NONRESIDENT
TRAINING
COURSE

February 2002

# Basic Military Requirements

## NAVEDTRA 14325

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**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.**

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# 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.

**COURSE OVERVIEW**: *Basic Military Requirements*, NAVEDTRA 14325, is a self-study training manual (TRAMAN)/nonresidsent training course (NRTC) that covers the basic knowledges required of the men and women of the U.S. Navy and Naval Reserve. This TRAMAN/NRTC provides subject matter that directly relates to the naval standards for the apprenticeship (E-2/E-3) rates. The naval standards are found in the *Manual of Navy Enlisted Manpower and Personnel Classification and Occupational Standards* (Volume 1), NAVPERS 18068F.

**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.

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## 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."

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# 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:

**https://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:

**https://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: n314products@cnet.navy.mil
Phone: Comm: (850) 452-1001, Ext. 1826
DSN: 922-1001, Ext. 1826
FAX: (850) 452-1370
(Do not fax answer sheets.)
Address: COMMANDING OFFICER
NETPDTC N314
6490 SAUFLEY FIELD ROAD
PENSACOLA FL 32509-5237

**For enrollment, shipping, grading, or completion letter questions**

E-mail: fleetservices@cnet.navy.mil
Phone: Toll Free: 877-264-8583
Comm: (850) 452-1511/1181/1859
DSN: 922-1511/1181/1859
FAX: (850) 452-1370
(Do not fax answer sheets.)
Address: COMMANDING OFFICER
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## NAVAL RESERVE RETIREMENT CREDIT

If you are a member of the Naval Reserve, you may earn retirement points for successfully completing this course, if authorized under current directives governing retirement of Naval Reserve personnel. For Naval Reserve retirement, this course is evaluated at 15 points. Unit 1 – 12 points upon satisfactory completion of assignments 1 through 12. Unit 2 – 3 points upon satisfactory completion of assignments 13 through 15. (Refer to *Administrative Procedures for Naval Reservists on Inactive Duty*, BUPERSINST 1001.39, for more information about retirement points.)

# Student Comments

**Course Title:** *Basic Military Requirements*

**NAVEDTRA:** 14325 **Date**: _____

**We need some information about you**:

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

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

**Your comments, suggestions, etc**.:

**Privacy Act Statement:** Under authority of Title 5, USC 301, information regarding your military status is requested in processing your comments and in preparing a reply. This information will not be divulged without written authorization to anyone other than those within DOD for official use in determining performance.

NETPDTC 1550/41 (Rev 4-0)

# CHAPTER 1

# POLICIES AND PROGRAMS

*When you cease to make a contribution, you begin to die.*

—Eleanor Roosevelt

What is a *policy* or a *program*? A policy is an overall plan that contains general goals and broad guidelines. Policy usually establishes the *end* to be attained, not the *means* of getting there. A program is a plan or system under which action may be taken towards a goal. Programs provide the *means* to reach the *end* (goal) stated by the policy. In other words, policies tell where to go; programs tell how to get there. This chapter covers some of the policies and programs of the U. S. Navy.

## ENVIRONMENTAL POLLUTION CONTROL

**Learning Objectives:** When you finish this chapter, you will be able to—

- Identify the need for environmental pollution control to include the sources and effects (natural, historical, archeological, physical, and biological) of pollution.
- Recognize the Navy programs for pollution control to include the Clean Air Act, Clean Water Act, and Noise Prevention Ashore.

The Navy's ability to accomplish its mission requires daily operations in land, sea, and air environments. The Navy is committed to operating ships and shore facilities in a manner compatible with the environment. National defense and environmental protection are and must be compatible goals. Therefore, an important part of the Navy's mission is to prevent pollution, protect the environment, and conserve natural, historic, and cultural resources. To accomplish this mission element, personnel must be aware of the environmental and natural resources laws and regulations that have been established by federal, state, and local governments. The Navy chain of command must provide leadership and a personal commitment to ensure that all Navy personnel develop and exhibit an environmental protection ethic.

Environmental pollution is the altering of the natural environment in an adverse way. Pollution can result from the presence of chemical, physical, or biological agents in the air, water, or soil. Some of the worst effects of pollution are economic loss (agricultural and industrial), fewer recreational opportunities, and the marring of the earth's natural beauty. Pollutants affect human health and comfort, fish and wildlife, plant life, water resources, physical structures, and equipment. In other words, environmental pollution results from any substance added to our water, air, or land that makes it less fit for use by plants, animals, or human beings.

### SOURCES OF POLLUTION

Nature contributes to pollution by eroding the soil causing silt to build up in streams and by volcanic eruptions that pollute the atmosphere. However, **people** cause most pollution problems in the world. The main sources of pollutants are agricultural, industrial, municipal, and transportation operations.

**Agricultural** pollutants include insecticides, herbicides, pesticides, natural and chemical fertilizers, drainage from animal feedlots, salts from field irrigation, and silts from uncontrolled soil erosion.

**Industrial** operations produce a wide variety of pollutants. Industrial pollutants include acids from mines and factories, thermal discharges from power plants, and radioactive wastes from mining and processing certain ores. Industries create pollutants by producing food, chemicals, metals, petroleum products, and poisons, as well as countless other by-products of our country's technology.

The primary **municipal** pollutants are raw or inadequately treated sewage. Other municipal pollutants include refuse, storm-water overflows, and salts used on streets in wintertime.

**Transportation** pollutants include emissions from aircraft, trains, waterborne vessels, and cars and trucks.

Motor vehicles create most of our air pollutants through their release of unburned fuel vapors (hydrocarbons). Oil becomes a pollutant when ships

spill it during refueling operations or as a result of collision or grounding. Several million gallons of oil may ruin and pollute miles of coastline as a result of such accidents.

## EFFECTS OF POLLUTION

Pollution produces physical and biological effects that vary from mildly irritating to lethal. The more serious of the two are the biological effects.

### Physical Effects

The physical effects of pollution are those that we can see, but they include effects other than actual physical damage.

Oil spills. One obvious physical effect of pollution is the result of oil spills that are caused by ship collisions or other accidents. Oil spilled into the seas coats everything it touches. It fouls boat hulls, pier pilings, and shore structures; spoils the beauty of nature by killing fish and birds; and makes beaches unusable. In addition to the physical effects, oil spills require costly cleanup operations.

Air pollutants. Air pollutants damage a wide variety of materials. Burning oil and coal produce sulfur oxides, which cause steel to erode two to four times faster than normal. When combined with other pollutants (soot, smoke, lead, asbestos, and so on), sulfur oxide particulates cause corrosion to occur at an even faster rate. By themselves, particulates damage and soil materials, structures, and equipment. Air pollutants speed the erosion of statues and buildings, which in some instances, destroys works of art.

### Biological Effects

The most serious result of pollution is its harmful biological effects on human health and on the food chain of animals, birds, and marine life. Pollution can destroy vegetation that provides food and shelter. It can seriously disrupt the balance of nature, and, in extreme cases, can cause the death of humans.

Pesticides, which include herbicides and insecticides, can damage crops; kill vegetation; and poison birds, animals, and fish. Most pesticides are nonselective; they kill or damage life forms other than those intended. For example, pesticides used in an effort to control or destroy undesirable vegetation and insects often destroy birds and small animals. Some life forms develop immunity to pesticides used to destroy them. When that happens, we develop more potent chemicals and the cycle repeats itself.

The widespread use of pollutants, such as oil, chemicals, and fertilizers, pollutes our waterways. The biological effect of water pollution is its danger to our water supplies; we require water to survive. Water pollutants are also dangerous to all forms of marine life. Oil is an especially harmful pollutant. It kills surface-swimming animals and sea birds and, once it settles on the bottom, harms shellfish and other types of marine life.

The primary pollution concern of Navy personnel involves pollution produced by shipboard wastes. In addition to oil, shipboard wastes include sanitary wastes, galley and laundry waters, chemicals, solid wastes, and combustion by-products of oil- and gasoline-driven engines. Pollutants produced by ships are similar to those generated by municipal and industrial operations.

## NAVY PROGRAMS FOR POLLUTION CONTROL

Based on an Executive Order, all government agencies must provide leadership in the protection and enhancement of the quality of our air and water resources. They also must comply with all environmental laws and regulations. Accordingly, the Secretary of the Navy, the Chief of Naval Operations, and other authorities have issued several pollution control instructions. Those instructions cover the abatement (lowering) of air, water, and noise pollution. In addition, we have a program to preserve our natural, cultural, and historic resources.

### Clean Air Act

Under the Clean Air Act, each state has the primary responsibility for assuring air quality. All naval activities must meet both federal and state standards for preventing air pollution.

The Navy has begun taking steps to help meet the nation's goal of reducing air pollution. One step has

***Student Notes:***

been the conversion of its power plants ashore and afloat to use more efficient pollution control systems for stack emissions.

When required by state or local regulations, activities have set up a program for monitoring and analyzing the exhaust from each vehicle. Vehicles that do not meet emission standards must have corrective maintenance before being returned to service.

**Clean Water Act**

The Clean Water Act, as amended, represents a clear goal to restore and maintain the chemical, physical, and biological integrity of the nation's waters.

To help reach that goal, the Navy uses municipal treatment plants where possible for its wastewater and sewage. (**NOTE:** Operators of municipal treatment plants must meet the operator-certification requirements of the state in which the Navy facility is located.) Whenever use of a municipal facility is impractical, the Navy provides, installs, and operates its own wastewater treatment and disposal systems. (**NOTE:** The Navy complies with water pollution control standards that govern the types of pollutants that can be introduced into a treatment facility.)

The Navy has installed marine sanitation devices (MSDs) aboard most of its ships. Some of those devices treat sewage to a level acceptable for overboard discharge. Others (collection, holding and transfer [CHT] systems) retain sewage on board for later discharge ashore or in waters in which discharge is allowed. No untreated or inadequately treated sewage may be discharged into navigable waters of the United States. In foreign waters, Navy vessels comply with the applicable Status of Forces Agreement (SOFA) in operating MSDs. If no SOFA exists, vessels operate MSDs based on the sewage-discharge standards observed by the host country's military forces.

Some of the guidelines followed by the Navy are shown below:

- Navy vessels may not discharge hazardous substances in harmful quantities into or upon navigable waters of the United States.
- They also may not discharge those substances upon adjoining shorelines or into or upon waters of the contiguous zone (12 nautical miles [nm] from shore).
- Since Navy vessels use many substances they cannot dispose of at sea outside the contiguous zone, they must store them in containers for shore disposal.
- Vessels may not discharge unpulped trash at sea within 25 nautical miles (nm) from the U. S. coastline and pulped trash within 12 nm of the U.S. coastline.
- They must make every effort to package all trash for negative buoyancy before overboard discharge.
- Submarines may discharge negatively buoyant compacted trash not less than 12 nm from the U.S. coastline only if the water depth is greater than 1,000 fathoms.
- Vessels may not discharge any trash within 25 nm of any foreign coastline.
- Overboard discharge of plastic waste material is prohibited.

**Noise Prevention Ashore**

The Noise Prevention Program directs federal facilities, including naval shore stations, to comply with all substantive or procedural requirements that apply to environmental noise reduction. Therefore, whenever feasible, the Navy procures (buys) low-noise emission products and provides soundproofing of Navy-owned/operated schools and hospitals affected by noisy operations. It also locates housing and other developments away from major noise sources and cooperates with and in support of neighborhood self-help programs. Aviation facilities consider remote siting, sound suppression equipment, and sound barriers when developing new systems. To the extent possible, the Navy limits the use of noisy tools, machinery, and equipment to normal working hours.

Afloat, the design of new ship systems and equipment is reducing noise emissions. The

***Student Notes:***

government doesn't prescribe retrofit (modifications) for existing noise sources. The government also exempts military aircraft, combat equipment, and weapon systems from new noise design standards.

## NATURAL, HISTORIC, AND ARCHEOLOGICAL RESOURCES PROTECTION

In keeping with federal programs, the Navy has established programs, suitable to its military mission, for the preservation of natural, cultural, and historic resources. The Navy programs consist of land management, forest management, fish and wildlife management, outdoor recreation, and general support for all land under naval jurisdiction.

**Land management** includes soil and water conservation, land restoration, noxious weed and poisonous plant control, agricultural lands leasing, range management, landscaping, and ground maintenance.

**Forest management** includes the production and sale of forest products for multiple-use and sustained-yield principles

**Fish and wildlife management** includes marine mammal protection, migratory fish protection, game and nongame species management, and animal damage control.

**Outdoor recreation** involves the protection of nature through programs such as migratory bird management, endangered species protection, and preservation of the earth's natural beauty. Recreation programs include the management and use of off-road vehicles, national recreation trails, hiking trails, outdoor recreation areas, wild and scenic rivers, and wilderness areas.

