockers as required by the ship's CBR defense bill.

● Pre-position stowed detection, monitoring equipment, and supplies at locations designated by the ship's CBR defense bill.

● Pre-position empty canteens at staging areas as designated by the ship's CBR defense bill.

● Set material condition ZEBRA (modified).

3. Shipboard Systems

● Operationally test countermeasures washdown system.

● Test shipboard alarms.

MOPP Level-3
(Probable Threat) Protection

During MOPP level-3 the following actions must be taken:

1. Individual Protection

● For all CBR threats, install new filter canisters on protective masks; maintain in carrier and on person.

● Provide wet-weather gear for donning over other protective clothing and equipment for all weather-deck activities.

● Chemical:

—Don chemical protective overgarments (CPO) (jumper and trousers) with hood down.

—Don chemical protective overboots.

—Stow personnel decontamination kit in mask carrier.

—Stow chemical protective glove set and medical supply items in the jumper cargo pocket.

—Initiate pyridostigmine pretreatment regimen.

● Biological:

—Don chemical protective overgarments (jumper and trousers) with hood down.

—Don chemical protective overboots.

—Stow personnel decontamination kit in mask carrier.

● Radiological:

—Don battle dress.

—Issue individual dosimeters and dose indicators (DT-60, etc.).

2. Collective Activities

● Direct the ship to general quarters (readiness Condition I maybe relaxed and readiness Condition II set at CO's discretion).

● Fill pre-positioned canteens with potable water.

● Assign personnel to decontamination stat ions and assure operability y,

● Post CBR detection and monitoring teams equipped with required instruments and supplies designated by the ship's CBR defense bill for readiness Condition I or II.

● Strike below, as appropriate, vulnerable flammable and absorbent weather-deck materials.

● Set material condition ZEBRA.

● Limit weather-deck activities to essential functions.

● Post and monitor installed CBR detection equipment and materials as designated by the ship's CBR defense bill.

3. Shipboard systems

● Activate countermeasures washdown system intermittently.

● Ensure collective protection systems are fully operational and access/exit procedures are in effect.

**MOPP Level-4
(Imminent Threat) Protection**

During MOPP level-4 the following actions must be taken:

1. Individual Protection

● For all CBR threats, don protective mask.

● Chemical/Biological:

—Secure jumper hood over head and around mask.

—Don chemical protective glove set.

● Radiological: Don battle dress.

2. Collective Activities.

● Direct the ship to general quarters (if not previously in effect).

● Implement mandatory water-drinking regimen.

● Initiate continuous monitoring and operation of detection equipment.

● Set Circle WILLIAM on ventilation systems (except Collective Protection System [CPS]).

● Radiological: Secure sea chests for underwater nuclear detonations, as directed by the Ship's CBR defense bill.

● Prepare NBC Warning and Reporting system (NBCWRS) messages for transmission.

3. Shipboard systems—Activate countermeasures washdown system to operate continuously.

DUTIES OF THE DIVISION DAMAGE CONTROL PETTY OFFICER

Damage control petty officers (DCPOs) normally serve for a period of 6 months. They are required to check with the fire marshal and

damage control assistant (DCA) upon being assigned to or released from these duties. The executive officer is the final approving authority for nomination, replacement, and rotation of all DCPOs. The duty DCPO performs the normal DCPO's duties in his or her absence. Therefore, the duty DCPO must be fully qualified as a DCPO.

The normal DCPOs and duty DCPOs are responsible for the following duties:

- Acquainting themselves with all phases of the ship's damage control, fire-fighting, and defense procedures

- Assisting with the instruction of division personnel in damage control, fire-fighting, egress, and CBR defense procedures

- Ensuring the preparation and maintenance of a damage control checkoff list for all spaces under their cognizance

- Supervising the setting of specified damage control material conditions within division spaces and making required reports

- Weighing portable CO_2 bottles, inspecting and testing damage control and fire-fighting equipment, and preparing required reports for approval of the division officer in accordance with current ship's instructions

- Ensuring all battle lanterns, dog wrenches, spanners, and other damage control equipment are in place and in a usable condition in all division spaces

- Ensuring all compartments, piping, cables, and damage control and fire-fighting equipment are properly stenciled or identified by color codes

- Ensuring safety precautions and operating instructions are posted in required division spaces

- Assisting the division officer in the inspection of division spaces for cleanliness and preservation and assisting in the preparation of required reports

- Conducting daily inspections of division spaces for the elimination of fire hazards

- Performing such other duties with reference to damage control and maintenance of division spaces as maybe directed by the division leading petty officer, division officer, fire marshal, DCA, and executive officer

- Following the ten commandments of damage control (See fig. 7-1.)

PHASES OF THE SHIP'S DAMAGE CONTROL FIRE FIGHTING AND DEFENSE

The five phases of the ship's damage control fire fighting and defense are the fire-main system, communications equipment, electrical systems, watertight closures, and ventilation systems.

Fire-Main System

The fire-main system receives water pumped from the sea. It distributes this water to fireplugs,

Ten Commandments
of
Damage Control

1. Keep your ship watertight.

2. Do not violate material conditions.

3. Have confidence in your ship's ability to withstand severe damage.

4. Know your way around -- Even in the dark!

5. Know how to use and maintain damage control equipment.

6. Report damage to the nearest damage control station.

7. Keep personal articles properly secured at all times.

8. Practice personal damage control. Protect yourself so you can protect your ship!

9. Take every possible step to save the ship as long as a bit of hope remains.

10. Keep cool; Don't give up the ship!

Figure 7-1.-The ten commandments of damage control.

sprinkling systems, flushing systems, machinery-cooling water systems, washdown systems, and other systems as required. The fire-main system is used primarily to supply the fireplug and the sprinkling system; the other uses of the system are secondary.

Naval ships have three basic types of fire-main systems: the single-main system, the horizontal-loop system, and the vertical-loop system. The type of fire-main system in any particular ship depends upon the characteristics and functions of the ship. Small ships generally have straight-line, single-main systems. Large ships usually have one of the loop systems or a composite system, which is some combination or variation of the following three basic types:

●The single-main fire-main system consists of one main that extends fore and aft. The main is generally installed near the centerline of the ship, extending forward and aft as far as necessary.

●The horizontal-loop fire-main system consists of two single fore-and-aft, cross-connected mains. The two mains are installed in the same horizontal plane but are separated athwartships as far as practical.

● The vertical-loop fire-main system consists of two single fore-and-aft, cross-connected mains. The two mains are separated both horizontally and vertically. As a rule, the lower main is located below the lowest complete watertight deck, and the upper main is located below the highest complete watertight deck.

● A composite fire-main system consists of two mains installed on the damage control deck and separated athwartships. A bypass main is installed at the lower level near the centerline. Cross connections are installed alternately between one service main and the bypass main.

Communications Equipment

Damage control communications are vital to a ship's survival during emergency conditions. If adequate damage control (DC) communications are not maintained, the entire DC organization could break down rapidly and fail to perform its primary functions.

The following communication methods are used for DC communications:

● Sound-powered battle telephone circuits

● Interstation two-way intercoms

● Ship's service telephones

● Ship's loud speaker or general announcing system

● Voice tubes

● Messengers

Detailed information on each method can be found in *Damage Controlman 3 & 2,* NAVED-TRA 10572.

Electrical Systems

DCPOs perform periodic maintenance (PM) on electrical systems within their division spaces. They must know the location of fuse boxes and circuit breakers that control the circuits. Proper tag out procedures are also required to prevent harm to other crew members while the PM is performed.

You should be able to identify the following electrical systems in your areas:

● Lighting

● Lighting panels

● Electrical power outlets

●Motors and fans

● Casualty power terminals and panels

● Battle lanterns

Watertight Closures

The watertight integrity of a naval ship is established when the ship is built. This original watertight integrity may be reduced or destroyed through enemy action, storm damage, collision, standing, or negligence. As a duty DCPO, you will be responsible for ensuring the proper material condition is set. Later in this chapter we will discuss in depth the material conditions and required reports.

Ventilation Systems

The purpose of the ventilation system is to maintain a standard of air quality in temperature and humidity for personnel habitation and for the removal of equipment-generated heat.

Areas requiring critical temperature control are supported by heating and/or air conditioning essential to the equipments' operation. Normal operations of the ventilation system are necessary to the removal of internally-generated contaminants, fumes, and humidity.

Ventilation may be accomplished by either natural draft or by electrically driven blowers. Ventilation systems are designated as supply, exhaust, or recirculating systems.

Individual ventilation systems between the main transverse bulkheads are large piping systems that can hinder watertight or fumetight integrity. This potential problem is overcome by ventilation closures installed in fire and flooding boundary bulkheads where penetrations are necessary. Ventilation systems are not installed in spaces that are entered infrequently. That minimizes the number of holes in bulkheads and decks and improves resistance to damage. Some examples are storerooms and voids. Wherever ventilation systems cross fire zone boundaries, fire dampers are installed at the bulkhead penetration.

Portable ventilation systems consisting of electric driven (RED DEVIL) or air-turbine-driven blowers with attached flexible trunks are available for emergency application when the installed ventilation is inoperable. Portable ventilation systems are a primary means of smoke and gas removal during post fire conditions.

DAMAGE CONTROL, FIRE-FIGHTING, EGRESS, AND CBR DEFENSE PROCEDURES

During a crisis situation, such as battle damage or shipboard fires, your division's survival depends on its members' knowledge and experience in damage control, fire-fighting, egress, and CBR defense procedures. DCPOs and duty DCPOs are responsible for ensuring division personnel understand these procedures.

Damage Control

The ship's damage control organization is the means by which you can reach the damage control objectives. In fact, organization is the key to all successful damage control. The damage control organization establishes standard procedures for handling various types of damage. It also sets up training in those procedures so that every person will know immediately what to do in each emergency situation.

Both preventive and corrective actions are vital. The prevention of damage requires that all departments carry out the following actions:

1. Maintain the established material conditions of readiness
2. Train all departmental personnel in all aspects of shipboard damage control
3. Maintain the ship in the best condition possible to resist damage

To achieve these goals, the ship's damage control organization must be coordinated with other elements of the ship's organization. Therefore, each department must assign specific damage control duties to individuals in each division. That includes the designations of a divisional DCPO and duty DCPOs. The corrective aspect of damage control requires the damage control battle organization to promptly restore the offensive and defensive capabilities of the ship.

The damage control organization consists of two elements: the damage control administrative organization and the damage control battle organization.

ADMINISTRATIVE ORGANIZATION. — The damage control administrative organization is part of the engineering department organization. However, each department has major administrative and preventive maintenance responsibilities, These responsibilities include the planned maintenance covering damage control equipment, systems, and fixtures within the departmental spaces. Each department head is to ensure the damage control planned maintenance system (PMS) assignments are completed and that discrepancies are documented and corrected.

BATTLE ORGANIZATION. —The damage control battle organization includes damage control central (DCC), various repair parties, and battle dressing stations. The organization varies somewhat from one ship to another. The difference will depend upon the size, type, and

mission of the ship. The battle organization is based on the following principles:

1. All personnel within the organization must be highly trained in all phases of damage control. They should also be trained in the technical aspects of their ratings to assist in the control of damage.

2. The organization must be decentralized into self-sufficient units. These units must have communication with each other and be able to take corrective action to control the various types of damage.

3. One central station (DCC) receives reports from all damage control units. This station evaluates and initiates those orders necessary for corrective action from a shipwide point of view. This station also reports to and receives orders from command control. These reports concern matters that affect the ship's buoyancy, list trim, stability, watertight integrity, and CBR defense measures.

4. Damage control units assigned work that is peculiar to a single department are under the direct supervision of one of that department's officers.

5. Provisions are made for relief of personnel engaged in difficult tasks, for battle messing, and for the transition from one condition of readiness to another. Procedures are developed to ensure all relief crews are informed of the overall situation. These procedures ensure continual and proper action to combat casualties.

6. Positive, accurate, and rapid communications are provided for between all damage control units. An overall coordination of effort and direction can then be readily accomplished.

7. A repair party, remotely located from DCC, assumes the functions of DCC in the event that DCC becomes a battle casualty.

Damage Controlman 3 & 2, NAVEDTRA 10572, provides in-depth information about the damage control organization, function, and responsibilities.

Fire fighting

Some fires aboard ship may start from an enemy hit, a cigarette or match carelessly thrown away, or the spontaneous ignition of various combustible substances. Others may start from the use of spark- or flame-producing tools and equipment in an atmosphere containing explosive vapors, the improper stowage of flammable materials, or static electricity. Fires aboard ship can start from many various causes.

The prevention as well as the fighting of fires has proved essential to the survival of a ship in peacetime and combat. Efforts must be continually made to reduce the damage resulting from fire through elimination of hazards, properly maintained and operational fire-fighting equipment, and effectively trained emergent y response parties. As the DCPO or duty DCPO, you should have an understanding of fire party organization and responsibilities and the types of fire-fighting agents and their use. This knowledge will enable you to train your division personnel in effective fire-fighting techniques.

FIRE PARTY. —The fire party is a component of the ship's DC organization. The minimum fire party should consist of sufficient personnel to perform the functions shown in figure 7-2. A person for each function is not necessary. A person may perform one or more functions simultaneously or sequentially. Each ship will determine the number of personnel required for a particular condition. Figure 7-2 shows the criteria ships use in determining their degree of flexibility in functional fire party assignments. All ships will have a contingency plan within their general emergency bill to augment the assigned fire party (for example, other repair lockers, personnel on board not assigned to the fire party or other ships' recovery, and assistance details). Fire parties are divided into two types, in-port and at-sea fire parties:

● IN-PORT FIRE PARTY. Each duty section must have an effective fire-fighting force. Care must be taken to ensure assigned personnel have the proper training and experience required based on the ship's general emergency bill. Personnel should not be assigned to additional in-port duties that might require them to leave the ship.

While in port, the fire party may require additional personnel and material support. These additional personnel should assemble at a designated location and assist in setting fire boundaries. They should be available to back up

Number of Personnel	Function
1	Repair Party Leader[1]
1	Fire Marshal[2]
1	Scene Leader
1	Team Leader "Attack Team"[3]
2	Nozzleman "Attack Team"
4	Hoseman "Attack Team"[4]
2	Plugman
2	Investigator
4	Boundaryman
2	Messenger/Phone Talker
1	Electrician
1	NFTI Operator[5]*
1	Access*
1	Reflashwatch*
1	Overhaul*
2	Smoke Control*
1	Post Fire Gas Free Test Assistant*
2	Dewater*
As Assigned	First Aid[6]*
4	Rapid Response[7]*

[1]Repair locker leader function is required only during Condition I.

[2]Fire marshal function is required inport and at-sea during non-Condition I.

[3]If conditions warrant, as determined by the scene leader, number 1 nozzleman may assume team leader responsibilities. The assigned team leader may then carry out other functions as directed. At a minimum the following situations require a person other than the nozzleman to perform as a team leader: when hose team(s) requires the use of NFTI to advance and/or when hoses(2) equipped with vari-nozzles are employed within the same compartment.

[4]Number of hosemen required is based on minimum manning for two 1 1/2 inch hoses. More hosemen may be required based on compartment layout, length of hose run, and size of hose employed.

[5]NFTI operator function may be combined with other functions. At a minimum personnel assigned the function of scene leader, team leader, nozzleman, investigators, electrician and overhaulman shall be qualified in its use.

[6]All personnel assigned shall be trained in performing basic first aid and burn treatment, and at least one person should be trained in CPR.

[7]The rapid response team is required inport and at-sea during non-Condition 1. The team shall be lead by the fire marshal. Several of the assigned boundarymen and the electrician may be used to comprise the remainder of this team.

*Denotes functions which may be performed by personnel assigned other functions.

Figure 7-2.-Minimum fire party functions.

FIRE DUTIES	COLLISION/FLOODING DUTIES
(1) DCC Supervisor/Locker Leader	DCC Supervisor/Locker Leader
(2) On-Scene Leader	On-Scene Leader
(3) #1 Nozzleman	Investigator
(4) #2 Nozzleman	Assistant Investigator
(5) #1 Hoseman	Shoring Detail
(6) #2 Hoseman	Pump Detail
(7) #1 Plugman	Shoring Detail
(8) #2 Plugman	Shoring Detail
(9) Electrician	Electrician
(10) Accessman/Compartment Tester	Pump Detail
(11) Stretcher Bearer	Stretcher Bearer
(12) Boundary Setter	Boundary Setter
(13) Boundary Setter	Boundary Setter
(14) CO_2 Man	Pump Detail
(15) Foam Man	Pump Detail
(16) Sprinkleman	Pump Detail
(17) DCC/Repair Locker Phone Talker	DCC/Repair Locker Phone Talker
(18) On-Scene Phone Talker	On-Scene Phone Talker

Figure 7-3.-Minimum acceptable duty in-port fire party assignments.

the primary fire team if needed. Figure 7-3 lists the minimum acceptable duty in-port fire party assignments.

● AT-SEA FIRE PARTY. Ships are required to organize an at-sea fire-fighting party (fig. 7-4). It may serve either as a standing organization or as a special detail for evolutions such as weapons handling, underway replenishment, helicopter operations, and towing operations. The at-sea fire party must be prepared to do the following:

1. Respond immediately to fire alarms when repair parties are not available

2. Extinguish fires effectively without disrupting other ship operations

3. Control fires until ongoing critical evolutions can be terminated and general quarters stations are ready

NUMBER OF MEN	FUNCTION/PROVIDE
1	Scene Leader
2	Investigator—OBA
2	OBA Tenders—Kit
2	Nozzleman—OBA
2	Hoseman—Foam Cans
2	Plugman—CO_2 Bottles
1	Talker—Sound Powered (2JZ) Phones
1	Messenger—Message Forms
1	Electrician—Kit, OBA
1	Corpsman—Kit
X	Aircraft Fire Fighters, as appropriate

Figure 7-4.-At-sea fire party organization.

FIRE-FIGHTING AGENTS. —Many materials may be used as fire-fighting agents. The following are the fire-fighting agents used most often aboard naval ships:

● **Water.** Water is a cooling agent, and aboard ship the sea provides an inexhaustible supply. If the surface temperature of a fire can be lowered below the fuels' ignition temperature, the fire will be extinguished. Water is most efficient when it absorbs enough heat to raise its temperature to 212°F (l00°C). At this temperature, the water will absorb still more heat until it changes to steam. The steam carries away the heat, which cools the surface temperature.

A secondary method of water extinguishment is caused by steam smothering. When water changes into steam by absorbing heat, it expands about 1,700 times in volume. The large quantity of steam displaces the air from the fuel, which smothers the fire. Steam-smothering systems are installed in boiler casings and catapult troughs.

● **Aqueous Film-Forming Foam.** Aqueous film-forming foam (AFFF) is composed of synthetically produced materials similar to liquid detergents. These film-forming agents are capable of forming water solution films on the surface of flammable liquids. The Navy mixes AFFF by volume in the following proportion: 6 parts of AFFF concentrate to 94 parts water.

AFFF concentrate is a clear to slightly amber-colored liquid concentrate. The AFFF solution of water and concentrate possesses a low viscosity and spreads quickly over a surface. AFFF concentrate is nontoxic and biodegradable in diluted form. AFFF concentrate may be stored for long periods without losing its effectiveness. The concentrate will freeze when exposed to temperatures below 32°F (0°C) but can be reused when thawed.

AFFF, when mixed with water, provides three fire-extinguishing advantages. First, it forms an aqueous film on the surface of the fuel, which prevents the escape of the hydrocarbon fuel vapors. Second, the layer of foam effectively excludes oxygen from the fuel surface. Third, the water content of the foam provides a cooling effect.

Foam is used mainly to extinguish burning flammable or combustible liquid spill fires (class B). AFFF has excellent penetrating characteristics and is superior to water in extinguishing class A fires.

● Carbon Dioxide (CO_2). CO_2 extinguishes fires by smothering. CO_2 is about 1.5 times heavier than air. That makes CO_2 a suitable extinguishing agent because it tends to settle and blanket the fire.

CO_2 is a dry, noncorrosive gas that is inert when in contact with most substances and will not leave a residue that damages machinery or electrical equipment. In both the gaseous state and the finely divided solid (snow) state, it is a non-conductor of electricity y regardless of voltage. CO_2 can be safely used in fighting electrical fires.

CO_2 extinguishes the fire by diluting and displacing its oxygen supply. If gaseous CO_2 is directed into a fire so that sufficient oxygen-supporting combustion is no longer available, the flames will die out. Depending on what is fueling the fire, that action will take place when the 21-percent oxygen content, normally present in air, is diluted with CO_2 below 15 percent oxygen. Some ordinary combustible class A fires require that the oxygen content be reduced to less than 6 percent to extinguish glowing combustion (smoldering fire). CO_2 has limited cooling capabilities, may not cool the fuel below its ignition temperature, and is more likely than other extinguishing agents to allow reflash. Therefore, the fire fighter must remember to stand by with additional backup extinguishers. The temperature of the burning substance and its surroundings must be below its ignition temperature if the fire is to remain extinguished.

CO_2 is not an effective extinguishing agent for fires in materials that produce their own oxygen supply (as an example, aircraft parachute flares). Fires involving reactive metals, such as magnesium, sodium, potassium, or titanium, cannot be extinguished with CO_2. Because of the relatively high temperatures involved, these metal fuels decompose CO_2 and continue to burn.

WARNING

CO_2 can produce unconsciousness and death when present in fire-extinguishing concentrations. The reaction in such cases is more closely related to suffocation. A concentration of 9 percent will cause most people to lose consciousness within a few minutes. Caution must be exercised when discharging CO_2 in confined spaces.

A typical discharge of liquid CO_2 has a white, cloudy appearance caused by finely divided dry ice particles carried along with the flash vapor. Some water will condense from the atmosphere creating additional fog, which will persist for a long time.

● **Halon.** Halon is a halogenated hydrocarbon in which one or more of the hydrogen atoms have been replaced by atoms from the halogen series (fluorine, chlorine, bromine, or iodine). This substitution provides nonflammability and flame extinguishing properties. A halon numbering system has been developed to describe the various halogenated hydrocarbons. The first digit in the number represents the number of carbon atoms in the compound molecule; the second digit, the number of fluorine atoms; the third digit, the number of chlorine atoms; the fourth digit, the number of bromine atoms; and the fifth digit, the number of iodine atoms, if any. In this system, terminal zero digits are not expressed.

The two types of halon used aboard Navy ships are Halon 1301 (the most commonly used) and Halon 1211, introduced for twin-agent (AFFF/Halon 1211) applications on flight and hangar deck mobile fire-fighting apparatus. Portable Halon 1211 extinguishers are also planned for backfit into vital electronics spaces of all surface combatant ships.

Halon 1301 consists of one atom of carbon, three atoms of fluorine, no chlorine atoms, one bromine atom, and no iodine atoms. For shipboard installation, Halon 1301 is superpressurized with nitrogen and stored in compressed gas cylinders as a liquid. When released, it vaporizes into a colorless, odorless gas with a density of approximately five times that of air.

Halon 1211 consists of one atom of carbon, one atom of chlorine, two atoms of fluorine, and one atom of bromine. Halon 1211 is also colorless, but it has a sweet smell. Halon 1211 is stored and shipped as a liquid and pressurized with nitrogen gas. Pressurization is necessary since the vapor pressure is too low to convey it properly to the fire area.

The mechanism by which halon extinguishes a fire is not thoroughly known. However, Halon (1211 and 1301) chemically inhibits the flame front; the halons act by removing the active chemical species involved in the flame's chain reaction.

Halon decomposes upon contact with flames or hot surfaces above 900°F (482°C). Decomposition products are principally hydrogen fluoride and hydrogen bromide.

The short discharge time of Halon 1301 (10 seconds maximum) keeps the thermal decomposition products well below lethal concentrations. The real hazard lies not in the by-products of the halon, but rather in the products of combustion from the fire. Products such as CO, combined with the oxygen depletion, heat, and smoke, pose a greater hazard to personnel. Personnel should not remain in a space where Halon 1301 has been released to extinguish a fire unless an oxygen breathing apparatus (OBA) is worn. If Halon 1301 should inadvertently be released into a space where no fire exists, personnel can be exposed to 5-to-7 percent concentrations of Halon 1301 for up to 10 minutes (depending upon the individual) without danger to their health. Halon 1301 can be considered a nontoxic and nonsuffocating extinguishing agent in the normal 5-to-7-percent concentrations; however, spaces should be evacuated on halon system discharge.

Exposure to Halon 1301 concentrations of up to about 7 percent by volume and Halon 1211 concentrations of 2 to 3 percent by volume has little noticeable effect on humans. Exposure to Halon 1301 concentrations of between 7 and 10 percent and Halon 1211 concentrations of between 3 and 4 percent may cause personnel to experience dizziness and tingling of the extremities. Those symptoms indicate mild anesthesia. At Halon 1301 concentrations above 10 percent and Halon 1211 concentrations above 4 and 5 percent, the dizziness becomes pronounced. Subjects feel as if they will lose consciousness (although none have), and physical and mental dexterity is reduced. No significant adverse health effects have been reported from the use of Halon 1301 or 1211 as a fire extinguisher since their introduction into the marketplace.