**General support programs** involve people and nature. Those involving people include youth programs, public participation, and cooperative agreements with public agencies. Those involving nature include resources inventory, conservation awards, coastal area management, wetland protection, flood plain management, natural area preservation, and animal disease eradication.

## REVIEW 1 QUESTIONS

Q1. List the four main sources of pollutants.

a.

b.

c.

d.

Q2. What are two primary effects of pollution?

Q3. What is the primary pollution concern of the Navy?

Q4. To help reduce air pollution, what steps has the Navy taken to improve their power plants ashore and afloat?

Q5. Name the agreement that the Navy follows to dispose of treated sewage in foreign waters.

Q6. How many nautical miles from the U.S. coastline can vessels discharge unpulped trash?

## ENERGY CONSERVATION PROGRAM

**Learning Objective:** When you finish this chapter, you will be able to—

- Recognize the policy for and identify the need for the Navy's energy conservation program.

Most of the Navy's ships and all of its aircraft use petroleum-based fuel. In addition, the Navy's vehicles

***Student Notes:***

used for ground transportation, such as cars, trucks, and buses, also use petroleum. That gives you an idea of how much the Navy depends on petroleum—without it, the Navy couldn't move. Navy bases also use petroleum fuel for heating and running electric plants.

We get most of our petroleum in the form of crude oil from the Middle East countries. We cannot rely on oil from that area forever because political unrest exists there. Besides, only so much oil exists in the earth. Therefore, we must conserve as much of our petroleum resources as possible.

The Navy's policy on energy conservation is that it will make all possible efforts to improve the way it uses energy resources. The Navy will not compromise readiness, effectiveness, or safety in its energy conservation efforts. One of the Navy's energy conservation goals is to ensure it provides the fleet with enough fuel to sustain peacetime and combat operations. Another objective is to reduce energy costs and dependency on unreliable energy sources while conserving petroleum.

You can help to conserve our energy resources by reporting wasteful practices to your supervisor or leading petty officer (LPO).

### REVIEW 2 QUESTION

Q1. What is the Navy's policy on energy conservation?

## NAVY SPONSOR PROGRAM

**Learning Objective:** When you finish this chapter, you will be able to—

- Recognize the purpose of and identify the responsibilities of the Navy Sponsor Program.

The Chief of Naval Operations set up the Navy Sponsor Program to ease the relocation of naval personnel and their families when transferred on permanent change of station (PCS) orders. This program has helped thousands of Navy families. Navy policy regarding assignment of sponsors is as follows:

- Assignment of a sponsor is mandatory in the case of PCS orders to or from any activity.
- In all other cases, individuals should request assignment of a sponsor through the use of the sponsor request form, NAVPERS 1330/2, entitled Navy Sponsor Notification.

**NOTE**

If you are being transferred on PCS orders, desire a sponsor, and have not heard from your new command, you can request assignment of a sponsor using the sponsor request form, NAVPERS 1330/2.

- School commands have developed home port and/or country information packages or packets to all personnel being transferred on PCS orders, especially first-term members.
- If you are assigned as a sponsor for a fellow naval member who is scheduled to transfer to your location, fully accept the responsibility of sponsorship. You can help make the difference between a good move and a bad one for the person being transferred as well as for that person's family. Using the following checklist (table 1-1) may help you be a better sponsor.

## OVERSEAS DUTY SUPPORT PROGRAM

**Learning Objective:** When you finish this chapter, you will be able to—

- Identify the Overseas Duty Support Program to include sources of information available for single Sailors and Navy families.

The Overseas Duty Support Program (ODSP) provides information and support to help personnel who are guests in foreign lands. Whether you find yourself in a foreign country as a result of a PCS or a deployment, the ODSP will provide you with information about the country you are visiting.

***Student Notes:***

**Table 1-1.—Sponsor Checklist**

**SPONSOR CHECKLIST**

1. Write a "welcome aboard" letter to your new shipmate. Include the following:
   a. Introduce yourself and give a warm welcome aboard.
   b. Include a copy of the rental and for sale ads from the local paper in any correspondence with the new member.
   c. Provide the member information on how he/she can contact you (your home address and telephone number).
   d. Ask him/her family members (if they will accompany the member, their mode of transportation, ages, and so on).
2. Ask him/her to keep you posted on travel and arrival plans. You are required to keep the sponsor program coordinator and pay/personnel administrative support system (PASS) officer informed of any changes the member may make.
3. Ensure follow-up letter or phone calls to answer any questions the new member may have.
4. Ensure transportation is available from place of arrival to the command if the member requests it.
5. Before the member's arrival, check on the housing availability. Inform the member if housing will be available upon reporting or if he/she may need to make arrangements for temporary lodging. Help the member with arrangements if necessary. (Make sure the new member checks in with the housing referral office before renting or buying a house. That is a must.)
6. Escort the individual through the check-in process.
7. Help the member locate the personal property office to check on household goods and private auto shipments. That may be done before the member reports in for duty.
8. Provide a tour of the base and local area if the member desires.

When visiting a foreign country, always remember you are a guest in that country. As a guest, you should respect the local customs and make every attempt to avoid getting into trouble. If possible, try to learn and use the local language, especially if you are stationed in that country. Be careful about taking pictures or recording anything without the permission of the people around you. Most police (or even passersby) will forbid you to take pictures of sights, such as government buildings, no matter how illogical that may seem. Some people will not want you to take their pictures for religious reasons. Some may feel you are making fun of them. They may think you will show the pictures to your friends back home as an example of how "backward" or "primitive" they are.

Dress comfortably, but be careful of your appearance. A woman in shorts is a "no-no" in many countries, and even a woman in slacks can upset people in some rural or conservative areas. A man in shorts can give the impression of insensitivity.

Unless you are similar in appearance to the people in the country you are visiting, they will likely stare, shout, giggle, and point at you, especially in out-of-the-way places. The people of most countries will usually shower attention upon you good naturedly. If you smile and accept the attention in the same way, your hosts will make you feel welcome. If you resent it and get angry, your hosts will be confused and displeased.

***Student Notes:***

Even though you look different than the local people, if you can manage a few words in the local language, you will reap many benefits. You will see taxi fares miraculously drop, room service drastically improve, and art objects sell for less. The people will receive you more warmly and genuinely than if you had spoken English.

Knowing some basics about the country you are visiting and its culture goes a long way towards helping you have a good time. Before the trip, read all you can about each country you will visit. Look at various publications that contain information about the countries or regions you will be touring. *Africa Report*, for example, is a magazine that offers much insight about the culture of that continent. If your library doesn't have a specific magazine, you can order it from the publisher. You will find the addresses of magazine publishers in your local library.

You may also get information on other countries by visiting the Family Service Center or logging on to the SITES home page on the Internet. The SITES home page gives you up-to-date information of the country you will be visiting.The address for SITES is www.dmdc.osd/mil/sites.

When you visit the towns, villages, and cities of other countries, you'll discover what so many of us have found, the unexpected hospitality and warmth of the people.

## MILITARY CASH AWARDS PROGRAM

**Learning Objective:** When you finish this chapter, you will be able to—

- Recognize the opportunities gained through the Navy Cash Awards Program.

The Military Cash Awards Program (MILCAP) is a special incentive awards program. It is designed to find new ideas to effectively increase performance within the Department of the Navy. The program has been responsible for important savings.

MILCAP provides monetary recognition awards of up to $25,000. It awards personnel for beneficial suggestions, inventions, and scientific achievements that increase efficiency, economy, or productivity or effect other improvements in operations. All active-duty military personnel are eligible to participate in MILCAP.

A beneficial suggestion is the proposal of an idea or a method of doing a task better, faster, cheaper, or safer. An individual or a group can submit a beneficial suggestion. To qualify for the MILCAP, the suggester must show a specific need for improvement and give a workable solution. The suggestion should also be beyond the suggester's normal job capability. Suggestions should do one or more of the following:

- Improve services to the fleet
- Increase productivity
- Conserve energy, manpower, materials, time, or space
- Reduce costs without loss of quality or efficiency

Perhaps you have an idea worthy of a cash award. Submit your suggestion in writing, either on a suggestion form or in a letter format, to your local MILCAP administrator. OPNAVINST 1650.8 contains additional information about the MILCAP.

## REVIEW 3 QUESTIONS

Q1. Delete

Q2. Delete

Q3. What program provides you with support and information about foreign lands?

***Student Notes:***

Q4. Besides ODSP, what other source can you use to get information about other countries?

Q5. What program does the Navy have that rewards you monetarily for beneficial suggestions, inventions, and scientific achievements?

## HEALTH AND PHYSICAL READINESS PROGRAM

**Learning Objective:** When you finish this chapter, you will be able to—

- Recognize the purpose of the Health and Physical Readiness Program.
- Identify the benefits of the Health and Physical Readiness Program to the individual.

People in the Navy and in the civilian community share a common problem—excessive body fat. It usually results from sitting all day at a desk job, eating too much, and getting too little exercise. Excessive body fat spoils our health, longevity, stamina, and military appearance. Maintaining good health and physical readiness helps to keep us combat ready, make us personally effective, and give us high morale.

The Navy's Health and Physical Readiness Program promotes active health and fitness at the command level. The program includes semiannual testing of all personnel to make sure they meet to certain standards. It provides educational programs that help personnel who don't meet the Navy's fitness or body fat standards. It also helps personnel who want to change long-established bad health habits to improve their fitness.

## NAVY POLICY ON PREGNANCY AND DEPENDENT CARE

**Learning Objectives:** When you finish this chapter, you will be able to—

- Identify the servicewoman's responsibilities regarding pregnancy.
- Identify the Navy's responsibility for obstetrical care.
- Recall the Navy policy for assignment of pregnant servicewomen.
- Recall the Navy policy for post delivery convalescent leave.
- Recall the Navy policy for separating pregnant servicewomen.
- Recall the Navy family care policy.
- Recognize the consequences of failing to maintain an up-to-date family care plan.

This section covers your and the Navy's responsibilities on pregnancy and family care.For information about hygiene, you should refer to chapter 14 of this TRAMAN.

### PREGNANCY

Getting pregnant can negatively impact your goals. It can also affect the mission of the Navy. By knowing the Navy's policy on pregnancy, you can make informed, personal choices **and** meet your commitment to the Navy.

#### The Sailor's Responsibilities

Servicewomen are responsible for—

- Planning the pregnancy to meet family **and** military obligations
- Confirming the pregnancy at a military medical treatment facility
- Notifying the commanding officer or officer in charge of the pregnancy
- Performing military duties while pregnant
- Complying with work- and task-related safety and health recommendations

***Student Notes:***

**The Navy's Responsibilities**

When a servicewoman is pregnant, the Navy has specific responsibilities for her care. Navy policy governs the assignment of pregnant servicewomen.

**RESPONSIBILITY.—**The Navy provides obstetrical care. When a pregnant servicewoman remains at her duty station, the military treatment facility provides care if—

- The facility has obstetrical-gynecological capabilities.
- The servicewoman lives in the facility's in-patient area.

**POLICY.—**The Navy policy for assigning pregnant servicewomen covers several areas, including overseas, CONUS, shipboard, aviation squadron, and military school assignment.

**Overseas.—**Based on medical considerations, no servicewoman may be assigned overseas or travel overseas after the beginning of the 28th week of pregnancy.

**Continental United States (CONUS).—**Pregnant servicewomen may be assigned within CONUS as follows:

- Without restriction, provided the servicewoman doesn't fly after the 28th week of pregnancy.
- Will not be transferred to a deploying unit during the period from the 20th week of pregnancy through 4 months after the expected date of delivery.

**Shipboard.—**The following policies govern the assignment of pregnant servicewomen:

- The CO, in consultation (talking to) with the health care provider and occupational health professional, decides if the Sailor may safely continue her shipboard assigned duties.
- Pregnant servicewomen won't remain aboard ship if the time for medical evacuation to a treatment facility is more than 6 hours.
- Service women can't remain on board a deployed unit beyond the 20th week of pregnancy.

**Aviation Squadron.—**Assignment of pregnant servicewomen to aviation squadrons is governed by the following:

- Pregnancy disqualifies designated flight status.
- Air controllers may work up to the 28th week of pregnancy; however, they are normally restricted from tower duties after their 27th week.
- Servicewomen who become pregnant while assigned to an aviation squadron due for deployment should be reassigned to a squadron not scheduled for deployment from their 20th week of pregnancy through the recuperative period.

**Military schools.—**The following rules apply to pregnant servicewomen at military schools:

- A pregnant servicewoman isn't assigned to a school if the projected delivery date or recuperative period will occur during the course of instruction.
- If a servicewoman becomes pregnant during training, the school's CO determines if the Sailor can complete the training based on the projected delivery and recuperation dates.

**POST-DELIVERY CONVALESCENT LEAVE.—**Normally, the CO grants 6 weeks (42 days) convalescent leave after the servicewoman has delivered the baby.