Direct contact with vaporizing liquid being discharged from Halon 1301 and Halon 1211 has a strong chilling effect on objects and can cause frostbite and burns to the skin. The liquid phase vaporizes rapidly when mixed with air and therefore limits this hazard to the immediate vicinity of the nozzle.

Note

In flammable gas cylinder storerooms, 20 percent Halon 1301 is required to extinguish a fire. Therefore, if the system is activated, personnel must leave the space immediately.

Halon 1301 is installed and used in fixed flooding systems for extinguishing flammable liquid fires. Halon 1211 is not used in total flooding systems. Its lower volatility, plus a high liquid density, permits the agent to be sprayed as a liquid and therefore propelled into the fire zone to a greater extent than is possible with other gaseous agents. Halon 1211 will replace Purple-K-Powder (PKP) in twin-agent systems installed on mobile fire-fighting apparatus on aircraft carriers.

● **Steam.** Steam smothers a fire by reducing the concentration of oxygen or the gaseous phase of the fuel in the air to the point that combustion stops. As long as the steam blanket is maintained, it will prevent reignition.

Since steam is a vapor when applied, it provides little cooling. Additionally, steam condenses when its supply is shut off. Its volume decreases rapidly and combustible vapors and air rush in to replace it. A fire can reflash if it has not been completely extinguished and cooled. The temperature of steam itself is high enough to ignite many liquid fuels. Steam is hazardous to personnel because the heat it carries can inflict severe burns.

● **Dry Chemical Extinguishing Agent.** PKP is a dry chemical principally used as a fire-extinguishing agent for flammable liquid fires. It is used in portable extinguishers and handheld hose-line systems aboard ship.

Various additives are mixed with PKP base materials to improve their storage, flow, and water-repellency characteristics. The most commonly used additives are silicones, which coat the particles of PKP to make them free flowing and resistant to the caking effect of moisture and vibration.

When PKP is applied to fire, the dry chemical extinguishes the flame by breaking the combustion chain. PKP does not have cooling capability. When PKP is applied, an opaque cloud is formed in the combustion areas. This cloud limits the amount of heat that can be radiated back to the heart of the fire. Less fuel vapor is produced because of reduced radiant heat.

PKP attacks the chain reaction required to sustain a fire. It is believed that PKP reduces the ability of the molecular fragments to recombine, thereby breaking the chain reaction.

PKP is primarily used to extinguish flammable liquid fires but can also be used on electrical fires (class C). PKP is highly effective in extinguishing both flammable liquid pool fires and oil spray fires. Although PKP can be used on electrical fires, it will leave a residue that may be hard to clean. PKP can be used in the galley for fighting fires on such items as the cooking hood, ducts, and ranges.

WARNING

The ingredients presently used in PKP are nontoxic. However, the discharge of large quantities of PKP may cause temporary breathing difficulty during and immediately after discharge and may seriously interfere with visibility.

The following is a list of limitations for PKP use.

1. PKP is not effective on materials that contain oxygen.
2. PK should not be used in installations where relays and delicate electrical contacts are present.
3. PKP is not effective on combustible metals and may cause a violent reaction.
4. Where moisture is present, PKP may combine with the moisture to corrode or stain surfaces on which it settles; when possible, PKP should be removed from all surfaces.
5. PKP does not produce a lasting inert atmosphere above the surface of a flammable liquid; consequently, its use will not result in permanent extinguishment if ignition sources such as hot metal surfaces or persistent electrical arcing are present.
6. PKP is not effective on fires involving ordinary combustibles (class A). However, it can be used to knock down a flaming fire, keeping it under control, until hose lines are advanced to the scene.

● **Aqueous Potassium Carbonate.** Aqueous potassium carbonate (APC) is used aboard ships for extinguishing burning cooking oil and grease in deep fryers and galley ventilation exhaust ducts. An APC solution consists of 42.2 percent K_2CO_3 and 57.8 percent water. Alkaline solutions such as APC are often used in combating liquid grease fires involving unsaturated animal fat and

vegetable oil. Upon contact with the burning surface, APC generates a soap-like froth that contains steam, which causes CO_2 and glycerine bubbles to float on top of the burning oil. The bubbles exclude air from the surface of the grease or oil, which extinguishes the fire.

Egress Procedures

Escape routes from below-deck spaces to weather decks should be clearly marked with directional arrows and appropriate labeling. Phosphorescent markings and appropriate emergency lighting of egress routes, hatches, and ladders will ensure that personnel will be able to safely find their way topside in the event of a loss of ship's power.

The emergency escape breathing device (EEBD) provides personnel with respiratory and eye protection in an atmosphere that will not support life.

All personnel must learn to follow escape routes to weather decks by taking part in blind-fold drills. Additionally personnel should be trained on the location and the proper wearing of EEBDs. The method of and frequency required for egress training are contained in type commander directives.

CBR Defense

CBR defense means defense against chemical or biological agents used in attacks or defense against radiation from nuclear explosions. Personnel must be able to detect and identify contamination, to decide on the protective measures needed, and to decontaminate ship surfaces, equipment, and personnel.

In studying CBR defense, remember that weapons are always developed and new defense measures are being established to deal with them. You will need to keep up to date with these changes.

The ship's bills that apply to shipboard CBR defense include the general emergency bill; the CBR defense bill; and the ship's battle bill. All personnel must be indoctrinated and trained to carry out the duties described in these bills. For information on the ship's battle bill and for additional information on other bills, see *Standard Organization and Regulations of the U.S. Navy,* OPNAVINST 3120.32.

Personnel under CBR attack should be protected through individual and group measures. Individual protection is of immediate concern.

What you do in the first few moments after a CBR attack may determine whether or not you survive. Know the symptoms of exposure to radiation and to biological and chemical agents. Know the action to take when you are exposed and any self-aid and first-aid measures that might help you or your shipmates. This knowledge may mean the difference between life and death.

COMPARTMENT CHECKOFF LISTS

Compartment checkoff lists (fig. 7-5) provide an itemized listing of all classified fittings and closures used in damage control to set the specified material condition of readiness. They are originally prepared and furnished by the ship builder's design agent during the construction of a ship or class of ships. It is each ship's responsibility to keep the lists current. Follow the guidelines listed in the *Naval Ships' Technical Manual,* chapter 079, volume 2, when you check and update your compartment checkoff lists.

All compartments must have a compartment checkoff list permanently posted within them in clear view of the space access. Weather decks that have damage control facilities must also have a compartment checkoff list posted. The compartment name and number are entered on the list along with all classified fittings and certain other damage control facilities in the compartment that are necessary to help damage control personnel in the performance of their duties. The information listed for each of the classified fittings and other facilities on a compartment checkoff list includes the following:

- Name of item

- Number of item

- Location of item

- Purpose of item

- Classification of item (if classified)

- Division responsibility for the proper operation of each fitting

When a compartment has more than one entrance, duplicate compartment checkoff lists must be posted at each entrance. The compartment checkoff lists shall be clearly labeled DUPLICATE. Partial compartment checkoff lists may be desirable when a compartment contains

COMP'T NO.	2-108-1-L		NAME	Crews Berthing (LSD Wing Wall)		

ITEM	FITTING	NUMBER	LOCATION AND PURPOSE	CLASSIFICATION	DIVISION RESPONSIBLE
	ACCESS				
1.	WT DOOR	2-108-1	Access to: 2-96-1-L	Z	REPIII
2.	WT DOOR	2-120-3	Access to: 2-120-1-L	Z	REPIII
3.	WT HATCH	2-108-1	Access to: 3-108-1-L	X	S
	MISCELLANEOUS CLOSURES				
4.	ATC	2-109-1	In WTH 2-108-1 used to test: 3-108-1-L 3-103-3-A 3-115-1-A	X	E
5.	ATC	2-108-1	In WTD 2-108-1 used to test: 2-96-1-L	X	E
	DRAINAGE				
6.	DECK SOCKET (remote)	2-112-1	Bilge eductor overboard discharge valve 5-112-1	X	M
7.	STC	2-118-1	Sound Ball 6-108-1-W	X	R
8.	GAGGED SCUPPER	2-109-1	Plumbing drain from 1-110-1-L	Z	REPIII
	FIRE MAIN & SPRINKLING SYSTEM AND WASH DOWN				
9.	FMCOV	2-109-1	Cut out to FP 1-109-1	W	REPIII
10.	FMCOV	2-110-1	Cut out to Group IV magazine sprinkler	W	REPIII
	FUEL OIL				
11.	STC	2-116-1	Sound F.O. & Ball. 6-108-3-F	X	B
	REMOTE OPERATION				
12.	Remote start/ stop switch	2-119-1	For exhaust blower 2-108-1	Z	REPIII
	MISCELLANEOUS UNCLASSIFIED				
13.	Loud Speaker		General announcing 1MC		
14.	C.P. Riser Terminal	2-114-1	Casualty Power outlet		
15.	15lb CO2	2-119-1	Portable fire extinguisher		
16.	One OBA		In box at Fr. 110 stbd.		

Figure 7-5.-Compartment checkoff list.

alcoves. The partial compartment checkoff list shall be clearly labeled PARTIAL. The item numbers on the partial list must correspond with the numbers on the original list. Compartment checkoff lists for the weather decks, and other decks, may be divided by sections; for example, main deck, frame 90-120, port side. The DCA maintains a master copy of each original and partial compartment checkoff list on file in DC central. The DCA, together with the DCPOs, is responsible for ensuring that the compartment checkoff lists are posted and correct.

The individual division officers are responsible for maintaining the list in good physical condition.

The commanding officer, assisted by the DCA, is responsible for filling in the column marked Division Responsibility.

The divisions concerned are responsible for securing fittings that are classified as XRAY or YOKE. The ship's repair parties are responsible for securing ZEBRA fittings.

MATERIAL CONDITION OF READINESS

The term *material condition of readiness* refers to the degree of access and system closure in effect at any given time. The securing of access fittings or systems limits the extent of damage that could occur to a ship. To prevent interference with normal operations, the ship does not maintain maximum closure at all times.

For damage control purposes, naval ships have three material conditions of readiness. Each condition represents a different degree of tightness and protection. The three material conditions of readiness are called XRAY, YOKE, and ZEBRA. These titles have no connection with the phonetic alphabet. Furthermore, the titles are used in all spoken and written communications that concern material conditions.

Condition XRAY provides the least amount of protection. It is set when the ship is in no danger of attack. Examples are when the ship is at anchor in a well-protected harbor or when secured at a home base during regular working hours.

Condition YOKE provides more protection than condition XRAY. It is set and maintained at sea during peacetime and in port during wartime. It is also maintained in port during peacetime outside of regular working hours.

Condition ZEBRA is set before a ship leaves or enters port during wartime. It is also set immediately, without further orders, when the ship is manning general quarters stations. Also, condition ZEBRA is set to isolate and control fires and flooding when the ship is not at general quarters.

All watertight, airtight, firetight, and fume-tight access fittings belong to a certain classification of fittings. Although the fittings usually have a basic classification, a select group of closures within each of the three material conditions of readiness are modified. The purpose of the modified closures is to allow access to a space that is secured because of the material condition that is set. Once a material condition is set, no fitting within the condition is to be opened without prior authorization. Closures that are not modified require permission of the commanding officer to be opened. Permission to open a closure is obtained through the damage control central (DCC) watch or the officer of the deck (OOD) when the ship is not manning the general quarters stations. Repair party officers control the opening and closing of all fittings in their assigned areas when the ship is at general quarters. Any change in the status of a fitting must be reported to DCC so that the ship's DC closure log maybe updated. You may open a modified closure without any special authorization. However, you are not authorized to leave the closure open unattended. Through careful attention to these procedures, a ship's watertight integrity can be maintained at a safe level.

The following discussion will help you learn about each classification, how the classification is marked, what group of fittings have the classification, and when you may or may not open a fitting with that classification.

XRAY fittings are marked with a black X. These closures are secured during conditions XRAY, YOKE, and ZEBRA. You must not open fittings with this classification without proper authorization. You will find this classification on the following access closures:

- Doors and hatches to storerooms and stowage spaces, including cargo ammunition spaces

- Hatches that are provided with a scuttle and lead to magazines and handling rooms

- Bolted-plate manhole covers

- Escape scuttles not covered elsewhere

- Doors and hatches located only on the weather deck and below that are used to strike down stores and ammunition

- Access to an aircraft fueling station compartment

- Access to escape trunks in machinery spaces

- Access to the arresting gear machinery room

- Access to the eductor room

- Access to the capstan and winch control room

- Access to the chain locker

- Access to the stores elevator

- Access to the catapult machinery room

- Access to forced draft blower rooms

- Access to fan rooms

CIRCLE XRAY fittings are marked with a black X inside of a black circle. These modified closures are secured during conditions XRAY, YOKE, and ZEBRA. However, personnel may open these fittings without special authorization when proceeding to battle stations or as required in routine inspection checks. You may open these closures, but you must secure them immediately after use. You will find this classification on the following closures:

- Doors to magazines and handling rooms

- Hatches that do not have a scuttle and lead to magazines and handling rooms

- Access to the missile handling and check-out area compartments

- Scuttles in hatches to the shaft alley, pump rooms, magazines, and handling rooms

- Access to the gas and fuel station and filter rooms

- Access to the oxygen-nitrogen rooms (compressor and producing)

- Access to the switch gear room, ammunition hoist, and elevators

- Access to the underwater log room

- Access to the equipment rooms that are unoccupied

- Scuttles for passing ammunition

YOKE fittings are marked with a black Y. These closures are secured during conditions YOKE and ZEBRA. You must have proper authorization to open fittings with this classification when the ship is at condition YOKE or ZEBRA. You will find this classification on the following closures:

- Hatches that are provided with a scuttle and lead to shaft alleys and pump rooms

- Alternate accesses to machinery rooms

- Weather-deck hatches not classified as XRAY

- Some alternate accesses on the DC deck and above

- Access to the windlass room

- Access to the air-compressor room

- Access to the air-conditioning machinery room

- Access to the refrigeration machinery room

- Access to the elevator machinery room

- Access to the missile director machinery room

- Access to the drying room

CIRCLE YOKE fittings are marked with a black Y inside of a black circle. These modified fittings are secured during conditions YOKE and ZEBRA. However, these fittings may also be opened without special authorization when personnel are proceeding to battle stations or as required in routine inspection checks. Again, you must secure these closures immediately after use. You will find this classification on the following closures:

- Hatches that lead to the shaft alley and pump room and do not have a scuttle

- Scuttles in the deck to the shaft alley and pump room

- Doors at the bottom of the trunk to the shaft alley and pump room

- Access to the steering gear power and ram room

- Access to the chill room

ZEBRA fittings are marked with a red Z. These closures are secured during condition ZEBRA. You must have proper authorization to open fittings with this classification when the ship is in condition ZEBRA. You will find this classification on the following closures:

- All remaining doors and hatches for routine access

- Access to all shops; labs; and commissary, utility, control, and hospital spaces

- Access to all offices

- Access to equipment rooms occupied when associated control room is in use

- Main access to machinery spaces

- Access to issue rooms

- Access to the steering gear room

- Access to the enclosed operating stations

- Access to hangar and flight deck control stations

- Access to the garbage disposal room

- Access to the trash burner and bin room

CIRCLE ZEBRA fittings are marked with a red Z inside a red circle. These modified fittings are secured during condition ZEBRA. CIRCLE ZEBRA fittings may be opened with the commanding officer's permission during prolonged periods of general quarters. The opening of these fittings allows evolutions such as the preparation and distribution of battle rations, opening of limited sanitary facilities, ventilation of battle stations, and access for aviation personnel to the flight deck. When open, CIRCLE ZEBRA fittings must be guarded so that they may be closed immediately if necessary. You will find this classification on the following closures:

- Limited doors or scuttles from the weather deck to the crews' galley

- Doors from aviators and flight crew ready rooms to the flight deck

DOG ZEBRA fittings are marked with a red *Z* inside a black *D.* These modified fittings are secured during condition ZEBRA and darken-ship conditions. You must have proper authorization to open fittings with this classification when the ship is at either condition ZEBRA or darken ship. You will find this classification on the following closures:

- Doors to the weather deck, excluding those classified XRAY or YOKE, that do not have a darken-ship switch or a darken-ship curtain

- Airports (portholes)

WILLIAM fittings are marked with a black *W.* These fittings are kept open during all material conditions. WILLIAM fittings are secured only as necessary to control damage or CBR contamination and to make repairs to the equipment served. You will find this classification on the following fittings:

- Vital sea suction valves that supply the main and auxiliary condensers, fire pumps, and spaces that are manned during conditions XRAY, YOKE, and ZEBRA

- Vital valves that if secured would impair the mobility and fire protection of the ship

CIRCLE WILLIAM fittings are marked with a black *W* inside a black circle. These fittings are normally kept open, as is the case with WILLIAM fittings. They must, however, be secured to prevent the spread of damage and as a defense measure when a CBR attack is imminent. You will find this classification on the following closures:

- Doors to the pilot house, flag bridge, and signal shelter

- Ventilation systems to main and auxiliary machinery spaces, generator spaces, and other systems and fittings serving spaces in continuous use

If access to a space is through a series of hatches and/or scuttles, all of the closures that provide that access must bear the same classification as that of the space. For example, a pump room is classified as CIRCLE YOKE. This means it is open during condition XRAY and closed during condition YOKE. All hatches, scuttles, and doors that provide access to the pump room must also be classified CIRCLE YOKE to allow routine access to the pump room.

When a fan room door must be kept open to supply air to a fan or to exhaust air from it, the door should have the same classification as that of the fan. For example, a fan room containing a YOKE fan has a YOKE door; a room containing YOKE and ZEBRA fans has a ZEBRA door. All other fan room doors are classified XRAY.

A classification has no bearing on the security of a space. A space classified ZEBRA may, for security reasons, be locked during condition YOKE if the space is unattended. However, the locking must be reported to the DCA or to the OOD.

When material conditions of readiness are being set, the ship's first concern is the requirement for watertight, airtight, firetight, and fumetight integrity. Living conditions and access to spaces are secondary requirements. During long periods at general quarters, however, condition ZEBRA may, with the commanding officer's permission, be relaxed to pass battle rations and to allow the crew to use the head facilities. The opening of certain weather-deck doors permits natural ventilation to replace the stuffiness at some general quarters stat ions with fresh air.

Condition YOKE may also be modified in a similar manner when appropriate.

All ships are required to prepare and maintain a DC closure log (fig. 7-6).

Strict discipline must be maintained in the modification of a material condition of readiness. As mentioned before, you must obtain permission before you change a material condition setting in any way. Obtain the permission from the DCA or the OOD. During general quarters, repair party officers control the opening and closing of all fittings in the assigned areas. The repair party officers must keep DCC informed so that the ship's DC closure log can be kept up-to-date.

The closure log is maintained at all times, whether the ship is in port or under way. The closure log is used to show the following:

- Where the existing material condition of readiness has been modified

- The fitting's type, number, and classification

D C CLOSURE LOG
IN ACCORDANCE WITH OPNAVINST 3120.32

PERSON REQUESTING PERMISSION			IDENTIFICATION OF FITTING			OPENED		CLOSED			PERSON GRANTING PERMISSION	
NAME	RATE	DIV.	TYPE	CLASSIFI-CATION	NUMBER	DATE	TIME	DATE	TIME	EST. TIME OPEN	NAME	RANK OR RATE

Figure 7-6.-DC closure log.

- The name, rate, and division of the person who requested permission to open or close the fitting

- The date and time the fitting was opened or closed

- The date and time the fitting was returned to its specified material condition of readiness setting

- The name and rate/rank of the person granting permission

The commanding officer prescribes the limit to which the modification of a material condition of readiness may be approved by the DCA or OOD. Reporting the temporary closing of a fitting that should be open is just as important as reporting the opening of one that should be closed. For example, a ZEBRA watertight hatch that is secured at the time general quarters is sounded could seriously interfere with personnel trying to get to their battle stations.

The damage control closure log is normally kept on the quarterdeck in port, on the bridge at sea, and in DCC during general quarters. However, if your ship has a 24-hour watch in DCC at all times, the closure log will be kept there no matter where the ship is. The closure log is updated when there is a change in the status of a classified closure or fitting. If a classified closure is to remain open for several days, it must be logged open each day. The maximum time a closure or fitting may be logged open is 24 hours.

DIVISION DAMAGE CONTROL AND FIRE-FIGHTING EQUIPMENT

Numerous pieces of damage control and fire-fighting equipment are located in division spaces. They include such items as battle lanterns, dog wrenches, spanners, fire stations, and portable fire extinguishers. These items must be inspected and tested based on the equipment's maintenance requirement cards (MRCs). That includes ensuring all damage control equipment, piping, cables, and compartments are properly stenciled and identified.

INSPECTIONS OF DIVISION SPACES

DCPOs are responsible for conducting daily inspections of division spaces for the elimination of fire hazards, They also assist division officers in the inspection of division spaces for fire hazards and good housekeeping practices. Special emphasis should be placed on safety precautions, and operating instructions must be placed in required spaces.

SUMMARY

In this chapter you were introduced to MOPP and risk management and implementation of MOPP. New weapons are being developed and new protective and defensive measures are being established all the time. Therefore, staying up-to-date in the area of CBR defense is important.

The responsibilities of the duty DCPO are both numerous and important. Training your division personnel in damage control, fire fighting, egress and CBR defense could save their lives during a crisis situation. You must ensure that the material condition of your spaces are properly set and that fire-fighting and damage control equipment are in excellent condition. These precautions will provide your division with a fighting chance in the event of a fire or CBR attack.

REFERENCES

Damage Controlman 3 & 2, NAVEDTRA 10572, Naval Education and Training Program Management Support Activity, Pensacola, Fla., 1986.

Surface Ship Survivability, NWP 62-1, Office of the Chief of Naval Operations, Washington, D.C. 1989.

CHAPTER 8

SECURITY REQUIREMENTS

LEARNING OBJECTIVES

Upon completion of this chapter, you should be able to do the following:

1. List the different types of terrorism methods.

2. List the six categories of terrorist threats.

3. Explain various types of safeguards against terrorism.

Terrorism is the use of tactics by small groups to create overwhelming fear, panic, or terror through the use of deadly force. Acts of terrorism are usually directed against specific or general targets in the general population and government. Generally, the goal of terroristic acts is to disrupt or destroy the bonds of trust and credibility between a government and its people. Sometimes the goals are to discredit or damage a group to achieve specific political aims.

Terrorism throughout the world is increasing each year. In 1980, the Federal Bureau of Investigation (FBI) classified terrorism as its third-ranking domestic bureau priority. Acts of terrorism directed at naval activities or installations have the potential to destroy critical facilities and to injure or kill key personnel. They can also impair or delay mission accomplishment or cause incalculable damage politically through adverse publicity and public perceptions.

The complexity of terrorism requires that you, as a second class petty officer, have a good understanding of terrorism. You must have the knowledge needed to protect yourself and to train your subordinates to protect themselves. This chapter will provide you with information on terrorism methods, threat conditions, and safeguards against terrorism.

TERRORISM METHODS

The record of terrorist activities directed at military activities in the past shows that terrorists might use the following methods:

1. **Bombing** —Bombing may be used to destroy equipment, cause fires, create casualties, and so forth. The bombs used may be of any degree of sophistication. Depending on bomb size and placement, the impact may range from a minor to a major crisis.

2. **Ambush** —Rapid ambush attacks are used by individuals or small groups to assassinate individuals, eliminate groups of naval personnel, or destroy or steal assets in remote locations.

3. **Armed Attack** —An armed attack, usually with one or more diversionary actions, is carried out by small groups against key personnel or critical assets on an installation. The objective is to disrupt the mission of the installation and to create adverse publicity. Normally, terrorists involved in this type of action take hostages only if their attackers try to prevent their escape.

4. **Hostage Seizures** —A terrorist group may seize a specific hostage or a number of hostages for ransom, media attention, coercion, or political bargaining purposes. The group may make an armed attack to seize critical assets (ships, submarines, aircraft, and so forth) manned with personnel. The terrorist group can then use the assets and personnel as leverage to bargain for publicity and political advantage.

5. **Sabotage** —Terrorist groups may use various sabotage methods to harass and demoralize personnel. Some of those methods include fires, explosive devices, mechanical devices, chemicals, psychological abuse, and unauthorized entries into computers.

TERRORIST THREAT TYPES

Terrorist threats are divided into the following six categories:

1. **Threat Type One.** One or more outsiders (nongovernment persons) who seek access to a base or restricted area or asset to perform an unauthorized act such as vandalism or theft

2. **Threat Type Two.** An individual or group, authorized access to a base or restricted area or asset, seeking to steal or remove an item of government property from the installation

3. **Threat Type Three.** A disgruntled employee seeking to perform an act of sabotage, data tampering, or wrongful destruction or otherwise destroy government property or impair mission accomplishment

4. **Threat Type Four.** An individual (outsider) or group seeking to make a political statement (antimilitary, antidefense, antinuclear, and so forth) by causing adverse publicity, usually nonviolent in nature, to embarrass the military service

5. **Threat Type Five.** An individual (outsider) terrorist, in philosophy and action, seeking access to a naval installation to commit an act of violence (sabotage, bombing, hostage abduction, murder, arson, or theft of sensitive matter including nuclear weapons, conventional arms, ammunition and explosives, and so forth)

6. **Threat Type Six.** A 2-to-12 person group of well-armed, well-trained dedicated terrorists seeking access to a naval installation to commit an act of violence (sabotage, bombing, hostage abduction, murder, arson, or theft of sensitive matter including nuclear weapons, conventional arms, ammunition, explosives, and so forth)

Commanding officers must have contingency plans to counter the six threat types. The following table summarizes the more sensitive areas and the threat types that must be included in a commanding officer's contingency plan.