**SEPARATION FROM THE NAVY.—**The Navy can discharge servicewomen from the Navy without maternity benefits under the following conditions:

- The servicewoman was pregnant before entry into recruit training.
- The pregnancy is certified during recruit training.

***Student Notes:***

- The pregnancy occurred during initial training (must be determined by the permanent duty station).

A pregnant servicewoman may request separation from the Navy before the 20th week of pregnancy (normally, such a request is not approved). Under law, the military departments, CHAMPUS, or the Veteran's Administration has the authority to pay civilian maternity care expenses for former servicewomen who separate from the Navy while pregnant.

## FAMILY CARE

All single service members and dual military couples having custody of children under 19 or other dependents must have a formalized plan for family care. If you are eligible for family care, you must complete the Family Care Plan Certificate, NAVPERS 1740/6 and Family Care Plan Arrangements, NAVPERS 1740/7. These forms certify that your family members will be cared for during your absence. These forms also identify the logistical, relocation, and financial arrangements that you've made.

Custodian(s) you designate (name) **must** have the following documents:

1. A power of attorney that authorizes medical care and person(s) action in *loco parentis* (as the parent)
2. Identification cards for all eligible dependents

If the person you designate as the custodian doesn't live in the local area, you will also need to make sure of the following:

- A nonmilitary escort for family members that need help; for example, infants, children, or elderly disabled adults
- Financial support to transport the family or caregiver to a designated location

If you don't maintain an up-to-date family plan, you can be separated from the Navy. In fact, the CO can separate members who are unable or refuse to maintain an updated family care plan, who do not remain available for worldwide assignment, or who are unable to perform their professional or military duties.

## PUBLIC AFFAIRS AND COMMUNITY RELATIONS PROGRAM

**Learning Objective:** When you finish this chapter, you will be able to—

- Recall the value of the public affairs and community relations programs.

Public affairs works on the principle that the public has the right to be fully informed about matters of national defense. In the Department of the Navy, the **mission of public affairs** is to inform the public and members of the naval service about the following:

- The Navy as an instrument of national policy and security
- Navy operations and programs
- The responsibilities and activities of naval personnel as U. S. citizens

An **objective of public affairs** is to better the general public's understanding of the following:

- The nature of sea power and its role in preserving the security of the United States
- The reasons underlying the need for an efficient and effective modern Navy
- The contributions of the Navy in scientific research and in community assistance
- The service naval members provide to their country
- The career advantages of naval service

The Navy is a part of the community in which its facilities or personnel are located. The attitude the civilian community has towards Navy personnel affects their morale and effectiveness. Therefore, all Navy personnel are responsible for maintaining good community relations. They can help to do that by taking an active part in civilian activities and organizations. In addition, each command develops a Community Relations Program to ensure Navy personnel and the civilian community live in harmony.

For more information about the Public Affairs and Community Relations Program, see SECNAVINST 5720.44, chapter 2.

***Student Notes:***

## REVIEW 4 QUESTIONS

Q1. What Navy program provides educational programs for people who don't meet the Navy's fitness or body fat standards and who also need to help change long-established bad health habits?

Q2. With regard to pregnant servicewomen, what is the Navy responsibility?

Q3. List the responsibilities of pregnant servicewomen.

a.

b.

c.

d.

e.

Q4. Service members must complete what forms for family care?

a.

b.

Q5. List the areas that the Department of the Navy public affairs office informs the public and service members about.

a.

b.

c.

## INTEGRITY AND EFFICIENCY PROGRAM

**Learning Objective:** When you finish this chapter, you will be able to—

- Recall key provisions of the Navy's Integrity and Efficiency Program to include fraud, waste, and abuse.

The Integrity and Efficiency (I & E) Program carries out the Department of the Navy's policy to detect, deter, and eliminate *fraud*, *waste*, *abuse*, and *mismanagement*. The terms *fraud*, *waste*, *abuse*, and *mismanagement* are defined as follows:

*Fraud*. Fraud is intentional misleading or deceitful conduct that deprives the government of its resources or rights.

*Waste*. Waste is the extravagant, careless, or needless expenditure of government resources.

*Abuse*. Abuse is the intentional wrongful or improper use of government resources.

*Mismanagement*. Mismanagement is to manage incompetently or dishonestly.

You report fraud, waste, abuse, and mismanagement through any of the following means:

- Chain of command
- Navy hotline
- Naval Criminal Investigative Service (NCIS)
- Congressional communication (writing your congressmen)

## STANDARDS OF CONDUCT AND PROFESSIONAL ETHICS

**Learning Objectives:** When you finish this chapter, you will be able to—

- Recall key points of the Standards of Conduct.
- Identify the need for professional ethics.

The Department of the Navy's ability to maintain public confidence in its integrity is essential to the performance of its mission. To help maintain that integrity, all naval personnel must comply with the following standards of conduct (table 1-2).

***Student Notes:***

**Table 1-2. Standards of Conduct**

1. Avoid any action, whether or not specifically prohibited, that might result in or reasonably be expected to create the appearance of the following:
   a. Using public office for private gain
   b. Giving preferential treatment to any person or entity
   c. Impeding government efficiency or economy
   d. Losing complete independence or impartiality
   e. Making government decisions outside official channels
   f. Adversely affecting the confidence of the public in the integrity of the government
2. Do not engage in any activity or acquire or retain any financial interest that results in a conflict between your private interest and the public interest of the United States related to your duties.
3. Do not engage in any activity that might result in or reasonably be expected to create the appearance of a conflict of interest.
4. Do not accept gratuities (gifts) from defense contractors.
5. Do not use your official position to influence any person to provide any private benefit.
6. Do not use your rank, title, or position for commercial purposes.
7. Avoid outside employment or activity that is incompatible with your duties or may bring discredit to the Navy.
8. Never take or use government property or services for other than officially approved purposes.
9. Do not give gifts to your superiors or accept them from your subordinates.
10. Do not conduct official business with persons whose participation in the transaction would be in violation of law.
11. Seek ways to promote efficiency and economy in government operation and public confidence in its integrity.
12. For more information consult SECNAVINST 5370.2.

## THE ROLE OF THE INSPECTOR GENERAL

**Learning Objective:** When you finish this chapter, you will be able to—

- Identify the purpose of the inspector general.

The mission of the naval inspector general (IG) is to "inquire into and report" on any matter that affects the discipline or military efficiency of the DoN. One way the IG can fulfill its mission is by providing a method of receiving and investigating reports of fraud, waste, mismanagement, and related improprieties

***Student Notes:***

(wrong actions). Generally, the hotline is used when the chain of command cannot or will not take appropriate action.

## ALCOHOL AND DRUG POLICIES

**Learning Objective:** When you finish this chapter, you will be able to—

- Identify the consequences of alcohol and drug abuse.

Our Navy is the most professional, highly trained, and capable force in the world and our Sailors function in a highly complex, technological environment requiring 100 percent of their mental and physical abilities. Alcohol and drug abuse and the incidents it causes impair our readiness and reduce the quality of life of our Navy team.

All DoN bases/installations will strictly conform to the drinking age limitations of the state or country in which they are located, and under no circumstances will drinking be permitted below the age of 18. The perception that alcohol is central to our tradition is wrong. Everyone from the new recruit to admiral must recognize the effect alcohol abuse can have on them, on others (including their families) and on their careers.

Each Sailor is ultimately responsible and will be held accountable for their own actions. Personal responsibility means no drinking and driving, no drinking to the extent that it impairs judgment (resulting in irresponsible behavior or incidents), no public drunkenness, and absolute compliance with the local laws for purchase, possession, and use of alcoholic beverages.

We have a personal responsibility not to abuse alcohol. We also have a responsibility to our shipmates. Shipmates take care of shipmates. All of us must be aware of the warning signs of alcohol abuse and must take positive steps to ensure shipmates stay on the right course. Don't let a shipmate drive after drinking. Shipmates who are drunk need to be watched and not left alone.

Drug use is incompatible with the Navy's high standards of performance, military discipline, and readiness. The Navy has a "zero tolerance" policy, which means using illegal drugs or abusing prescription drugs will result in being discharged from the Navy.

## PROVISIONS OF THE PRIVACY ACT

**Learning Objective:** When you finish this chapter, you will be able to—

- Recall key provisions of the Privacy Act and recognize its purpose.

The Privacy Act primarily protects the rights of personal privacy of people about whom records are maintained by agencies of the federal government. In other words, the Privacy Act protects your privacy about your records the federal government maintains. It isn't legal for an agency of the federal government to maintain records on people without announcing the fact in the Federal Register.

If your duty requires you to keep personal information about others, keep only that information that is needed to do what law requires. Remember, keep personal information private! Don't disclose information about a person to any unauthorized person. If you make an unauthorized disclosure, you may be fined up to $5,000. If you maintain records on your fellow Navy member, you have an obligation to protect this information from unauthorized disclosure.

Also, it's your right to look at any record the Department of the Navy keeps on you. You have the right to copy it and to request to have it corrected if you think it is wrong.

## REVIEW 5 QUESTIONS

Q1. What is the Navy's policy on drug abuse?

Q2. What is the purpose of the Integrity and Efficiency Program?

***Student Notes:***

Q3. List the ways to report fraud, waste, and abuse.

a.

b.

c.

d.

Q4. For the Navy to maintain public confidence in its integrity, naval personnel should comply with _____.

## EQUAL OPPORTUNITY IN THE NAVY

**Learning Objectives:** When you finish this chapter, you will be able to—

- Identify the policies of the Command Managed Equal Opportunity (CMEO) Program.
- Recognize the purpose of equal opportunity and human rights.
- Recall the need for equal opportunity in the following areas: performance evaluations, duty assignments, training and advancement, justice, service and recreational facilities, housing, and equal opportunity off base.
- Recognize the consequences of discrimination.

According to *Navy Regulations*, Article 1164, "Equal opportunity shall be afforded to all on the basis of individual effort, performance, conduct, diligence, potential, capabilities, and talents without discrimination as to race, color, religion, creed, sex or national origin. Naval personnel shall demonstrate a strong personal commitment to stand on these principles and carry them out."

The **key word** in the title of this section is **equal**. Real democracy cannot exist if our society doesn't have equal opportunities for all of its people. Equality can't be legislated; however, the law can serve to make sure that everyone receives equal treatment.

The Navy is made up of people, and people in the Navy come from all parts of the United States and from other countries. They bring with them views common to their racial, social, religious, and economic backgrounds. For many years, the official policy of the Department of the Navy has been one of equal treatment and opportunity for all personnel, regardless of race, color, creed, sex, or national origin. The Navy carries out that policy through the Command Managed Equal Opportunity (CMEO) Program. The Chief of Naval Operations (CNO) provides the guidance and policy for that program.

### COMMAND MANAGED EQUAL OPPORTUNITY (CMEO) PROGRAM

The Command Managed Equal Opportunity (CMEO) Program is the Navy's equal opportunity program. The Navy requires all commands to set up a CMEO program. CMEO allows the commanding officer (CO) to create and maintain a positive equal opportunity (EO) environment. CMEO also allows commands to identify and resolve command-level equal opportunity problems and concerns. Commands can closely monitor EO issues, and at the same time, remain flexible enough to use only the manpower required for any given situation.

Commanding officers must make equal opportunity a reality in their commands. They must ensure only merit, ability, performance, and potential affect a person's promotion, training, duty assignment, or other personnel action.

### PERFORMANCE EVALUATION IN EQUAL OPPORTUNITY

The Navy evaluates every Navy member's support of the equal opportunity program. Personnel in paygrades E-1 through E-9 receive numeric grades, based on a number scale, on overall annual performance evaluations of specific traits. Your performance evaluation will reflect your attitude toward and your conduct in support of the Navy's equal opportunity program.

***Student Notes:***

## PROCEDURES CONCERNING INSENSITIVE PRACTICES

When people enter the Navy, they have their own feelings, attitudes, prejudices, and ideas based on their individual personal backgrounds. An insensitive practice is behavior that is prejudicial to another person because of that person's race, religion, creed, color, sex, or national origin. To ensure teamwork and to fulfill the Navy's mission, individuals **must** put aside their personal feelings, attitudes, prejudices, and ideas about other people and how they act around others.

Commanding officers take proper action to correct insensitive practices. If a person takes part in insensitive practices, that person receives counseling about their responsibilities with regard to equal treatment. If such counseling is not effective or if further action is warranted, personnel may receive administrative or disciplinary action or both.

## DUTY ASSIGNMENTS

The unfair assignment of general administrative and support duties (food service, compartment cleaning, and work details) outside the normal requirements of a rating frequently lowers morale. It also weakens the efficiency and overall effectiveness of a command.

Based on Navy policy, supervisors should assign work not included in a specific rating on a fair, rotational basis. They should make such assignments without regard to race, creed, color, sex, age, or national origin. Although supervisors may consider the seniority of personnel in detailing such duties, they must make positive efforts to ensure fair treatment.

Assignment to duty on ships or stations should also comply with the Navy's equal opportunity goals. The repeal of the combat exclusion law potentially opens all classes of surface ships to women. The Naval Construction Force, or Seabees, has also received women in sea duty construction battalions. All construction battalions are now open to women, opening more than 4,000 seagoing billets to women.

The expanded opportunity for women in the Navy ensures a more equitable rotation between sea and shore duty for all Sailors and provides career paths for women that are consistent with those of their male counterparts.

## PROFESSIONAL TRAINING AND ADVANCEMENT

The Navy expects everyone who enters the naval service to increase his/her knowledge and skills. Your command will provide the necessary training so you can develop a skill and properly prepare yourself for advancement. Although advancement is an individual effort, the command has the responsibility to provide you with an equal opportunity for training and advancement. How far you advance depends primarily on your own initiative, capabilities, and qualifications.

The Department of the Navy sets the requirements for advancement for paygrades E-1 through E-9. To advance to E-4 through E-7, Sailors must pass an advancement-in-rate exam. However, just meeting all the requirements does not guarantee advancement. Only the most qualified will be advanced, and they will be advanced **only if vacancies exist** for that paygrade. Improving yourself, your skills, and your education increases your chance for advancement.

## MILITARY JUSTICE

To assure equal justice and treatment, your command will continuously review charges, dismissed cases, issued warnings, and all nonjudicial punishment procedures. Such reviews detect racial, religious, ethnic, cultural, or sexual bias affecting either the accusation or the punishment phase of military justice.

## SERVICE AND RECREATIONAL FACILITIES

Service and recreational facilities must meet the needs of all segments of the Navy community. Commands must pay special attention to the possibility of discriminatory practices in the operation of exchanges, commissaries, service clubs, and recreational facilities. Segregation, lack of tolerance of cultural preferences, or discriminatory practices in command facilities are inconsistent with equal opportunity.

Navy exchange facilities provide a variety of products. These products include items purchased by minority and female personnel and dependents, such as special categories of cosmetics, books, magazines, and

***Student Notes:***

records. Barber and beauty shops employ personnel trained and qualified to serve all Navy members and their dependents.

## HOUSING REFERRAL OFFICE

The Department of Defense (DoD) has established housing referral offices at locations with large concentrations of military families. DoD has also established housing referral offices at locations where housing discrimination may exist because of race, color, creed, or national origin.

The Navy requires that all personnel offices include the following statement in orders for detachment and TAD of more than 30 days in any one place:

**"You are directed to report to the appropriate Housing Referral Office prior to negotiating any agreement for off-base housing."**

The HRO provides information about government housing and the type, cost, and availability of private housing. The HRO also maintains a list of facilities banned as housing for military personnel because of discriminatory practices.

Department of the Navy (DoN) policy supports the Federal Fair Housing legislation through its efforts to ensure equal opportunity for available housing. It makes every effort to eliminate off-base housing discrimination toward DoD personnel because of sex, race, color, religion, or national origin. It tries to ensure DoD personnel who meet ordinary standards of character and financial responsibility can obtain off-base housing as easily as any other person.

## EQUAL OPPORTUNITY OFF BASE

Discrimination in the civilian community has an adverse effect on the welfare and morale of military personnel and their dependents. Consequently, discrimination off base is harmful to the military effectiveness of a command. Dealing with discrimination in the civilian community is more difficult than within a command. However, the Navy deals affirmatively with such problems to ensure equal treatment for service members and their dependents in nearby communities.

Commands can take a number of actions to promote equal opportunity for its members in the civilian community. At some installations, problems of mutual concern to the base and the community are discussed on an informal but regular basis. The Navy has established command-community relations committees as another approach. Whatever approach they use, commands make every effort to eliminate off-base discrimination for military personnel and their dependents.

Military personnel moving into or changing their place of residence may not enter into rental, purchase, or lease arrangements with facilities under restrictive sanctions. However, such sanctions do not apply to personnel who may be residing in the facility at the time the sanction is imposed. Personnel who intentionally, and contrary to instructions, take residence in restricted facilities are subject to disciplinary action and loss of basic allowance for quarters (BAQ).

Equal opportunity also applies to public facilities, such as schools, parks, playgrounds, libraries, and hotels. Any person who receives discriminatory treatment in such places can seek relief through military or civilian channels. Normally, you should go through military channels (your chain of command). That gives your command the opportunity to try to get the facility to comply with the law.

The First Amendment of the Constitution guarantees you the rights of freedom of speech and assembly. That means you can attend civil rights demonstrations and similar gatherings. However, service members have several conditions attached to their participation in such demonstrations.

- Navy personnel cannot take part in civil rights demonstrations while wearing their uniform or during duty hours.
- Navy personnel cannot take part in a civil rights demonstration held on a military reservation or in a foreign country.
- Navy personnel cannot take part in demonstrations that violate law and order or that could reasonably be expected to result in violence.

***Student Notes:***

## DISCRIMINATION COMPLAINT PROCEDURES

Apart from their individual merits, legitimate complaints can provide valuable information about the existence of discriminatory treatment within a command. Positive action in cases where complaints are found to be valid lends credibility to your command's stated commitment to ensure equal treatment and justice.

No matter how badly they are treated, most people are reluctant to complain about this treatment or to express grievances to their seniors. People feel that if they complain, they will suffer. *Navy Regulations* and the *U.S. Navy Equal Opportunity Manual* guarantee personnel the right to file a complaint of discriminatory treatment without danger of reprisal from the command. This means that if you file a complaint about the way someone treated you, you can expect to be treated fairly and not be discriminated against by that person or anyone else. However, personnel should gather all pertinent facts before forwarding a complaint.

### Special Request Chit

When you cannot resolve a complaint among the persons involved or with the help of a supervisor (your LPO or division CPO), submit a special request chit as your first course of action. Attach a written complaint to the special request chit and submit it through the chain of command within a timely manner of the incident. You do not have to follow any special format in writing a discrimination complaint. However, you should fully explain the complaint and include all facts.

### Captain's Mast Request

As a Navy member, you have the right to speak with the commanding officer to voice a complaint or get help in resolving a problem. To do this, you request a captain's mast. But, you should request a captain's mast only if your first course of action fails. (Remember, your first course of action is to let the chain of command correct the problem.) You can also request a captain's mast if you feel that the problem you have is so important that immediate action is required. A captain's mast request requires each person in the chain of command to forward the request—whether or not the request is approved.

## FALSE DISCRIMINATION COMPLAINTS

Filing false discrimination complaints is just as serious as discrimination itself. The Navy doesn't tolerate the filing of false discrimination complaints for any reason. The Navy takes the same administrative and disciplinary actions to those who file false complaints as it does to those who discriminate.

# HAZING

**Learning Objectives:** When you finish this chapter, you will be able to—

- Define hazing.
- Identify the Navy's policy on hazing.

Military customs and traditions are a part of the Navy and Marine Corps. Ceremonies, initiations, and rites of passage are leadership tools that instill *esprit de corps* and build respect for the accomplishments of other Sailors and Marines. Most ceremonies honor the bravery of our military men and women and commemorate (memorialize) significant events. The accomplishments of Sailors and Marines and significant events are the basis of the Navy's Core Values—Honor, Courage, and Commitment. Graduations, chiefs' initiations, and crossing-the-line ceremonies are used to celebrate and recognize the achievements of individual Sailors, Marines, or entire units. However, hazing behavior (behavior that is degrading, embarrassing, or causes injuries) is illegal.

## DEFINITION OF HAZING

Hazing is defined as any conduct whereby a military member or members, regardless of service or rank, without proper authority causes another military member or members, regardless of service or rank, to suffer or be exposed to any activity which is cruel, abusive, humiliating, oppressive, demeaning, or harmful. Soliciting or coercing another to perpetrate any such activity is also considered hazing. Hazing need not involve physical contact among or between military members; it can be verbal or psychological in nature. Actual or implied consent to acts of hazing does not eliminate the culpability of the perpetrator.

***Student Notes:***

Hazing can include, but is not limited to, the following types of activities:

- Playing abusive or ridiculous tricks
- Threatening or offering violence or bodily harm to another
- Striking
- Branding
- Taping
- Tattooing
- Shaving
- Greasing
- Painting
- Requiring excessive physical exercise beyond what is required to meet standards
- "Pinning," "tacking on," "blood wings"
- Forcing or requiring the consumption of food, alcohol, drugs, or any other substance

**DEPARTMENT OF THE NAVY (DoN) POLICY ON HAZING**

The DoN's policy on hazing is as follows:

- Hazing is **prohibited** and will not be tolerated.
- No service member in the DoN may engage in hazing or agree to be hazed.
- No commander or supervisor may, by act, word, deed, or omission condone (agree to) or ignore hazing if they know or reasonably should have known, that hazing may or did occur.
- It is the responsibility of every Sailor and Marine to make sure that hazing does not occur. Every service member is responsible to make the appropriate authorities aware of hazing violations.
- Commanders or individuals in supervisory positions are responsible for making sure that all ceremonies and initiations conducted within their organizations or commands comply with this policy.
- Supervisory personnel must make sure that service members participating in command-authorized ceremonies, initiations, and other activities are treated with dignity and respect during these events.
- Reprisal actions against any victim or witness of hazing incidents are strictly prohibited.

**REVIEW 6 QUESTIONS**

Q1. All naval personnel should be treated equally and be given equal opportunities. What program does the Navy use to achieve this purpose?

Q2. Who provides guidance and policy for the CMEO Program?

Q3. Telling a sexist or racial joke would be an example of what type of behavior?

Q4. To avoid discriminating practices in the operation of exchanges, commissaries, service clubs, and recreational facilities, what do command facilities provide?

Q5. Where is the best place for you or your family to start to resolve an off-base discrimination complaint?

***Student Notes:***

Q6. Service members can attend civil rights demonstrations and similar gatherings except for what conditions?

a.

b.

c.

Q7. You have submitted a special request chit and feel that the chain of command has not resolved your discrimination complaint. What should be your next course of action?

Q8. What is hazing?

Q9. What is the Navy's policy on hazing?

## SEXUAL HARASSMENT

**Learning Objectives:** When you finish this chapter, you will be able to—

- Recall the definition of sexual harassment.
- Identify the policies that pertain to sexual harassment.

All military and civilian personnel in the Department of the Navy have responsibilities. One of those responsibilities is to maintain high standards of honesty, integrity, and conduct to assure proper performance of business and to maintain public trust. Sexual harassment violates those standards, especially equal opportunity. Both men and women can be victims or harassers.

Sexual harassment is a form of sex discrimination. Sexual harassment is unwelcome sexual advances, requests for sexual favors, and other verbal or physical conduct that is sexual nature. Sexual harassment occurs when—

- Submission to or rejection of such conduct is made, either explicitly or implicitly, a term or condition of a person's job, pay, or career, or
- Submission to or rejection of such conduct by a person is used as a basis for career or employment decisions affecting that person, or
- Such conduct interferes with an individual's performance or creates an intimidating, hostile, or offensive environment.

This means that if a supervisor or someone in a command position makes sexual advances and tells you that if you don't go along you could lose your job, not be promoted, or make it impossible to do your job because of that persons actions, you are being sexually harassed.

**Any supervisor or person in a command position who uses sexual behavior to control or affect your career, pay, or job is sexually harassing you. Also, any person who makes unwelcome verbal comments, gestures, or physical contact of a sexual nature is sexually harassing you.**

Basically, sexual harassment means bothering someone in a sexual way. For a person's behavior to be considered sexual harassment, it must meet three criteria:

1. Be unwelcome
2. Be sexual in nature
3. Occur in or impact on the work environment

### UNWELCOME BEHAVIOR

Unwelcome behavior is behavior that a person doesn't ask for and considers undesirable or offensive. Not everyone has the same perception (idea) of what is *undesirable or offensive*. What's okay for some people isn't okay for others.

So, whose perception should be used, the person who is giving the unwelcome behavior or the person

***Student Notes:***

receiving (recipient) the unwelcome behavior? The person receiving the behavior is being affected; therefore, it's the recipient's perception that counts. If the recipient is a reasonable person and not overly sensitive, behavior which the recipient finds unwelcome should be stopped. From the view of the recipient, this is a **reasonable personal standard** and is really no more than using common sense.

## BEHAVIOR WHICH IS SEXUAL IN NATURE

Behavior that is sexual in nature is fairly easy to determine. For example, if someone tells sexually explicit jokes, displays sexually suggestive pictures, and talks about sex, that person's behavior is sexual in nature.

Some people consider other behaviors, such as touching, to be sexual in some cases but not in others. Not all touching is sexual in nature. However, touching certain parts of the body or done suggestively is sexual in nature. Again, using common sense is normally enough to tell whether a certain behavior is sexual in nature.