AREAS	Under Normal Conditions Commanding Officers Must Have Ability To Counter Treat Types					
Bases	1	2	3	4	5	6
Shipyards	1	2	3	4	5	
Aviation (as an example, flight lines)	1	2	3	4	5	
Waterfronts	1	2	3	4	5	
Nuclear Weapons Storage	1	2	3	4	5	6
Communications Facilities	1	2	3	4	5	
Intelligence Collection/Sensitive Communication Sites	1	2	3	4	5	
Conventional Arms, Ammunition and Explosives Storage Sites	1	2	3	4	5	6
Bulk Petroleum, Oil, and Lubricants (POL) (ground fuels, POL war reserve, etc.)	1	2	3	4	5	
Nuclear Weapons	1	2	3	4	5	6
Conventional Munitions	1	2	3	4	5	
Small Arms (Armories)	1	2	3	4	5	
Supply items	1	2	3	4	5	
Funds and Negotiable instruments	1	2	3			
Drugs, Drug Abuse Items	1	2	3	4		
Precious Metals		2	3			
Classified Information/ Material	1	2	3	4		
Automatic Data Processing (ADP) Facilities	1	2	3	4		
Aviation	1	2	3	4	5	

THREAT CONDITIONS

Indications and warnings of terrorist activity against naval installations and personnel will

normally be received from U.S. security authorities. They may also be received through the security agencies of the host countries concerned. Information may also come from local police forces or be received directly by a U.S. command or agency as a threat or warning from a terrorist organization.

The declaration of a THREATCON, including the security measures it requires, may be decreed by a U.S. command or agency or by a local commanding officer or head of an agency following receipt of intelligence through official sources or following an anonymous threat message. The Alpha, Bravo, Charlie, and Delta THREATCONs are described in the following paragraphs:

● THREATCON ALPHA—This condition is a general warning of possible terrorist activity, the nature and extent of which are unpredictable. The circumstances do not justify the declaration of a THREATCON BRAVO.

● THREATCON BRAVO—This condition is declared when an increased and more predictable threat of terrorist activity exists even though no particular target is identified. The security measures required during this condition may have to be maintained for weeks without causing undue hardship, without affecting operational capability, and without aggravating relations with local authorities.

● THREATCON CHARLIE—This condition is declared when an incident occurs or when intelligence is received indicating that some form of terrorist action against an installation or personnel is imminent. The security measures required during this condition for more than short periods will probably create hardship and will affect the peacetime activities of the installation and its personnel.

● THREATCON DELTA—A terrorist attack has occurred or intelligence has been received that terrorist action against a specific location is likely. Normally, this THREATCON is declared as a localized warning.

Each naval installation or command provides instructions on the measures its personnel should take during each of the four THREATCONs.

THREAT ASSESSMENTS

Based on available information, your command must determine if the threat is going to be a short-, medium-, or long-term threat. Although the Naval Investigative Service (NIS) can supply those threat evaluations on request, they must be carefully analyzed to determine the required THREATCON level.

SAFEGUARDS AGAINST TERRORISM

Department of Defense (DOD) policy is to protect to the best of its ability DOD facilities, equipment, and personnel and their dependents from terrorist acts. Particular attention is given to informing and protecting high-risk targets. High-risk targets include the following:

● Key DOD personnel

● U.S. Military Assistance Advisory Groups (MAAGs) and other military missions

● Technical assistance field teams

● Training and advisory teams

● Defense attaché offices

● Nuclear weapons sites

● Recruiting offices

● Small communications, liaison, and administrative activities considered to be especially vulnerable to terrorist acts

Absolute protection against terrorist activities is impossible. Therefore, protective plans and procedures are based upon a balance between the degree of protection desired, mission requirements, and available manpower and fiscal resources.

The most cost-effective, broadly based method of organizing an antiterrorism effort is to integrate it as much as possible with crisis management procedures. Those procedures should set up ways to prevent, control, or contain natural and man-made crises. Essentially, specific antiterrorism

planning involves the use of two defensive measures:

1. Intelligence—Intelligence consists of information obtained through threat assessment and continuing contacts with the NIS or command intelligence personnel. An organization must have access to intelligence to prepare for or forestall terrorist incidents.

2. Target Hardening and Procedural Safeguards—Target Hardening and Procedural Safeguards consist of security measures established to protect critical and sensitive activity assets against terrorist threats. An organization's safeguards must present an increased cost and risk to professional terrorists.

Additionally, each of us plays active roles in safeguarding both property and personnel against terrorism. We should constantly be on guard against suspicious personnel, vehicles, and materials around our work facilities. We should report any suspicious personnel, vehicles, or materials to the security department.

SUMMARY

Acts of terrorism directed at naval personnel, activities, or installations have the potential to destroy critical facilities and to injure or kill personnel. They can also impair or delay command missions and cause incalculable damage.

This chapter provided information on terrorist methods, terrorist threat types, conditions, and assessments. By understanding those elements of terrorism, you are better prepared to assist in safeguarding yourself, other personnel, installations, and equipment against terrorist activity.

Be on the lookout for suspicious personnel, vehicles, and materials on and around your work facility. Call the Security Office if anything appears unusual or suspicious.

REFERENCES

Department of the Navy Physical Security and Loss Prevention, OPNAVINST 5530.14B, Chief of Naval Operations, Washington, D.C., 1988.

Protection of DOD Personnel and Resources Against Terrorist Acts, SECNAVINST 3850.1A, Secretary of the Navy, Washington, D.C., 1982.

INDEX

Assignment Questions

ASSIGNMENT 1

1-1. When first established, the Navy operated under what governmental department?

    1. War
    2. Defense
    3. Interior
    4. Congressional

1-2. What document authorized Congress to establish the Navy?

    1. Navy Regulations
    2. The Articles of War
    3. The United States Constitution
    4. The Declaration of Independence

1-3. The Commander in Chief exercises ultimate authority over the Navy, Army, Air Force, Marines, and Coast Quard. What official has always been the commander in chief?

    1. The Secretary of War
    2. The Secretary of the Navy
    3. The Fleet Admiral of the Navy
    4. The President of the United States

1-4. During the 1800s, what civilian official exercised direct control of the Navy?

    1. The Secretary of War
    2. The Secretary of the Navy
    3. The Secretary of State
    4. The President of the United States

1-5. What military official exercises command of the Shore Establishment?

    1. Commander, Naval Military Personnel Command
    2. The Chief of Naval Education and Training
    3. The Chief of Naval Operations
    4. The Chief of Naval Personnel

1-6. The operating forces are made up of which of the following types of commands?

    1. Unified
    2. Specified
    3. Both 1 and 2 above
    4. Overseas

1-7. Under the President, which of the following officials exercises both operational and administrative authority over the Navy's combatant forces?

    1. The Chief of Naval Operations
    2. The Chief of Naval Personnel
    3. The Secretary of the Navy
    4. The Secretary of Defense

1-8. The Chief of Naval Operations has direct operational authority over a Navy operating force which is assigned to a unified command.

    1. True
    2. False

1-9. The power to declare an emergency and to call out the military Reserves belongs to what official(s)?

    1. The Congress
    2. The Secretary of the Navy
    3. The Chief of Naval Operations
    4. The President of the United States

1-10. The President has the power to order the armed forces into action before Congress declares war.

    1. True
    2. False

1-11. What President ordered naval air action against North Vietnamese gun boats?

1. F. D. Roosevelt
2. L. B. Johnson
3. J. F. Kennedy
4. R. M. Nixon

1-12. What President ordered a naval quarantine of Cuba?

1. F. D. Roosevelt
2. L. B. Johnston
3. J. F. Kennedy
4. J. E. Carter

1-13. What President ordered foreign submarines in U.S. waters to be sunk on sight?

1. F. D. Roosevelt
2. J. F. Kennedy
3. R. M. Nixon
4. J. E. Carter

1-14. What President sent troops into Saudi Arabia to prevent Iraq from extending aggression into Saudi Arabia?

1. F. D. Roosevelt
2. J. F. Kennedy
3. J. E. Carter
4. G. F. Bush

1-15. In 1949, the Army, Navy, and Air Force became part of the Department of Defense under what authorization?

1. Executive Order 42
2. An Amendment to the National Security Act
3. Presidential proclamation
4. A Department of Defense order

1-16. What official is at the top of the military chain of command withiun the Department of Defense?

1. The President
2. The Secretary of Defense
3. The Joint Chiefs of Staff
4. The Chief of Naval Operations

1-17. Which of the following U.S. government agencies is the largest?

1. The State Department
2. The Department of Defense
3. The Department of the Navy
4. The Internal Revenue Service

1-18. Which of the following Department of Defense officials is a member of the President's cabinet

1. The Secretary of Defense
2. The Secretary of the Army
3. The Secretary of the Navy
4. The Secretary of the Air Force

1-19. What official exercises direct control over the Department of Defense?

1. The President
2. The Vice President
3. The Secretary of Defense
4. The Chairman of the Joint Chiefs of Staff

1-20. The chairman of the Joint Chiefs of Staff is appointed by what official?

1. The President
2. The Vice President
3. The Secretary of the Navy
4. The Secretary of Defense

1-21. Which of the following armed forces is NOT represented on the JCS?

1. The Army
2. The Air Force
3. The Coast Guard
4. The Marine Corps

1-22. The Joint Chiefs of Staff makes up the immediate military staff of which of the following officials?

1. The Secretary of the Navy
2. The Secretary of the Army
3. The Secretary of Defense
4. The Secretary of the Air Force

1-23. Who is/are the principal military advisor(s) to the National Security Council?

  1. The Chief of Naval Operations
  2. The Commandant, U.S. Marine Corps
  3. The Chiefs of Staff, U.S. Army and Air Force
  4. All of the above

1-24. Of the following U.S. military organizations, which one is made part of the Navy during time of war?

  1. The Army Corps of Engineers
  2. The Air Force Reconnaissance Command
  3. The Coast Guard
  4. The Merchant Fleet

1-25. The Department of the Navy is headed by what civilian official?

  1. The Secretary of the Defense
  2. The Secretary of the Navy
  3. The Undersecretary of the Navy
  4. The Chief of Naval Operation

1-26. Which of the following offices is/are part of the Navy Department?

  1. The operating forces of the Navy
  2. The shore establishment of the Navy
  3. Both 1 and 2 above
  4. Office of the Judge Advocate General

1-27. Congressional proceedings that affect the Department of the Navy are monitored by which of the following offices?

  1. The Office of Legislative Affairs
  2. The Office of Information
  3. The Office of the General Counsel of the Navy
  4. The Office of the Judge Advocate General

1-28. In matters of financial management, which of the following persons exercises overall control for the Navy?

  1. The Auditor General
  2. The Judge Advocate General
  3. The Comptroller of the Navy
  4. The Deputy Undersecretary of the Navy

1-29. Printing and publications are the responsibility of which of the following assistant secretaries of the Navy?

  1. Financial Management
  2. Shipbuilding and Logistics
  3. Manpower and Reserve Affairs
  4. Research, Engineering, and Systems

1-30. What officer normally has precedence over all other officers in the Navy?

  1. The Chief of Naval Personnel
  2. The Chief of Naval Operations
  3. The Commandant of the Marine Corps
  4. The Chairman, Joint Chiefs of Staff

1-31. If a Navy officer is the chairman of the Joint Chiefs of Staff, what officer has precedence in the Navy?

  1. The Chief of Naval Personnel
  2. The Chief of Naval Operations
  3. The Chairman, Joint Chiefs of Staff
  4. The Commandant of the Marine Corps

1-32. The Chief of Naval Operations, by virtue of the position, is also a member of the

  1. President's cabinet
  2. Joint Chiefs of Staff
  3. National Security Council
  4. Senate Armed Services Committee

1-33. The Chief of Naval Operations has which of the following responsibilities?

1. Directing the administration of the Naval Reserves
2. Determining personnel and material requirements of the Navy
3. Formulating the Navy's strategic plans and policies
4. All of the above

1-34. The office of the Master Chief Petty Officer of the Navy (MCPON) was created in 1967 in response to which of the following events?