## OCCUR IN OR IMPACT ON THE WORK ENVIRONMENT

For sexual harassment to occur, unwelcome sexual behavior must occur in or impact on the work environment.

### *Quid Pro Quo* (This for That)

When someone is offered or denied something that is work-connected in return for submitting to or rejecting unwelcome sexual behavior, that person is being subjected to a type of sexual harassment known as *quid pro quo* ("this for that").

A person isn't promoted because he/she didn't submit to unwelcome sexual behavior. This is an example of *quid pro quo* sexual harassment. Other examples include the loss of a job, a demotion, or a bad performance eval.

Basically, if a work-connected decision is made because a person is being subjected to or has rejected unwelcome sexual behavior, sexual harassment has occurred. Normally, this is from a senior to a junior, because the senior person can offer something.

### Hostile Environment

If unwelcome sexual behavior of one or more persons in a workplace interferes with another person's work performance, sexual harassment has occurred. Now, suppose the behavior makes the workplace offensive, intimidating, or abusive to another person, whether or not work performance is affected. This type of sexual harassment is called *hostile environment*. The following are examples of a person's behavior that could create a hostile environment:

- Use of sexually explicit or sexually offensive language.
- Display sexually oriented posters or calendars of nude or partially clad individuals.
- Touch someone in a suggestive manner (that is, intentionally brushing against or pinching a person).
- Give someone unwelcome letters, cards, or gifts of a personal nature that have sexual overtones.
- Give unwanted or uninvited pressure for dates.

Some types of unwelcome sexual behavior don't have to create a hostile environment to be sexual harassment. If a person fondles or gropes another person in the workplace, the behavior is considered sexual harassment. This behavior is considered sexual harassment even if it only happened once. Other, less obvious behaviors can become sexual harassment if they are repeated.

## RANGE OF BEHAVIORS

There is a wide range of behaviors, from leering to rape, that can be unwelcome, sexual, and work-connected. These behaviors can constitute sexual harassment. Some behaviors may be unwelcome and work-connected, but not sexual (for example, performance counseling). This behavior is not sexual harassment. To make it easier to understand, it is helpful to think of the entire range of possible behavior in terms of a traffic light. The traffic light has three colors—red,

***Student Notes:***

yellow, and green. Behavior may be divided into three zones.

- Red on the traffic light means **stop**; behavior in the red zone means **don't do it**—it's sexual harassment.
- Yellow on the traffic light means **use caution**; behavior zone may be sexual harassment.
- Green on the traffic light means **go**. Behavior in the green zone means **it's acceptable**—it's not sexual harassment.

Just as with a traffic light, if in the yellow zone long enough, the light will turn red. If yellow zone behavior is repeated enough, especially after having been told it is unwelcome, it becomes red zone behavior—sexual harassment. The following show these three types of behavior, but they are certainly not all-inclusive:

**NOTE**

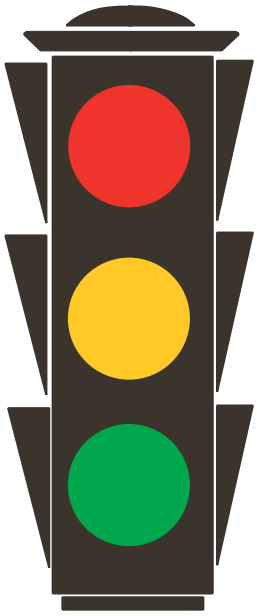
Remember that the above examples are only guides. Individuals who believe they are being sexually harassed base their belief on their perceptions. Also, each incident is judged on all the facts in that particular case, and that individual's judgment may vary on the same facts. Therefore, use caution. Any time sexual behavior is introduced into the work environment or among coworkers, the individuals involved are on notice that the behavior may constitute sexual harassment.

## REPORTING AN INCIDENT INVOLVING SEXUAL HARASSMENT

Individuals who believe they have been sexually harassed have ways to seek resolution and redress (remedy). Check with your CMEO officer for the avenues available to you. All reported incidents of sexual harassment are investigated and resolved at the lowest appropriate level. All incidents are resolved promptly and with sensitivity. Confidentiality will be maintained to every extent possible.

If you believe that you have been sexually harassed, talk about your concerns or objections directly with the person who is behaving in a harassing way. If you are subjected to or observe objectionable behavior, you should promptly notify the chain of command if one of the following conditions exists:

- The objectionable behavior does not stop,
- The situation is not resolved,



**Red zone.** These behaviors are always considered sexual harassment. They include sexual favors in return for employment rewards, threats if sexual favors aren't provided, sexually explicit pictures (including calendars or posters) or remarks, using status to request dates, or obscene letters or comments. The most severe forms of sexual harassment constitute criminal conduct; that is, sexual assault (ranging from forcefully grabbing to fondling, forced kissing, or rape).

**Yellow zone.** Many people would find these behaviors unacceptable, and they could be sexual harassment. These behaviors include violating personal "space," whistling, questions about personal life, lewd or sexually suggestive comments, suggestive posters or calendars, off-color jokes, leering, staring, repeated requests for dates, foul language, unwanted letters or poems, sexually suggestive touching, or sitting or gesturing sexually.

**Green zone.** These behaviors are not sexual harassment. They include performance counseling, touching that couldn't reasonably be perceived in a sexual way (such as touching someone on the elbow), counseling on military appearance, social interaction, showing concern, encouragement, a polite compliment, or friendly conversation.

***Student Notes:***

- Addressing the objectionable behavior directly with the person concerned is not reasonable under the circumstances, or

- The behavior is clearly criminal in nature.

If the person whose behavior is objectionable is a direct superior in the chain of command or if the chain of command condones (tolerates) the conduct or ignores a report, the person subjected to or who has observed the objectionable behavior should promptly communicate the incident through other available means. When possible, always use your chain of command; but, if your boss allows the conduct or ignores a report of objectionable behavior, use other means to report it.

**REVIEW 7 QUESTIONS**

Q1. Improper conduct is considered sexual harassment when—

a.

b.

c.

Q2. List the criteria for a person's behavior to be termed sexual harassment.

a.

b.

c.

Q3. Whose perceptions count when there is unwelcome behavior?

Q4. Your LCPO offers you high marks on your evals in exchange for sexual favors. What type of sexual harassment is this?

Q5. Displaying sexual posters or using sexual explicit language creates what type of environment?

Q6. How has the Navy made it easier to understand the wide range of good to bad behavior?

a.

b.

c.

**FRATERNIZATION**

**Learning Objectives:** When you finish this chapter, you will be able to—

- Recognize the fraternization policy.

- Identify the consequences of not observing this policy.

Article 1165 (Fraternization Prohibited) of the *U.S. Navy Regulations* states: "No person in the Navy is to enter a personal relationship that is unduly familiar, does not respect differences in rank, and is prejudicial to good order and discipline." Some relationships between Navy members violate naval traditions. Unduly familiar relationships can exist between officers, officer and enlisted persons, or between enlisted persons. If there is an unduly familiar relationship between a supervisor and a subordinate, the relationship isn't right and harms good order and discipline. Breaking the rules on fraternization among Regular and Reserve personnel may result in administrative or punitive action.

***Student Notes:***

## FAMILY OMBUDSMAN PROGRAM

**Learning Objectives:** When you finish this chapter, you will be able to—

- Recall the provisions of the Family Ombudsman Program.
- Identify sources of information available to Navy families.

The command ombudsman is a volunteer who is a liaison between the command and families. This person undergoes a regular application and interview process by the command team and is appointed by the commanding officer. Once the CO appoints an ombudsman, he/she attends an intense 21-hour training course that provides the basic tools for performing the duties of the position. In addition, ombudsmen undergo continuous training offered through local assemblies and family service centers.

Since 1973, the focus of the program has shifted away from the grievance-processing role. Today, the enlarged scope of the ombudsman job is assisting COs in their responsibilities for the morale and welfare of the families of the command. In general, any functions that promote these goals may be included in the ombudsman program. It is **always** the CO who determines the content and priorities of that program. The basic roles and functions of an ombudsman are as follows:

- Serve as the primary link/liaison and communicator of information between command families and the command.
- Communicate regularly with command families in ways approved and supported by the command; for example, command newsletter, command-sponsored telephone "Careline," and a phone tree for emergency information as directed by the CO.
- Provide information and outreach to command family members. Interact and cooperate with organizations and military departments, family service centers, chaplain's office, medical treatment facilities, Navy-Marine Corps Relief Society, American Red Cross, Navy Wifeline Association, legal assistance offices, and so forth.
- Refer individuals in need of professional assistance to appropriate resources; possibly provide support to individuals and refer them for counseling.
- Act as an advocate for command family members; help access the appropriate level of chain of command for intervention and for the forwarding of appropriate requests/grievances while exercising confidentiality.
- Participate in indoctrination and orientation programs.
- Assist in welcome programs and act as a family coordinator as part of the command Sponsor Program.
- Represent the command on committees, boards, and working groups in the military or civilian communities concerned with services and support to command families.
- Participate in activities that would promote the morale, health, and welfare or command families.

The ombudsman is trained to help with information and referral; however, they are not a taxi service or babysitter. The Privacy Act and strict rules of confidentiality bind the command ombudsman; they are not a rumor mill.

## REENLISTMENT QUALITY CONTROL PROGRAM

**Learning Objective:** When you finish this chapter, you will be able to—

- Recall the incentives for reenlistment, education, and special duty.

***Student Notes:***

The Reenlistment Quality Control Program sets standards you should meet to be eligible to reenlist. The purpose of the Reenlistment Quality Control Program is as follows:

- To provide a personnel management program to control rating manning, reduce advancement stagnation, and meet end strength requirements
- To issue reenlistment criteria for the Reenlistment Quality Control Program
- To establish terms of years an individual may reenlist based upon Career Reenlistment Objective (CREO) group of his/her rating and years of service at the time of reenlistment
- To establish standardized professional growth points or high-year tenure (HYT) by paygrade
- To establish procedures by which personnel may request consideration for reenlistment/extension beyond established professional growth points

All first-term Sailors in paygrades E-1 through E-6 requesting reenlistment must be approved through the Enlisted Navy Career Options for Reenlistment (ENCORE) Program. E-1/E-2 cannot reenlist unless involved in special programs, such as the 2YO program, and approval is granted through ENCORE. Personnel serving in paygrade E-3 are eligible to reenlist/extend provided they have met the professional growth criteria and have been approved through ENCORE.

The Reenlistment Quality Control Program uses reenlistment codes to indicate whether you have met professional growth criteria. Reenlistment codes reflect the quality control category and the status of personnel who separate from the Navy. If you don't reenlist at your end of active obligated service (EAOS), your Certificate of Release/Discharge from Active Duty (DD214) indicates your reenlistment code. If you decide to reenlist later on, the reenlistment code indicates whether or not you're qualified to reenlist. The reenlistment codes are as follows:

- RE-R1—Recommended for Preferred Reenlistment
- RE-1—Eligible for Reenlistment
- RE-R3—Eligible for Probationary Reenlistment
- RE-4—Not Eligible for Reenlistment.

## STATE AND NATIONAL VOTING PROCEDURES

**Learning Objective:** When you finish this chapter, you will be able to—

- Identify the procedures for state and national voting to include absentee ballots.

Democracy depends on its members access to vote. Department of the Navy policy is to ensure its members, their spouses, and their dependents may register and vote in all elections within their home districts.

The Chief of Naval Personnel directs and supervises the Navy's voting program. The voting program makes sure all ships and stations receive voting information pamphlets, posters, and materials. All eligible personnel receive in-hand delivery of the Federal Post Card Application for Absentee Ballot (FPCA), SF Form 76, and revised 1987, for all federal elections. They receive the ballots well in advance of the November election. The recommended delivery time for overseas areas is 15 August and for stateside personnel 15 September.

## REVIEW 8 QUESTIONS

Q1. Describe why the Navy has a fraternization policy.

Q2. What is the function of the ombudsman?

a.

b.

Q3. How does the ombudsman communicate with Navy families?

***Student Notes:***

Q4. List some the agencies or organizations ombudsman works with.

a.

b.

c.

d.

e.

f.

g.

Q5. What must a first-term Sailor have before they can reenlist or extend?

Q6. When leaving the Navy, what determines if you will be able to reenlist at a later date?

Q7. When away from their home district, how can a Sailor and his family register to vote?

## SUMMARY

Since the Navy is such a large, diverse, and complex organization, it requires numerous programs to help its members resolve a wide variety of problems. For example, the Command Managed Equal Opportunity (CMEO) Program makes sure Navy members have the same basic rights all other citizens in our society enjoy.

Department of the Navy policies govern our day-to-day operations by requiring us to perform to certain standards. Those policies give us a general goal and the guidelines to achieve that goal. Those policies and the programs that support them ensure Navy personnel know how to do their jobs and where to find help to resolve their problems.

## REVIEW 1 ANSWERS

A1. The four main sources of pollutants are—

a. **Agricultural runoff**

b. **Industrial**

c. **Municipal**

d. **Transportation operations**

A2. Pollution affects both the **physical and biological world**.

A3. The primary pollution concern of the Navy is the **pollution produced by shipboard waste**.

A4. The Navy has been **converting their power plants to use more efficient pollution control systems for stack emissions**.

A5. The agreement the Navy follows to operate marine sanitation devices (MSDs) and to dispose of treated sewage in foreign waters is the **Status of Forces Agreement (SOFA)**.

A6. Vessels must be **at least 25 nautical miles** from the U.S. coastline before they can discharge unpulped trash.

## REVIEW 2 ANSWER

A1. The Navy makes every possible effort to **improve the way it uses energy resources, without compromising readiness, effectiveness, or safety**.

## REVIEW 3 ANSWERS

A1. **Delete**

A2. **Delete**

A3. The **Overseas Duty Support Program (ODSP)** provides you with support and information about foreign lands.

A4. Besides the ODSP, you can get information about other countries through the **Overseas Transfer Information Service (OTIS)**.

A5. The **Military Cash Awards Program (MILCAP)** is used to reward individuals for their beneficial suggestions, inventions, and scientific achievements.

## REVIEW 4 ANSWERS

A1. If Navy service members don't meet the fitness or body fat standards and need help to change health habits, they take part in the **Health and Physical Readiness Program**.

A2. The Navy responsibility for pregnant servicewomen is **providing obstetrical care at a medical facility if it has obstetrical/gynecological facilities and if the servicewoman lives in the treatment facility area**.

A3. List the responsibilities of pregnant servicewomen.

a. **Plan pregnancy to meet family and military obligation**

b. **Confirm pregnancy with military medical facility**

c. **Notify CO or OIC of pregnancy**

d. **Perform military duties while pregnant**

e. **Comply with work- and task-related safety and health recommendations**

A4. Service members must complete what forms for family care?

a. **Family Care Plan Certificate, NAVPERS 1740/6**

b. **Family Care Plan Arrangements, NAVPERS 1740/7**

A5. The Department of the Navy public affairs informs the public and service members about the following subjects:

a. **The Navy as an instrument of national policy and security**

b. **Navy operations and programs**

c. **The responsibilities and activities of naval personnel as U. S. citizens**

## REVIEW 5 ANSWERS

A1. The Navy's policy on drug abuse **is zero tolerance**.

A2. The purpose of the Integrity and Efficiency Program **is to detect, deter, and eliminate fraud, waste, and abuse**.

A3. You can report fraud, waste, and abuse situations by the following means:

a. **Chain of command**

b. **Navy hotline**

c. **Naval Criminal Investigative Service (NCIS)**

d. **Congressional communication**

A4. For the public to feel confident about the Navy's integrity, naval personnel should comply with the **Standards of Conduct and Professional Ethics**.

## REVIEW 6 ANSWERS

A1. The Navy uses the **Command Managed Equal Opportunity (CMEO) Program** to ensure that all naval personnel are treated equally and are given equal opportunities.

A2. Guidance and policy for the CMEO Program is provided by the **Chief of Naval Operations**.

A3. Telling an sexist or racial joke is an **insensitive practice**.

A4. Command facilities provide **a variety of products and services in command facilities** to avoid discrimination in the operation of exchanges, commissaries, service clubs, and recreational facilities.

A5. The best place for you or your family to start to resolve an off-base discrimination complaint is **your chain of command**.

A6. Navy personnel can't take part in civil rights demonstrations in the following situations:

a. **While wearing their uniform or during duty hours.**

b. **When held on a military reservation or in a foreign country.**

c. **When law and order are violated or when they could reasonably be expected to result in violence.**

A7. You have submitted a special request chit and feel that the chain of command hasn't resolved your discrimination complaint. **Your next course of action is to request captain's mast**.

A8. Hazing is **any conduct whereby a military member or members, regardless of service or rank, without proper authority causes another military member or members, regardless of service or rank, to suffer or be exposed to any activity which is cruel, abusive, humiliating, oppressive, demeaning, or harmful.**

A9. According to Navy policy, **hazing is prohibited**.

## REVIEW 7 ANSWERS

A1. Improper conduct is considered sexual harassment when—

a. **Submission to or rejection of such conduct is made either explicitly or implicitly a term or condition of a person's job.**

b. **Pay, or career; submission to or rejection of such conduct by a person is used as a basis for career or employment decisions affecting that person.**

c. **Such conduct interferes with an individual's performance or creates an intimidating, hostile, or offensive environment**.

A2. A person's behavior to be termed sexual harassment if is—

a. **Unwelcome**

b. **Sexual in nature**

c. **Occurs in or impacts on the work environment**

A3. The **recipient's perceptions** count when there is unwelcome behavior.

A4. If your LCPO offers you high marks on your evals in exchange for sexual favors, it is ***quid pro quo*** sexual harassment.

A5. Displaying posters or using sexually explicit language creates a **hostile** environment.

A6. To make the range of good to bad behavior easier to understand, the Navy has compared behavior ranges to the traffic light.

a. **Red light—Sexual harassment behavior**

b. **Yellow light—Many people find behavior unacceptable**

c. **Green light—Acceptable behavior, not sexual harassment**

## REVIEW 8 ANSWERS

A1. The function of the ombudsman is to **promote good order and discipline**.

A2. The ombudsman—

a. **Acts as a liaison between Navy families and the command, and**

b. **Keeps the families informed about command policies.**

A3. The ombudsman communicates with Navy families through **command newsletters, command-sponsored telephone "Careline," or phone trees**.

A4. The ombudsman works through the following agencies/organizations:

a. **Navy-Marine Corps Relief Society**

b. **American Red Cross**

c. **Family Service Centers**

d. **Chaplain's office**

e. **Navy Wifeline Association**

f. **Medical treatment facilities**

g. **Legal assistance offices**

A5. Before a first-term Sailor can reenlist or extend, he/she must have **ENCORE** approval.

A6. If you leave the Navy, your **reenlistment code** tells whether you can reenlist.

A7. When away from their home district, a Sailor and his/her family can register to vote by using a **Federal Post Card Application for Absentee Ballot (FPCA)**.

# CHAPTER 2

# MILITARY CONDUCT AND JUSTICE

*I pledge allegiance to the flag of the United States of America, and to the Republic for which it stands, one nation under God, indivisible, with liberty and justice for all.*

Because the United States Navy is a military service and since you are a member of the U.S. Navy, you are expected to be *military* in the best sense of the term. You are expected to know the traditions of the Navy, its customs, and its language. You should understand the organization and mission of the Navy and the "why" behind the Navy's discipline and its drills. In the front of this manual is the Navy Creed; if you haven't read it, read it now. You will see the importance of your responsibilities and duties to your Country and to the Navy.

In this chapter, you will learn about military conduct, which includes the conduct expected of you if you should become a prisoner of war. You will also learn about the military police, the purpose of discipline and punishment, and the three sources that set forth the basic disciplinary laws for the U.S. Navy. Those sources are *U.S. Navy Regulations, Standard Organization and Regulations of the U.S. Navy,* and the *Uniform Code of Military Justice (UCMJ).*

## PERSONAL CONDUCT

Learning Objective: When you finish this chapter, you will be able to—

- Identify the personal characteristics of a good Sailor.

Every Sailor in the Navy should set an example of high personal and military ideals. Every Sailor should always set a good example for other, perhaps younger, nonrated personnel. Remember, a good Sailor always does the following:

- Acts in a military and seamanlike manner.
- Puts the good of the ship and the Navy before personal likes and dislikes.
- Obeys the rules of military courtesy and etiquette as well as the rules of military law.
- Demonstrates loyalty, self-control, honesty, and truthfulness.
- Knows what to do in an emergency and how to do it with the least waste of time and with minimum confusion

As a Sailor, you represent the Navy. People form their opinions of the Navy based on your appearance and actions. Always wear your uniform with pride. Conduct yourself in a manner that will reflect credit on you and the Navy. In effect, you conduct the business of public relations for the Navy. The way in which you sell the Navy to civilians and the way you sell yourself to your superiors and shipmates determines their opinion of you and of the Navy.

A good Sailor is morally responsible. That means you know what's right and what's wrong, and you try to do what is right. As a morally responsible person, you perform all assigned duties as correctly and timely as humanly possible without worrying about personal gain or inconveniences.

To succeed in any line of work, you must be devoted to duty and be able to take orders. Shipboard life is so exacting that a team of members must do many tasks; one person alone cannot do them. In battle or in solving a battle problem, all personnel must work as a team; and it doesn't make any difference whether the team consists of a few or many members.

The Navy isn't the place for the immature self-seeker who puts forth his/her best efforts only when some personal advantage is to be gained. Also, the Navy doesn't have room for the resentful, hardheaded, self-important person who can't take an order. Rules and regulations serve as guides for daily living and, if followed by all, make life more pleasant and easier for all hands.

## THE CODE OF CONDUCT

**Learning Objective:** When you finish this chapter, you will be able to—

- Recognize the responsibilities stated in articles I through VI of the Code of Conduct for members of the Armed Forces of the United States.

Because of the conduct of a few Americans during the Korean conflict, President Dwight D. Eisenhower prescribed a Code of Conduct for members of the armed forces in 1955. That code provides American military personnel with a standard of conduct should they be captured by an enemy. It provides a framework of ideals and ethical standards that will help personnel resist the physical, mental, and moral onslaughts of their captor.

Many Americans have been prisoners of war (POWs), and they all agree that life as a POW is hard. A few POWs were unprepared or lacked the ability to maintain their faith and loyalty under extreme pressure. The enemy broke their will, and they gave information and/or acted in a way that hurt their country and their fellow prisoners.

If you ever become a POW, don't make up stories; your interrogator will eventually catch on and could resort to harsher methods to try to gain information. A simpler, "I don't know," is a better answer. Your captors will use many methods to gain information. They will try to get prisoners to collaborate by torturing them or by trying to turn prisoners against each other. Although forbidden by the Geneva Convention, history has shown that some captors have resorted to physical and mental forms of torture to get the information they want. Maintain your faith in your God, your country, and your fellow prisoners.

Remember the first sentence of the first article of the Code of Conduct, "I am an American, fighting in the forces which guard my country…" If you live up to that principle, you don't ever have to worry about an investigation concerning your behavior. You won't live the rest of your life knowing that something you said harmed your fellow prisoners, comrades in arms, or your country and its allies.

In 1988, President Ronald Reagan issued Executive Order 12633, amending the Code of Conduct to use gender-neutral language. First expressed in written form in 1955, the Code is based on time-honored concepts and tradition that date back to the days of the American Revolution. The six articles of the Code of Conduct are as follows:

### ARTICLE I

I am an American, fighting in the forces which guard my country and our way of life. I am prepared to give my life in their defense.

### ARTICLE II

I will never surrender of my own free will. If in command I will never surrender the members of my command while they still have the means to resist.

### ARTICLE III

If I am captured I will continue to resist by all means available. I will make every effort to escape and aid others to escape. I will accept neither parole nor special favors from the enemy.

### ARTICLE IV

If I become a prisoner of war, I will keep faith with my fellow prisoners. I will give no information or take part in any action which might be harmful to my comrades. If I am senior, I will take command. If not, I will obey the lawful orders of those appointed over me and will back them up in every way.

### ARTICLE V

When questioned, should I become a prisoner of war, I am required to give name, rank, service number and date of birth. I will evade answering further questions to the utmost of my ability. I will make no oral or written statements disloyal to my country and its allies or harmful to their cause.

### ARTICLE VI

I will never forget that I am an American, fighting for freedom, responsible for my actions, and dedicated

***Student Notes:***

to the principles which made my country free. I will trust in my God and in the United States of America.

### REVIEW 1 QUESTIONS

Q1. List the three sources that contain the basic disciplinary laws for the U.S. Navy.

a.

b.

c.

Q2. What is one of the most important characteristics of a good Sailor?

Q3. For you to succeed in your work in the Navy, you should possess what quality?

Q4. Why was the Code of Conduct established?

Q5. What total number of articles are there in the Code of Conduct?

Q6. When questioned under article V, what is the only information you are allowed to give?

## MILITARY POLICE

**Learning Objectives:** When you finish this chapter, you will be able to—

- Recognize the authority of the military police/shore patrol.
- Identify the functions of the military police/shore patrol.

All branches of the armed forces assign personnel to duties as military police. In the Air Force, they are called *security police*; in the Army and Marine Corps, they are called *military police* (*MP*); and in the Navy, they are called *shore patrol* (*SP*). The shore patrol consists of officers and petty officers assigned to assist military personnel ashore. They are identified by armbands bearing the letters *SP*.