1. A SECNAV task force on retention
2. A request by a committee of CPOs
3. A request by the Fleet Reserve Association
4. A recommendation by a committee of senior officers

1-35. Each MCPON normally serves a tour length of what total number of years?

1. One
2. Two
3. Three
4. Four

1-36. The MCPON has which of the following duties?

1. Serves as primary enlisted advisor to the Chief of Naval Operations
2. Advises the Chief of Naval Personnel on all active and retired personnel and their dependents
3. Serves in an advisory capacity on various boards pertaining to enlisted personnel
4. All of the above

1-37. On duties external to the Department of the Navy (DON), the Commandant of the Marine Corps reports to which of the following persons?

1. The Chief of Naval Operations
2. The Secretary of the Defense
3. The Secretary of the Navy
4. Both 2 and 3 above

1-38. Which of the following commanders reports directly to the CNO?

1. Commander, Naval Telecommunications Command
2. Commander, Naval Oceanography Command
3. Commander, Naval Intelligence Command
4. Each of the above

1-39. Which of the following commands is the central authority for ensuring that airborne and shipboard electronics meet Navy standards?

1. NAVAIR
2. SPAWAR
3. NAVSEA
4. NAVSUP

1-40. Which of the following commands is the central authority for ship safety, explosives, and explosive ordnance disposal?

1. NAVSEA
2. SPAWAR
3. NAVSUP
4. NAVFACENGCOM

1-41. Which of the following commands is responsible for directing the Department of the Navy's (DON) security program and fulfilling DON counterintelligence responsibilities?

1. The Naval Intelligence Command
2. The Naval Security Group Command
3. The Naval Security and Investigative Command
4. The Naval Telecommunications Command

1-42. Which of the following officials would NOT be part of a unit's operational chain of command?

1. Type commander
2. Task group commander
3. Joint Chief of Staff
4. Secretary of the Navy

1-43. Which of the following naval activities can be placed under the command of operating forces?

1. Supply depots
2. Ship repair facilities
3. Naval air facilities
4. Each of the above

1-44. A leading petty officer (LPO) is expected to fulfill which of the following roles?

1. Technical expert
2. Leader
3. Mentor
4. All of the above

1-45. Concrete learners have which of the following characteristics?

1. They prefer to treat each situation as a new case
2. They tend to be withdrawn
3. They like to combine theory with application
4. They use feedback from others

1-46. Active learners have which of the following qualities?

1. They prefer to be objective learners
2. They like to combine theory with application
3. They like systematic approaches or theories
4. They prefer to treat each situation as a new case

1-47. An effective leader uses time efficiently.

1. True
2. False

1-48. Which of the following personnel is/are responsible for carrying out equal opportunity?

1. The commanding officer
2. The division officer
3. The leading petty officer
4. All of the above

1-49. Supervision is the ability of a leader to accomplish which of the following objectives?

1. Get the job done
2. Oversee the work process
3. Both 1 and 2 above
4. Develop close friendships

1-50. Through extensive research, the U.S. Navy identified a total of how many leadership skills of a superior performers?

1. 10
2. 12
3. 14
4. 16

1-51. Which of the following is NOT an effective time management practice?

1. Set goals
2. Start with the most important goals
3. Make a decision about a piece of paper the second time you read it
4. Make a daily "to do" list

1-52. Delegating authority to your people is important because it will encourage your subordinates to seek responsibility for managing tasks.

1. True
2. False

1-53. When you appoint someone in a work group to be in charge of an assigned task, you are exercising which of the following leadership competencies (skills)?

1. Delegating authority
2. Rewarding subordinates
3. Planning and organizing
4. Demonstrating self-control

1-54. Which of the following actions should you take before you reprimand a person?

1. Identify the facts
2. Always counsel the person in private
3. Both 1 and 2 above
4. Always give the person a warning in public

1-55. After reprimanding a person, you have not noticed any signs of improvement. What should you do next?

1. Berate the person
2. Treat the person as if nothing has happened
3. Refer the problem to the LPO or division officer
4. Display your anger

1-56. Leadership is the ability to direct and motivate people on a person-to-person basis toward mission accomplishment.

1. True
2. False

1-57. Which of the following leadership actions demonstrate(s) self-control?

1. Controlling anger
2. Remaining calm in potentially explosive situations
3. Both 1 and 2 above
4. Never getting angry

1-58. A petty officer should use which of the following techniques when trying to influence his or her subordinates?

1. Persuade or sell ideas
2. Make others feel weak
3. Do not share information
4. Do not explain why a job must be done

1-59. An effective leader transfers knowledge and skill to subordinates in which of the following ways?

1. By setting an example of how to do a job
2. By providing information and encouragement
3. By making trainlng opportunities available
4. Each of the above

1-60. Which of the following traits is the key to building an effective team?

1. Flattery
2. Cooperation
3. Personal example
4. Personal ambition

1-61. A leader's realistic expectations are those doubts and concerns about the ability of others to perform.

1. True
2. False

1-62. Coercer style leaders are ineffective in which of the following situations?

1. When a crisis occurs
2. When subordinates must solve problems, take initiative, or innovate
3. When a situation requires a leader to issue directions based on information or a perspective subordinates have no need to know
4. When emergencies occur, requiring a quick response

1-63. Leaders who have an authoritarian leadership style expect to lead and make their own decisions.

1. True
2. False

1-64. Affiliator style leaders have which of the following traits?

1. They develop only short-range goals and plans
2. They motivate primarily by threats
3. They do not develop subordinates' skills
4. They give subordinates specific negative feedback of a personal nature

1-65. If you are effective in advising and counseling subordinate, you will achieve which of the following results?

1. Solve the problems more quickly by dealing with them within the work group
2. Increase morale by building trust
3. Both 1 and 2 above
4. Increase the pressure on superiors by not resolving situations at your own level

1-66. What type of counseling session should you use when an individual is seeking options or ideas about career paths?

1. Personal
2. Career
3. Performance
4. Disciplinary

1-67. What type of counseling session should you use when a person has difficulty coping with situations either on or off the job?

1. Personal
2. Career
3. Performance
4. Disciplinary

1-68. What type of counseling session should you use when an individual is not performing at a level consistent with unit or command standards?

1. Personal
2. Career
3. Performance
4. Disciplinary

1-69. What type of counseling session should you use when an individual has violated a specific rule or regulation?

1. Personal
2. Career
3. Performance
4. Disciplinary

ASSIGNMENT 2

Textbook Assignment: "Programs and Policies," chapter 3, pages 3-1, through 3-4 and "Professional Development," chapter 4, pages 4-1 through 4-17.

2-1. The pursuit of an environment free from discrimination is an element of leadership.

1. True
2. False

2-2. The Command Managed Equal Opportunity (CMEO) program directs the command to take which of the following actions?

1. Create and maintain a positive equal opportunity climate within the command
2. Identify and resolve equal opportunity/sexual harassment problems and concerns
3. Ensure that merit, ability, performance, and potential are the only factors that affect individual promotion, training, duty assignments, and any other action
4. All of the above

2-3. A command with 250 military personnel must have at least how many command training team (CTT) members?

1. Five
2. Two
3. Three
4. Four

2-4. Which of the following statements concerning Navy Rights and Responsibilities (NR&R) workshops is NOT correct?

1. All personnel must attend an NR&R workshop within 90 days of reporting to a new permanent duty station
2. Commands must conduct NR&R training frequently enough to keep the class size below 20 people
3. Lesson topics for NR&R workshops are locally prepared
4. Commands hold an annual all-hands NRRR workshop

2-5. Which of the following factors is/are used when gathering command demographic information?

1. Age
2. Gender
3. Race
4. All of the above

2-6. The Navy's enlisted performance evaluation system is designed to fairly and equitably evaluate an individual's worth to the Navy. For which of the following purposes is the performance evaluation used?

1. To determine an individual's eligibility for reenlistment or honorable discharge
2. To determine an individual's qualifications for the Navy's special duty programs
3. To select personnel for advancement
4. Each of the above

2-7. Performance evaluations are categorized as Periodic, Transfer, and Other. Which of the following would NOT normally be an occasion for an Other type of report?

1. Interdepartmental transfer
2. Bad-conduct discharge
3. Retirement
4. Advancement

2-8. Guidelines for preparing personnel evaluations are found in which of the following publications?

1. Standard Organization and Regulations of the U.S. Navy
2. Bibliography for Advancement Study
3. NAVMILPERSCOMINST 1616.1
4. United States Navy Regulations

2-9. Personnel in paygrades E-6 and below do NOT require an evaluation mark in which of the following areas?

1. Leadership
2. Management
3. Self-expression
4. Personal traits

2-10. In evaluating personnel, which of the following factors should you consider?

1. Each paygrade has equally high standards of performance
2. Individuals should be compared with all others within a work center
3. Individuals should be compared with all others in the same command
4. When possible, personnel in each paygrade should be compared only with others in the same rate and rating

2-11. Which of the following guidelines should you follow when assigning evaluation marks?

1. Opinions should not be formed on the basis of only one or two isolated observations of performance
2. All traits for an individual should be assigned the same mark
3. The opinions of others should never be used in evaluating an individual
4. Personal relationships should be considered

2-12. In the Navy's enlisted performance evaluation system, what minimum numerical values are assigned to (a) a satisfactory performer and (b) one who performs above expectation?

1. (a) 3.0 (b) 3.4
2. (a) 3.0 (b) 3.8
3. (a) 2.8 (b) 3.8
4. (a) 2.8 (b) 3.4

2-13. A person's ability to perform tasks without being told how or when to do them is measured by what enlisted performance evaluation trait?

1. Initiative
2. Reliability
3. Military bearing
4. Personal behavior

2-14. A person's success in inspiring subordinates and achieving goals is measured by what enlisted performance evaluation trait?

1. Personal behavior
2. Counseling
3. Directing
4. Advising

2-15. When evaluating performance, you are permitted to exercise subjective judgement in which of the following areas?

1. Counseling
2. Initiative
3. Overall evaluation
4. Military knowledge/performance

2-16. When you maintain personnel performance records on individuals, you must take certain actions to ensure compliance with the Federal Privacy Act of 1974 and the Freedom of Information Act. These actions include the responsibility to inform individuals that they have which of the following rights?

1. The right to examine and make copies of their record
2. The right to discuss differences they have with entries
3. The right to request changes by higher authority of unresolved differences
4. Each of the above

2-17. The Petty Officer Quality Control Review Board reviews the performance records of personnel in which of the following paygrades?

1. E-4 through E-6
2. E-4 through E-7
3. E-4 through E-7
4. E-5 through E-9

2-18. If the Petty Officer Quality Control Review Board determines that the performance of the petty officer is below standard, which of the following actions could it take?

1. Process the petty officer for administrative separation
2. Reduce the petty officer to the next inferior paygrade
3. Advise the petty officer that it would be in his or her personal benefit to request either a transfer to the Fleet Reserve or the U.S. Navy retired list or Naval Reserve retired list
4. Each of the above

2-19. After enlisting in the Navy, who is primarily responsible for insuring that you better yourself, move ahead, grow more knowledgeable, and become better qualified?

1. You
2. Your division leading petty officer
3. Your division chief petty officer
4. Your division officer

2-20. People often choose which of the following reasons for making the Navy a career?

1. Travel
2. Retirement
3. Job security
4. Each of the above

2-21. You can find incentive program eligibility requirements in which of the following publications?

1. Standard Organization and Regulations of the U.S. Navy
2. Enlisted Transfer Manual
3. Retention Team Manual
4. Both 2 and 3

2-22. The Selective Reenlistment Bonus (SRB) program is designed to achieve which of the following goals?

1. To provide a reenlistment incentive for all first-time reenlistees
2. To reenlist sailors in ratings that are undermanned
3. To encourage people to change their rating to a "sea-going" rating
4. Each of the above

2-23. Which of the following incentive programs may be able to help you change your rating?

1. Lateral Conversion
2. Selective Training and Reenlistment
3. Guaranteed Assignment Retention Detailing
4. Each of the above

2-24. Which of the following programs is designed to teach basic skills in English, reading, mathematics, and writing?

1. Navy Campus Certificate/Degree Program
2. Basic Skills Program
3. Program for Afloat College Education
4. College Level Examination Program

2-25. To be considered for instructor duty, you should exhibit which of the following traits?

1. Maturity
2. Loyalty to the Navy
3. Good leadership ability
4. All of the above

2-26. Which of the following locations is NOT considered overseas duty?

1. Hawaii
2. Alaska
3. New Mexico
4. Puerto Rico

2-27. Special warfare combat swimmers would most likely be found serving in which of the following units?

1. Fleet diver
2. SEAL
3. EOD
4. Submarine

2-28. The purpose of the Navy's Tuition Assistance (TA) Program is to provide financial assistance to eligible personnel who attend educational institutions on a voluntary, off-duty basis.

1. True
2. False

2-29. The policy of the Department of the Navy is "to promote habits of thrift and encourage... conduct of financial affairs in such a manner as to reflect credit upon the naval service."

1. True
2. False

2-30. When preparing a budget you should consider which of the following items first?

1. Food
2. Clothing
3. Savings
4. Housing

2-31. You may encounter which of the following disadvantages when buying on credit?

1. Overbuying
2. Paying higher credit prices as compared to cash prices
3. Paying interest charges
4. All of the above

2-32. If you receive a verification request for a Navy person, you are NOT permitted to provide which of the following information?

1. The person's membership in the Navy
2. The person's station address
3. The statement of the person's basic pay
4. The member's social security number

2-33. The provisions for discharge because of nonpayment of legal debts can be found in which of the following manuals?

1. Naval Military Personnel Manual
2. U.S. Navy Regulations
3. Enlisted Transfer Manual
4. Retention Team Manual

2-34. The Navy expects its personnel to pay their debts in a proper and timely manner.

1. True
2. False

2-35. In matters pertaining to Indebtedness, you are NOT authorized to perform which of the following functions?

1. Arbitrate claims about the private financial debts of your personnel
2. Act as an agent or collector for a creditor
3. Both 1 and 2 above
4. Encourage your people to conduct their financial affairs in a way that reflects credit upon themselves and the Navy

2-36. Improper use of credit can create a financial nightmare that can adversely affect your personal life in which of the following areas?

1. Your job
2. Your family life
3. Your mental and physical health
4. All of the above

2-37. As suggested by the U.S. Department of Labor, approximately what percentage of take-home pay should you budget for food?

1. 5%
2. 11%
3. 23%
4. 25%

2-38. As suggested by the U.S. Department of Labor, approximately what percentage of take home pay should you budget for housing?

1. 5%
2. 10%
3. 25%
4. 50%

2-39. The total amount of salary before any deductions is known by which of the following terms?

1. Gross income
2. Deductions
3. Flexible expenses
4. Allotments

2-40. The amount of money taken from pay for income tax, social security, and other reasons is known by which of the following terms?

1. Gross income
2. Fixed expenses
3. Deductions
4. Net income

2-41. The total amount of money paid to a member after all deductions and allotments are paid, often called take-home pay, is known by which of the following terms?

1. Gross income
2. Fixed expenses
3. Flexible expenses
4. Net Income

2-42. Those sums of money deducted from gross income to pay debts such as insurance premiums, debts due the United States, and family support are known by which of the following terms?

1. Net income
2. Allotments
3. Gross income
4. Deductions

2-43. Expenses that are the same each month are known by which of the following terms?

1. Gross income
2. Fixed expenses
3. Flexible expenses
4. Net income

2-44. Expenses that change from month to month, sometimes called variable expenses, are known by which of the following terms?

1. Flexible expenses
2. Net Income
3. Allotments
4. Gross Income

2-45. The services provided by various Family Service Centers (FSCs) may vary as a result of which of the following conditions?

1. Command and community makeup
2. Needs of personnel
3. Both 1 and 2 above
4. Lack of participation by personnel

2-46. Navy Campus provides' which of the following services?

1. Coordinates off-duty education for Navy personnel
2. Provides Strategic Weapons System (SWS) training
3. Prepares enlisted performance evaluations
4. Prepares duty-preference cards

2-47. The Enlisted Education Advancement Program (EEAP) provides a means of obtaining which of the following types of degrees?

1. Associate
2. Baccalaureate
3. Masters
4. Doctorate

2-48. Navy personnel may use tuition assistance for which of the following purposes?

1. High school completion
2. Vocational and technical training
3. College courses leading toward undergraduate and graduate degrees
4. All of the above

2-49. In reference to the Instructor Services Program, which of the following statements is true?

1. The total cost to enroll in the program is $25,00
2. The program cannot be used to gain vocational skills
3. The students pay no tuition
4. The program provides a means for getting academic credit

2-50. Which of the following tests are offered free of charge to military personnel through the Defense Activity for Non-Traditional Educational Support (DANTES)?

1. DANTES Subject Standardized Tests
2. College admission tests
3. College Level Examination Program (CLEP) tests
4. All of the above

Textbook Assignment: "Training," chapter 5, pages 5-1 through 5-17 and "Personnel Safety and Damage Control," chapter 6, pages 6-1 through 6-25.

3-1. Which of the following features are required to create an effective unit training program?

1. Compatibility
2. Instruction and evaluation
3. Analysis and improvement
4. All the above

3-2. As a general rule, training in a work situation is most effective under which of the following conditions?

1. In large groups, early in the day
2. In large groups, late in the day
3. In small groups, early in the day
4. In small groups, late in the day

3-3. Which of the following is considered to be an effective training period and training cycle?

1. 15 to 30 minutes, twice a week
2. 45 to 60 minutes, three times a week
3. 1 to 3 hours, once a week
4. 1 to 3 hours, three times a week

3-4. Which of the following training methods is the least effective?

1. The "school of hard knocks" method
2. The apprenticeship method
3. The schoolhouse method
4. The in-house training method

3-5. Which of the following training methods is the most effective?

1. The "school of hard knocks" method
2. The apprenticeship method
3. The schoolhouse method
4. The in-house training method

3-6. Career or professional development training is designed to develop and improve the knowledge, skills, and abilities of your people to prepare them to fill positions of greater responsibility?

1. True
2. False

3-7. The group method of training is most effective in which of the following situations?

1. To provide hands on practice with complex equipment
2. To provide skill training on a specific subject
3. To provide practical experience with dangerous equipment
4. To provide information to a large number of people at the same time

3-8. A command that sends a person to a Navy school to learn a new skill gains which of the following advantages?

1. The person can later transfer the new skill to another command
2. The person can teach the new skill to other members of the crew
3. The person can be retained on board for a longer period of time
4. The person can take leave during the training period

3-9. The in-house training on your ship may be group, apprenticeship, schoolhouse, or any combination of the three. Which of the following requirements should these training methods meet?

1. The needs of the command
2. The desires of the students
3. The needs of the instructor
4. The promotion requirements of the student

3-10. Which of the following types of in-house training is a priority for a person who has just reported aboard?

1. Career
2. Refresher
3. On-the-job
4. Orientation

3-11. Which of the following methods is the most effective in getting the trainees to think constructively while interacting with the rest of the group?

1. The Lecture method
2. The Discussion method
3. The Demonstration method
4. The individual study method

3-12. Which of the following techniques should you follow when conducting a classroom discussion?

1. Build up a background for the discussion
2. Ask thought-provoking discussion questions
3. Both 1 and 2 above
4. Do not accept incorrect answers

3-13. The performance step is the step in which the trainees practice under supervision until they have attained the require proficiency.

1. True
2. False

3-14. Oral questions during a training session are used for which of the following purposes?

1. To stimulate trainee thought
2. To arouse interest
3. To focus the trainees's attention
4. All of the above

3-15. The Long-Range Training Plan is the basic instrument for informing personnel of training goals and operating schedules.

1. True
2. False

3-16. The Long-range training plan should include which of the following information?

1. The annual employment schedule
2. A list of all required examinations/inspections/ certifications/assist visits
3. Both 1 and 2 above
4. The Weekly Training Schedule

3-17. Which of the following training plans indicates what training is to be conducted on specific days and who the instructor will be?

1. The Yearly Training Plan
2. The Quarterly Training Plan
3. The Monthly Training Plan
4. The Weekly Training Plan

3-18 Training records must be kept to an absolute minimum and need only be maintained to show what training has been accomplished and what remains to be done.

1. True
2. False

3-19. Which of the following goals are part of the Navy safety programs?

1. Ensuring safe working conditions
2. Reducing material loss
3. Reducing injuries
4. Each of the above

3-20. Safety-minded supervisors are considered the key to successful mishap prevention programs for which of the following reasons?

1. They have routine contact with personnel and equipment
2. They know the work areas and hazards involved
3. They can take immediate action
4. Each of the above

3-21. What is the most common cause of mishaps in the Navy?

1. Apathy
2. Skylarking
3. Lack of knowledge or skill
4. Long working hours

3-22. Which of the following methods will you find to be the most effective when teaching safety habits?

1. Discussions
2. Training films
3. Hands-on practice
4. Classroom lectures

3-23. Which of the following publications contains pages that make good safety posters?

1. Fathom
2. All Hands
3. Navy Times
4. Navy Customer Service Manual

3-24. Which of the following points should be considered by personnel who conduct safety inspections?

1. They should keep an open mind at all times
2. They should know what to look for
3. They should use a checklist during inspections
4. All of the above

3-25. First-line supervisors should hold random informal inspections for hazards at least how often?

1. Daily
2. Weekly
3. Monthly
4. Quarterly

3-26. Which of the following personnel should always be present during a safety inspection?

1. The division officer
2. The department head
3. The personnel who work in the space
4. The master at arms

3-27. The basic guidance for Navy Occupational Safety and Health (NAVOSH) is contained in which of the following publications?

1. OPNAVINST P-5100
2. OPNAVINST 5100.23B
3. OPNAVINST 5100.19A
4. OPNAVINST 5102.1A

3-28. To accomplish the objectives of the Navy Hearing Conservation Program, which of the following actions should you take?

1. Survey work spaces
2. Require periodic hearing tests
3. Educate personnel in causes of hearing loss
4. All of the above

3-29. Which of the following is the most common work-related source of noise?

1. Gun or rocket firings
2. Marine engines
3. Aircraft launches
4. High-speed tools

3-30. Navy personnel should be encouraged to wear hearing protective devices while mowing their lawns at home.

1. True
2. False

3-31. Equipment or spaces should be labeled as hazardous if noise is produced at which of the following sound levels?

1. 80 dB
2. 110 dB
3. 150 dB
4. Both 2 and 3 above

3-32. A worker should wear double hearing protection when working around noise sources above what prescribed sound level?

1. 94 dB
2. 100 dB
3. 104 dB
4. 140 dB

3-33. When protective devices do not provide noise reduction to a level below 84 dB, which of the following actions should be taken?

1. Secure noisy equipment
2. Reduce exposure time
3. Remove personnel from the area
4. Reduce the number of personnel operating equipment

3-34. Supervisors and visitors who are in the vicinity of eye-hazardous operations are required to wear protective equipment,

1. True
2. False

3-35. In areas where personnel may be exposed to corrosive materials, which of the following items must be available?

1. Protective eyewear
2. Eyewash facilities
3. Warning signs
4. Each of the above

3-36. Personnel just passing through an eye hazard area do NOT need eye protection as long as they keep moving.

1. True
2. False

3-37. Which of the following contaminants is formed from condensation of vaporized solids?

1. Fumes
2. Dust
3. Smoke
4. Mist

3-38. Which of the following contaminants results from the incomplete combustion of coal, wood, and oil?

1. Fumes
2. Dust
3. Smoke
4. Mist

3-39. Fine liquid droplets suspended in air by condensation or atomization will cause which of the following contaminants?

1. Fumes
2. Dust
3. Smoke
4. Mist

3-40. Small solid particles created by the breaking up of larger particles by machine shop tools will cause which of the following contaminants?

1. Fumes
2. Dust
3. Smoke
4. Mist

3-41. Which of the following methods affords the best personnel protection from industrial respiratory hazards?
1. Exhaust ventilation systems
2. Airtight working spaces
3. Surgical masks
4. Respirators

3-42. When, if ever, would a surgical mask be considered as adequate for industrial respiratory protection?

1. During fueling operations
2. While using cleaning solvents
3. While spray painting
4. Never

3-43. An air-purifying type of respirator can be used in a space that has insufficient oxygen.

1. True
2. False

3-44. The OBA can be used for which of the following situations?

1. Painting a void
2. Sandblasting a void
3. Fighting a fire in a void
4. Each of the above

3-45. Respirator cartridges use which of the following means for identifying the type of contaminant against which they are useful?

1. Color codes
2. Raised letters
3. Fluorescent letters
4. Alphanumeric codes

3-46. Prolonged exposure of personnel to excessive heat and humidity while under a continued work load can result in which of the following conditions?

1. Heat stress
2. Heat stroke
3. Heat exhaustion
4. Each of the above

3-47. Voltages of 115 and below are very dangerous.

1. True
2. False

3-48. One of your workers reports that a typewriter is not working properly. Upon inspecting it, you notice it has a frayed plug. Which of the following actions should you take?