In areas where units of different armed services are located, the military police may be combined to form one unit instead of a separate unit for each service. This single unit is known as an *Armed Forces Police Detachment* (*AFPD*), and all members are identified by brassards (armbands) with the letters *AFPD*. The primary duties of AFPD are to assist military personnel ashore, maintain good order and discipline among military personnel, and report conditions or practices that appear prejudicial to the welfare of military personnel. They have authority to stop, question, apprehend, or take into custody any member of the armed forces.

When asked to do so by the military police, you must show your ID card, leave authorization, and the like. You must obey any orders given you by the military police.

Some reminders are listed here for you to observe in any dealings with the military police or shore patrol. (For the remainder of our discussion, *patrol* is used to include all armed forces police.)

1. Obey the orders of the patrol.
2. Don't become argumentative if the patrol is questioning you. The patrol will rightfully question you if you are out of uniform, appear drunk, or act in a suspicious manner.
3. Never interfere with the members of the patrol in the performance of their duty. If you are in a place where a fight has begun or is about to develop and the patrol orders you to leave, do so without protest.

Don't feel that the patrol is trying to harass you. You won't have to prove who you are or verify that

***Student Notes:***

you're entitled to be ashore every time you see a patrol. The patrol will stop you only when you appear to be in, or to be headed for, some kind of trouble or if you arouse their suspicions in some other manner. The military patrol can be a real friend in time of need. The patrol's orders are to be courteous, fair, and reasonable in all dealings with members of the armed forces and with civilians.

Whenever you are away from your ship or station and need advice, directions, or help of any kind, call on the nearest military patrolman or patrol headquarters.

Aboard ships and stations, masters-at-arms (MAAs) and police petty officers have functions similar to those of the shore patrol. The master-at-arms force, headed by the chief master-at-arms (CMAA), works directly for the executive officer. The master-at-arms force enforces Navy and ship regulations, musters restricted personnel, holds reveille, and performs other duties as are required for the maintenance of good order and discipline.

The duties of police petty officers (PPOs) are about the same as those of MAAs, but are on a divisional instead of a shipwide basis. Although PPOs stand their regular watches and perform their normal duties within their divisions, they are assigned additional duties such as making reveille and taps, ensuring compartments are cleaned, and maintaining order. At times they assist the MAA force in searching the ship, and providing bunks for new personnel or passengers.

### REVIEW 2 QUESTIONS

Q1. In the Navy, the military police are known as the—

Q2. Shore patrol personnel are identified by—

Q3. When military police from different branches of the armed forces combine to form one unit, they are known as—

Q4. List the primary duties of the shore patrol.

a.

b.

c.

## PURPOSE OF DISCIPLINE

**Learning Objective:** When you finish this chapter, you will be able to—

- Recall the purpose of good order and military discipline.

The word *discipline* comes from a Latin word meaning "to teach." However, discipline involves a certain type of teaching. Discipline is not peculiar to military organizations. Discipline is the training that develops self-control, character, and efficiency, or is the result of such training. **Discipline is a character builder, not a destroyer of individuality**.

The Navy's discipline consists of training its Sailors to behave in certain ways under certain circumstances. It gets them to work as a unit with maximum efficiency. To encourage Sailors to work as a unit, the Navy uses a system of motivation and correction through reward and punishment. Studious Navy men and women, when recommended by their commanding officers, are rewarded by timely promotions; lazy or careless individuals suffer a self-inflicted punishment by missing out on those promotions. Fines, restriction, confinement, demotion, and other forms of disciplinary action punish Sailors who get into trouble because they are negligent or indifferent.

The signs of discipline are shown in smart salutes, proper wearing of the uniform, prompt and correct action in any emergency, and in battle efficiency that brings victory in wars (fig. 2-1). Discipline, obviously, is indispensable to a military organization. Without it almost any effort would be defeated by lack of organization.

The purpose of discipline in the military services is to bring about an efficient military organization—a body of human beings trained and controlled for

***Student Notes:***

**Figure 2-1.—The results of discipline are shown in prompt and correct action in an emergency, and especially in battle efficiency.**

concerted action for the attainment of a common goal. Each individual understands how to fit into the organization as a whole. The members understand one another through the sharing of common knowledge. They are bound together by a unity of will and interest expressed by their willingness to follow and obey their leader. A group so organized is effective, not only for the specific purpose intended, but also for an emergency. Thus, a gun crew may be readily converted into a repair party for carrying out any essential job within its capabilities; a company of midshipmen may be turned into a fire-fighting organization. A well-disciplined naval unit responds automatically to an emergency and is not subject to panic.

## PUNISHMENT

**Learning Objective:** When you finish this chapter, you will be able to—

- Recall the Navy's concept of punishment.

Based on the Navy's concept, punishment is not personal, vindictive, or inflicted as revenge for misconduct. The Navy realizes punishment cannot right the wrong resulting from an act of dereliction (failure). The value of punishment is the object lesson the punishment teaches the wrongdoer and others—the offense must not be repeated. That concept is referred to as the deterrent theory of punishment.

To accomplish its purpose, punishment must be consistent and just and must be recognized as such by the recipients and their shipmates. Punishment should neither be of such a nature that it lowers self-esteem, nor should it be so severe that it is out of proportion to the offense. Recipients of Navy punishment should keep two facts in mind:

1. Personnel are punished only as a result of their misbehavior, and
2. They will not be punished again if they learn to conform to Navy standards of conduct.

The administration of punishment is not personal; therefore, those who administer it should be shown no malice (hate). They are carrying out their duties as required by *Navy Regulations*.

## REVIEW 3 QUESTIONS

Q1. What method does the Navy use to help Sailors work as a unit with maximum efficiency?

Q2. What is the purpose of discipline in the military?

***Student Notes:***

Q3. What theory of punishment does the Navy use?

Q4. What two things should a recipient of Navy punishment remember?

a.

b.

## REGULATIONS THAT GOVERN THE U.S. NAVY

**Learning Objectives:** When you finish this chapter, you will be able to—

- Recall various parts of the *Navy Regulations* and *Uniform Code of Military Justice* (*UCMJ*) articles.
- Identify types of courts-martial, purpose of the report of offense, and the procedures for redress of grievance.

Figure 2-2 shows the three official sources that set forth the basic disciplinary laws for the Navy. These sources are the *Uniform Code of Military Justice (UCMJ)* (contained in the *Manual for Courts-Martial, 1995 Edition*), *United States Navy Regulations* (commonly called *Navy Regs*), and the *Standard Organization and Regulations of the U.S. Navy* .

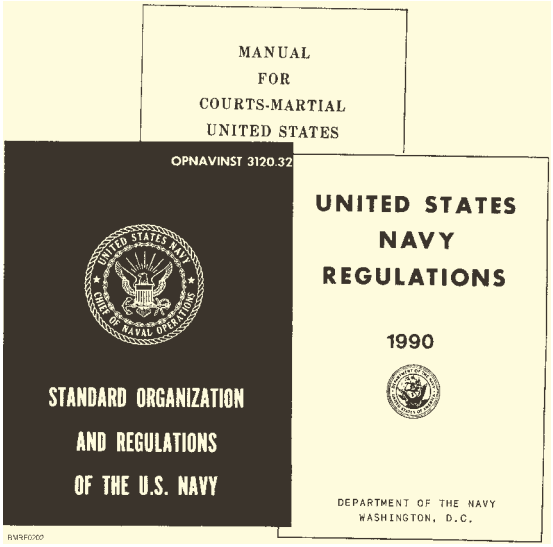



**Figure 2-2.—Three official sources for basic disciplinary laws.**

You probably have heard the saying: "Ignorance of the law is no excuse." This is a true saying. If it weren't, personnel could excuse their misconduct merely by saying they didn't know there was a law against it. When you entered the Navy, you agreed to live by the Navy's laws and regulations. However, you do need time to learn all the rules you must obey. You should make every effort to learn them as soon as possible to avoid embarrassing situations.

The *U.S. Navy Regulations* you must learn about are discussed first. Then the *Standard Organization and Regulations of the U.S. Navy* and the *UCMJ* are discussed.

### U.S. NAVY REGULATIONS

The articles published in *United States Navy Regulations* describe the principal parts of the Department of the Navy. They also describe the duties, authority, and responsibilities of some of the offices within the Department of the Navy, such as the Secretary of the Navy, the Chief of Naval Operations, and the commanding officer. You will find the regulations concerning the honors and ceremonies given to civilian and military officials of the United States and foreign governments in the *Navy Regs.*

*U.S. Navy Regulations* describe the rights and responsibilities of all Navy members. As you become more familiar with the regulations that govern the Navy, you can see that they are written to protect you and to provide guidance affecting your day-to-day routine.

The Chief of Naval Operations is responsible for ensuring the *U.S. Navy Regulations* conform to the current needs of the Department of the Navy. *U.S. Navy Regulations* and changes to it are issued by the Secretary of the Navy after being approved by the President of the United States.

#### Summaries and Excerpts from *Navy Regulations*

This section lists articles (with a condensation of their text, if appropriate) from *United States Navy Regulations, 1990,* that all personnel in the Navy should know. This listing serves only as a starting place for you to learn about Navy regulations. **You are responsible for learning and obeying all regulations**. These

***Student Notes:***

regulations are not punitive articles, but laws under which the Navy operates. Many exist for your own protection. Failure to obey any regulation subjects the offender to charges under article 92, *UCMJ* (Failure to obey an order or a regulation).

The first two digits of the article number indicate the chapter of *Navy Regs* from which the article is taken. If the article is self-explanatory, no further explanation is given; the article will be shown in block quotation exactly as stated in *Navy Regs*. Articles that are lengthy and, in some cases, difficult to interpret, have been paraphrased (rewritten) to give you a brief overview of what the article contains. Remember that in *Navy Regs*, the words *he*, *his*, or *him* refers to both men and women Navy Sailors.

**0818. Publishing and Posting Orders and Regulations**

1. In accordance with Article 137 of the *Uniform Code of Military Justice*, the articles specifically enumerated therein shall be carefully explained to each enlisted person:

a) At the time of entrance on active duty or within six days thereafter;

b) Again, after completion of six months active duty; and

c) Again, upon the occasion of each reenlistment.

2. A text of the articles specifically enumerated in Article 137 of the *Uniform Code of Military Justice* shall be posted in a conspicuous place or places, readily accessible to all personnel of the command.

3. Instructions concerning the *Uniform Code of Military Justice* and appropriate articles of *Navy Regulations* shall be included in the training and educational program of the command.

4. Such general orders, orders from higher authority, and other matters which the commanding officer considers of interest to the personnel or profitable for them to know shall be published to the command as soon as practicable. Such matters shall also be posted, in whole or in part, in a conspicuous place or places readily accessible to personnel of the command.

5. Upon the request of any person on active duty in the armed services, the following publications shall be made available for that person's personal examination:

a) A complete text of the *Uniform Code of Military Justice*;

b) *Manual for Courts-Martial*;

c) *Navy Regulations*;

d) *Manual of the Judge Advocate General*;

e) *Marine Corps Manual* (for Marine Corps personnel); and

f) *Naval Military Personnel Manual* (for Navy personnel) or *Marine Corps Personnel Manual* (for Marine Corps personnel).

**0917. Dealings With Foreigners**

When in foreign ports, officers and enlisted personnel should respect local laws, customs, ceremonies, and regulations; display courtesy and moderation; and cultivate a feeling of good will and mutual respect.

**1001. Officers of the Naval Service**

Officers of the United States naval service shall be known as officers in the line, officers in the staff corps, chief warrant officers and warrant officers.

**1002. Precedence of Officers**

This article discusses the precedence of officers.

**1003. Relative Rank and Precedence of Officers of Different Services**

This article explains the relative rank of grades of officers of the Army, Air Force, Marine Corps, Navy, Coast Guard, and members of the National Oceanic and

***Student Notes:***

Atmospheric Administration and Public Health Service serving with the military.

**1010. Manner of Addressing Officers**

This article describes the proper manner of addressing officers orally and in writing.

**1020. Exercise of Authority**

> All persons in the naval service on active service, and those on the retired list with pay, and transferred members of the Fleet Reserve and the Fleet Marine Corps Reserve, are at all times subject to naval authority. While on active service they may, if not on leave of absence…, on the sick list, taken into custody, under arrest, suspended from duty, in confinement or otherwise incapable of discharging their duties, exercise authority over all persons who are subordinate to them.

**1021. Authority Over Subordinates**

This article gives officers the authority necessary to perform their duties.

**1022. Delegation of Authority**

Although you may delegate authority, that does not relieve you of being responsible. You must make sure the delegated authority is properly exercised and orders and instructions are properly executed.

**1023. Abuse of Authority**

Persons in authority are forbidden to injure their subordinates by tyrannical or capricious conduct, or by abusive language.