1. Wrap the plug with insulation tape and allow the person to continue typing
2. Have the person stop typing and call the electric shop supervisor
3. Put a rubber mat under the typist's chair and allow the person to continue typing
4. Wiggle the cord until the typewriter works and allow the person to continue typing

3-49. Navy personnel who are assigned work in construction or ship repair must obtain safety shoes at their own expense.

1. True
2. False

3-50. Hazardous material labels are required on which of the following items?

1. Materials with a flash point of 190°F
2. Materials that are unstable if heated
3. Corrosive materials that do not burn
4. Each of the above

3-51. Which of the following effects is known to be caused by overexposure to rf radiation?

1. Loss of reproductive ability
2. Loss of muscle tissue
3. An increase in body temperature
4. Each of the above

3-52. Safety limitations for exposure to rf radiation have been established by the Naval Medical Command. These limits are based on which of the following criteria?

1. Beam power density and exposure time
2. Antenna size and exposure time
3. Beam power density and proximity
4. Antenna size and proximity

3-53. While working near a radar antenna, you accidentally touch a guard rail that has a significantly large induced rf voltage. You could suffer which of the following effects?

1. Pain
2. Skin damage
3. Involuntary reflex action
4. Each of the above

3-54. What are the most important deterrents against rf burns?

1. Rubber gloves and shoe soles
2. rf hazard warning signs
3. Training and awareness
4. Equipment design modifications

3-55. Which of the following items can be used for protection from chemical warfare (CW) agents?

1. Masks
2. Clothing
3. Nerve agent antidotes
4. Each of the above

3-56. What is your personal first line of defense in chemical warfare?

1. Work clothing
2. A protective mask
3. Impregnated clothing
4. Protective gloves

3-57. A protective mask protects the wearer against which, if any, of the following gases?

1. Carbon monoxide
2. Carbon dioxide
3. Ammonia
4. None of the above

3-58. When entering an area that has a deficiency of oxygen, you must wear which of the following masks?

1. MCU-2/P
2. M17A1
3. OBA
4. ND MK V

3-59. The mechanical filter in the filtering system of protective masks clears the inhaled air of which of the following kinds of contaminants?

1. Solid particles only
2. Liquid particles only
3. Solid and liquid particles
4. Toxic vapors

3-60. The useful life of a mask's filter element depends on which of the following conditions?

1. Weight of the wearer
2. Work rate of the wearer
3. Breathing rate of the wearer
4. Each of the above

3-61. When the filter canister for the Mk V protective mask is left in its original hermetically sealed container, what is its shelf life?

1. 2 to 3 years
2. 4 to 6 years
3. 7 to 10 years
4. Indefinite

3-62. The size of the MCU-2/P protective mask issued to each person depends on which of the following factors?

1. Hat size
2. Face length
3. Thickness of hair
4. Distance from ear to ear

3-63. When you don or adjust the MCU-2/P mask, which of the following mask parts should NOT be held?

1. The canister
2. The voicemitter
3. The head harness
4. The outlet valve assembly

3-64. In an actual chemical threat situation, what should be the first step in donning the MCU-2/P mask?

1. Remove your glasses
2. Remove your hat
3. Stop breathing
4. Grab the mask

3-65. Since large droplets of CW agent may penetrate impregnated clothing, which of the following types of clothing should be worn topside as the outside garment over the impregnated clothing?

1. Wet-weather clothing
2. Asbestos clothing
3. Reflective clothing
4. Ordinary work clothing

3-66. What is the effective shelf life of the chemical-protective overgarment (a) before and (b) after it is removed from its protective envelope?

1. (a) 1 year ; (b) 30 days
2. (a) 5 years; (b) 14 days
3. (a) 10 years; (b) 30 days
4. (a) 10 years; (b) 14 days

3-67. The chemical-protective overgarment provides continuous protection within a chemically contaminated environment for what maximum number of hours?

1. 6 hours
2. 2 hours
3. 12 hours
4. 24 hours

3-68. The M258A1 decontamination kit is used for which of the following CBR exposures?

1. Biological and radiological contamination
2. Blood agents or radiation burns
3. Blister and nerve agents
4. Nerve gas and phosphorous burns

3-69. The purpose of the Navy's Electrical Safety Program is to provide guidance to assist in the identification of electrical hazards, and to prevent mishaps that could cause fatal injuries and extensive damage to shipboard equipment.

1. True
2. False

3-70. The electrical safety petty officer works with which of the following officers in the performance of his or her duties?

1. Operations officer
2. Quality control officer
3. Electrical safety officer
4. Division officer

3-71. Prior to being assigned as an electrical safety petty officer, you should meet which of the following qualifications?

1. Complete a basic electrical/electronics school or equivalent training
2. Be fully PQS qualified in Ships Maintenance and Material Management (3-M), watchstation 301, maintenance personnel
3. Be fully PQS qualified as a Division Safety Petty Officer/Electrical Safety Petty Officer
4. All the above

3-72. Electrical safety is the responsibility of all hands.

1. True
2. False

ASSIGNMENT 4

Textbook Assignment: "CBR DEFENSE/DAMAGE CONTROL," chapter 7, pages 7-1 through 7-20, and "Security Requirements", chapter 8, pages 8-1 through 8-4.

4-1. The mission oriented protective posture (MOPP) provides for measures against which of the following types of attacks?

1. Chemical
2. Biological
3. Radiological
4. Thermonuclear

4-2. There are a total of how many levels of MOPP?

1. One
2. Two
3. Three
4. Four

4-3. Under MOPP level-l, which of the following items will provide chemical protection?

1. Masks
2. Clothing
3. Atropine
4. All of the above

4-4. What condition of material readiness if set during MOPP level-l?

1. CIRCLE WILLIAM
2. YOKE
3. ZEBRA (modified)
4. ZEBRA

4-5. What condition of material readiness is set during MOPP level-2?

1. CIRCLE WILLIAM
2. YOKE
3. ZEBRA (modified)
4. ZEBRA

4-6. What condition of material readiness is set during MOPP level-3?

1. CIRCLE WILLIAM
2. YOKE
3. ZEBRA (modified)
4. ZEBRA

4-7. What condition of material readiness is set during MOPP level-4

1. CIRCLE WILLIAM
2. YOKE
3. ZEBRA (modified)
4. ZEBRA

4-8. Duty damage control petty officers (DCPOs) normally serve for a total of how many months?

1. 3 months
2. 6 months
3. 9 months
4. 12 months

4-9. In the absence of the DCPO, who performs his or her duties?

1. The DCA
2. The DCPO
3. The LPO
4. The WCS

4-10. Following the ten commandments of damage control is the responsibility of all DCPOs and duty DCPOs.

1. True
2. False

4-11. The five phases of a ship's damage control firefighting and defense include the firemain system, communication equipment, watertight closures, ventilation systems, and what other systems?

1. Hydraulic systems
2. Electrical systems
3. Water cooling systems
4. Propulsion systems

4-12. Which of the following types of firemain systems is generally found aboard small ships?

1. Horizontal-loop
2. Single-main only
3. Vertical-loop only
4. Single-main and vertical-loop

4-13. What type of firemain system consists of two mains installed on the damage control deck and is separated athwartships?

1. A composite firemain system
2. A horizontal firemain system
3. A straight firemain system
4. A vertical firemain system

4-14. When is the watertight integrity of a naval ship established?

1. Prior to getting under way
2. At sea
3. Prior to general quarters
4. When the ship is built

4-15. What is the primary means of smoke and gas removal during post fire conditions?

1. Back-up air supply systems
2. Installed ventilation systems
3. Natural ventilation
4. Portable ventilation systems

4-16. What is the key to successful damage control?

1. Firefighting
2. Flood control
3. Organization
4. Manpower availability

4-17. Preventive and corrective actions are vital to damage control.

1. True
2. False

4-18. What damage control organization includes damage control central (DCC)?

1. Administration
2. Battle
3. Communication
4. Firefighting

4-19. Ship fire parties are divided into which of the following types?

1. Inport and at-sea
2. Large and small
3. Normal and emergency
4. Quick response and delayed action

4-20. Which of the following is NOT a primary firefighting agent used aboard naval ships?

1. CO_2
2. PKP
3. Steam
4. Sand

4-21. Which of the following fire fighting agents is a clear to slightly amber-colored liquid concentrate?

1. AFFF
2. Aqueous Potassium Carbonate
3. Halon
4. Water

4-22. CO_2 is about how many times heavier than air?

1. 1.0
2. 1.5
3. 2.0
4. 2.5

4-23. Air diluted with CO_2 will extinguish a fire below what prescribed percent of oxygen?

1. 12%
2. 15%
3. 18%
4. 21%

4-24. CO_2 is more likely than other fire-fighting agents to allow which of the following conditions to occur?

1. Explosions
2. Residue buildup
3. Reflash
4. Electrical shock

4-25. Halon 1301 discharges in a maximum of how many seconds?

1. 5 seconds
2. 10 seconds
3. 15 seconds
4. 20 seconds

4-26. Which of the following statements pertaining to PKP is NOT true?

1. PKP has a high cooling capability
2. PKP forms an opaque cloud
3. PKP attacks the chain reaction required to sustain a fire
4. PKP is primarily used to extinguish flammable liquid fires

4-27. Which of the following statements pertaining to PKP is true?

1. PKP produces a lasting inert atmosphere
2. PKP is effective on class A fires
3. PKP can be used to fight galley fires
4. PKP can not be used on electrical fires

4-28. Which of the following devices will provide personnel with respiratory and eye protection in an atmosphere that will not support life?

1. EEBD
2. MK5
3. OBA
4. SCBA

4-29. What you do in the first few moments after a CBR attack may determine whether or not you survive?

1. True
2. False

4-30. Who maintains the master copies of each original and partial compartment checkoff list?

1. The CHENG
2. The CMAA
3. The DCA
4. The XO

4-31. What material condition provides the least amount of protection aboard ship?

1. WILLIAM
2. XRAY
3. YOKE
4. ZEBRA

4-32. What type of fitting is marked with a red Z inside a black D?

1. XRAY
2. CIRCLE WILLIAM
3. WILLIAM
4. DOG ZEBRA

4-33. The closure log is maintained under which of the following conditions?

1. Emergency only
2. Inport only
3. Underway only
4. At all times

4-34. Division damage control and firefighting equipment must be inspected and tested in accordance with which of the following publication?

1. Manufactures' technical manuals
2. Maintenance Requirement Cards
3. Naval Ships' Technical Manuals
4. Posted operating procedures

4-35. Who is responsible for conducting daily inspections of division spaces for the elimination of five hazards?

1. The XO
2. The DCPO
3. The LPO
4. The WCS

4-36. Small groups that create overwhelming fear, panic, or terror are said to be using what tactic to accomplish their goals?

1. Coercion
2. Intimidation
3. Politics
4. Terrorism

4-37. In 1989, the FBI gave terrorism what domestic bureau priority?

1. First
2. Second
3. Third
4. Fourth

4-38. Acts of terrorism are NOT usually directed against specific or general targets in the general population and government.

1. True
2. False

4-39. Terrorist threats are divided into a total of how many categories?

1. Two
2. Four
3. Six
4. Eight

4-40. A general warning of possible terrorist activity would be declared as what type of THREATCON?

1. ALPHA
2. BRAVO
3. CHARLIE
4. DELTA

4-41. THREATCON DELTA indicates that a terrorist attack has occurred?

1. True
2. False

4-42. Absolute protection against terrorist activities is possible?

1. True
2. False

4-43. Specific anti-terrorism planning involves the establishment of what total number of defenses to prevent terrorist acts?

1. One
2. Two
3. Three
4. Four

4-44. You should report anything you think is suspicious to security?

1. True
2. False

4-45. What THREATCON musst be capable of being maintained for weeks without causing undue hardship?

1. ALPHA
2. CHARLIE
3. BRAVO
4. DELTA

4-46. On request, what agency can supply threat evaluations?

1. CIA
2. FBI
3. Local Police
4. NIS

4-47. It is the policy of what agency to protect its personnel, their dependents, facilities, and equipment from terrorist acts?

1. CIA
2. DOD
3. FBI
4. NIS

4-48. Your commanding officer may declare a THREATCON following an anonymous threat message?

1. True
2. False

4-49. Terrorism throughout the world is decreasing every year?

1. True
2. False

4-50. What terrorist threat type involves a individual or group seeking to make a political statement which is usuall nonviolent in nature

    1. One
    2. Two
    3. Three
    4. Four

4-51. A disgruntled employee seeking to perform an act of sabotage or otherwise destroy government property would be under what terrorist threat type?

    1. One
    2. Two
    3. Three
    4. Four

4-52. When an incident occurs or when intelligence is received indicatin that some form of terrorist actio against the installation or personne is imminent, what TREATCON condition should be declared?

    1. ALBHA
    2. BRAVO
    3. CHARLIE
    4. DELTA