**1024. Contradictory and Conflicting Orders**

> If an enlisted person in the naval service receives an order, which annuls, suspends or modifies one received from another superior, he or she shall immediately represent the facts to the superior from whom the last order was received. If, after such representation, the superior from whom the last order was received should insist upon the execution of that order, it shall be obeyed. The person receiving and executing such order shall report the circumstances as soon as practicable to the superior from whom the original order was received.

**1025. Authority of an Officer in Command**

An officer in command, either of the line or of a staff corps, has authority over all officers and other persons attached to the command, whatever their rank and whether they are of the line or of a staff corps.

**1033. Authority in a Boat**

This article provides the senior line officer eligible for command at sea the authority over all persons embarked in a boat. It also delegates to the officer the responsibility for the safety and management of the boat.

**1034. Authority and Responsibility of a Senior Officer Under Certain Circumstances**

This article gives the senior person present, whether an officer or an enlisted person, the authority to take necessary action during a riot, a quarrel between naval service members, or circumstances not covered by these regulations.

**1037. Authority of Warrant Officers, Noncommissioned Officers and Petty Officers**

> Chief warrant officers, warrant officers, noncommissioned officers and petty officers shall have, under their superiors, all necessary authority for the proper performance of their duties, and they shall be obeyed accordingly.

**1038. Authority of a Sentry**

> A sentry, within the limits stated in his or her orders, has authority over all persons on his or her post.

**1052. Orders to Active Service**

You may not be ordered to active service without permission of the Chief of Naval Personnel.

***Student Notes:***

**1064. Detail of Enlisted Persons for Certain Duties**

Petty officers will not be detailed to perform mess duties, except when nonrated persons are unavailable.

**1101. Demand for Court Martial**

> Except as otherwise provided in the *Uniform Code of Military Justice*, no person in the naval service may demand a court martial either on him- or herself or on any other person in the naval service.

**1102. Limitations on Certain Punishments**

> Instruments of restraint, such as handcuffs, chains, irons and straitjackets, shall not be applied as punishment. Other instruments of restraint may not be used except for safe custody and no longer than is strictly necessary….
>
> The punishments of extra duties and hard labor without confinement are not performed on Sunday, although Sunday counts in the computation of the period for which such punishments are imposed.
>
> Guard duty shall not be inflicted as punishment.

**1104. Treatment and Release of Prisoners**

Persons in confinement must not be subjected to cruel or unusual treatment. They must be visited at least once every 4 hours to check on their condition and to care for their needs. In the event of an emergency, they may be removed to a safe area or released within the limits of the command. No greater force than that required to restrain or to confine an offender should be used to take into custody a person under the influence of alcohol, marijuana, narcotic substances, or other controlled substances.

**1105. Places of Confinement**

Prisoners must be confined only in brigs or other facilities designated as naval places of confinement by the Secretary of the Navy. In case of necessary temporary confinement, the senior officer present may authorize confinement in spaces that provide sufficient security, safety for both prisoner and guards, and adequate living conditions.

Persons under the influence of alcohol or other drugs should not be confined in any place or manner that may be dangerous to them in their condition.

**1110. Standards of Conduct**

> All Department of the Navy personnel are expected to conduct themselves in accordance with the highest standards of personal and professional integrity and ethics. At a minimum, all personnel shall comply with directives issued by the Secretary of Defense and the Secretary of the Navy regarding the Standards of Conduct and Government Ethics.

**1111. Pecuniary Dealings with Enlisted Persons**

No officer should have any dealings involving money with enlisted persons except as may be required in the performance of the officer's duties or as involved in the sale of personal property. An officer may be designated by superior authority to accept deposits from enlisted personnel for the purpose of safeguarding those funds under emergency or operational situations.

**1112. Lending Money and Engaging in a Trade or Business**

Naval personnel must not lend money to another member of the armed services at an interest rate, for the period of the loan, that exceeds 18 percent simple interest per year. Personnel may not act as a salesperson or an agent or engage in a business on board without permission of the commanding officer.

**1113. Endorsement of Commercial Product or Process**

> Except as necessary during contract administration to determine specification or other compliance, no person in the Department of the Navy, in his or her official capacity, shall endorse or express an opinion of approval or disapproval of any commercial product or process.

***Student Notes:***

**1115. Report of Fraud**

Any suspicions of fraud, collusion, or improper conduct in matters concerning supplies and repairs should be reported to the proper authority.

**1121. Disclosure, Publication and Security of Official Information**

Naval personnel may not make speeches or write anything that might disclose information of interest to foreign countries or that would aid persons with claims against the United States. If naval personnel publish articles on Navy, political, or international subjects, they must state the views are theirs and not those of the Navy. When such articles are accepted for publication, personnel must forward a complete copy of each article to the Secretary of the Navy.

**1122. Adverse Matter in Officer Fitness Reports and Enlisted Performance Evaluation Reports**

Information of an adverse nature should not be entered in the record of a person of the naval service unless the member was first afforded an opportunity to submit a written statement regarding the matter. Certain medical and dental entries are excepted.

**1125. Inspection of the Record of a Person in the Naval Service**

The record of a person in the naval service which is maintained by the Chief of Naval Personnel or the Commandant of the Marine Corps shall be available for inspection by the person or a duly authorized agent, designated as such in writing by the person.

**1126. Correction of Naval Records**

Any military record in the Department of the Navy may be corrected by the Secretary of the Navy, acting through the Board for Correction of Naval Records, when the Secretary considers that such action should be taken in order to correct an error or to remove an injustice.

Applications for corrections may be made only after exhaustion of all other administrative remedies afforded by law or regulation.

**1127. Control of Official Records**

No person, without proper authority, shall withdraw official records or correspondence from the files, or destroy them, or withhold them from those persons authorized to have access to them.

**1129. Records of Fitness**

Records of fitness reflect each officer and enlisted person's fitness for service and fitness for the performance of duties. These records are used to determine promotions and duty assignments.

**1132. Compliance with Lawful Orders**

All persons in the naval service are required to obey readily and strictly, and to execute promptly, the lawful orders of their superiors.

**1133. Language Reflecting on a Superior**

No person in the naval service shall use language that may tend to diminish the confidence in or respect due to his or her superior officer.

**1134. Exchange of Duty**

An assigned duty may not be changed with another person (such as trading watches) without permission from proper authority.

**1135. Relations with Foreign Nations**

Naval service members must conform to international law and precedents set by the United States in its relations with foreign nations.

**1136. Foreign Religious Institutions**

Navy personnel visiting foreign nations must respect that country's religious institutions and customs.

***Student Notes:***

**1137. Obligation to Report Offenses**

> Persons in the naval service shall report as soon as possible to superior authority all offenses under the Uniform Code of Military Justice which come under their observation, except when such persons are themselves already criminally involved in such offenses at the time such offenses first come under their observation.

You should report all offenses under the UCMJ that you see to the proper authority unless reporting the offense would incriminate yourself. This is known as *self-incrimination*.

**1138. Responsibilities Concerning Marijuana, Narcotics and Other Controlled Substances**

Personnel may not bring on board any naval activity, or have in their possession at any time, marijuana, narcotics, or any controlled substances.

**1140. Capture by an Enemy**

A person in the naval service who is captured by the enemy is required to give name, grade or rate, service number, and date of birth. That person will make no statement disloyal to, critical of, or harmful to the United States or its allies.

**1142. Unavoidable Separation from a Command**

Persons who become separated from their ship, station, or unit by shipwreck, disaster, or other unavoidable happening, should proceed to the nearest U.S. military activity as soon as possible.

**1143. Report of a Communicable Disease**

Personnel should report any suspicions of communicable disease to their medical representative.

**1144. Immunization**

Personnel must take the immunizations prescribed for them as scheduled.

**1145. Service Examinations**

No persons in the Navy, without proper authority, should have or attempt to have in their possession, any examination papers, any part or copy thereof, or any examination answer sheets. They also must not obtain, sell, publish, give, purchase, receive, or reproduce any of these examination products.

**1150. Redress of Wrong Committed by a Superior**

A person who believes a superior has wronged him/her or is guilty of misconduct should submit a complaint to his/her commanding officer.

**1151. Direct Communication with the Commanding Officer**

> The right of any person in the naval service to communicate with the commanding officer in a proper manner, and at a proper time and place, shall not be denied or restricted.

**1152. Suggestions for Improvement**

Any person in the Navy may submit suggestions or constructive criticism about efficiency or economical methods of administration or management within the Department of the Navy. Suggestions or criticism should be submitted to the Secretary of the Navy through the chain of command.

**1154. Communications to the Congress**

Personnel may not, in their official capacity, apply to Congress for congressional action of any kind or provide information requested by Congress. The only exception to this regulation is such communication as authorized by the Secretary of the Navy or as provided by law.

**1155. Dealings with Members of Congress**

All persons may write to their congressmen in a personal or private capacity on any subject as long as they do not violate security regulations or the law.

***Student Notes:***

**1156. Forwarding Individual Requests**

Requests from persons in the naval service shall be acted upon promptly. When addressed to higher authority, requests shall be forwarded without delay. The reason should be stated when a request is not approved or recommended.

**1157. Leave and Liberty**

Leave and liberty will be granted to the maximum extent practicable.

**1159. Possession of Weapons**

Personnel may not have any weapons or explosives in their possession without proper authority.

**1160. Possession of Government Property**

Personnel shall not possess, without permission, any property of the United States except what is needed in the performance of their duty.

**1162. Alcoholic Beverages**

The personal possession of any alcoholic beverages aboard any ship is prohibited. The transportation aboard ship of alcoholic beverages for personal use ashore is authorized subject to the discretion of and under regulations established by the commanding officer.

**1164. Equal Opportunity and Treatment**

All persons in the Department of the Navy regardless of their race, color, religion, sex, or national origin, consistent with requirements for physical capabilities, will be afforded equal opportunity and treatment.

**1165. Fraternization Prohibited**

No person in the Navy is to enter a personal relationship that is unduly familiar, does not respect differences in rank, and is prejudicial to good order and discipline.

**1166. Sexual Harassment**

Do not make offensive verbal comments, gestures, or physical contact in the work environment. Do not use implicit or explicit sexual behavior to control other personnel.

**1167. Supremacist Activities**

No person in the Naval service shall participate in any organization that espouses supremacist causes; attempts to create illegal discrimination based on race, creed, color, sex, religion, or national origin; advocates the use of force or violence against the government of the United States or the government of any state, territory, district, or possession thereof, or the government of any subdivision therein; or otherwise engages in efforts to deprive individuals of their civil rights.

***STANDARD ORGANIZATION AND REGULATIONS OF THE U.S. NAVY***

The *Standard Organization and Regulations of the U.S. Navy*, OPNAVINST 3120.32, provides regulations and guidance governing the conduct of all members of the Navy. This instruction specifies duties and responsibilities of personnel within a unit organization—from the commanding officer down to the messenger of the watch.

Naval personnel who fail to comply with regulations may be awarded punishment based on the *Uniform Code of Military Justice (UCMJ)*. Many regulations are printed on large posters and posted in conspicuous locations aboard naval units.

**Excerpts from the *Standard Organization and Regulations of the U.S. Navy***

This section contains some of the articles contained in chapter 5, "Regulations," of the OPNAVINST 3120.32. Self-explanatory articles are shown in block quotation exactly as stated in the OPNAVINST 3120.32. Sections that are lengthy or difficult to interpret are paraphrased to briefly explain the contents of the regulation.

***Student Notes:***

**510.5 Armed Forces Identification Cards and Leave Papers**

No person without proper authority shall:

a. Have in his/her possession more than one properly validated Armed Forces identification card.

b. Depart on liberty without his/her own properly validated identification card; or, in the case of leave, without his/her own properly validated leave papers and identification card.

c. Have in his/her possession a false or unauthorized identification card; or a mutilated, erased, altered, or not properly validated identification card; or an identification card bearing false or inaccurate information concerning a name, grade, service number, or date of birth.

d. Return from leave without depositing his/her leave papers with the proper authority. Any person returning without an identification card shall report the loss to the OOD in person.

**510.14 Customs**

Upon arrival of a naval unit in United States territory after visiting a foreign port, it is subject to customs and other inspections by Federal authorities.

a. On such occasions, customs declarations will be distributed to all hands in sufficient time to be filled out and returned before arrival in port.

b. It shall be the duty of all personnel to accurately complete customs declarations prior to arrival in port.

c. No person, without permission from the commanding officer, shall bring on board any article, animal, or any other thing, the introduction of which into U.S. territory is forbidden or restricted under current regulations.

**510.16 Divine Services**

Accessible and appropriate space shall be provided for divine services. No person shall conduct himself/herself in a manner that would interfere with properly authorized divine services.

**510.18 Emergency Equipment**

No person shall use emergency equipment for any purpose other than that for which it is intended. Emergency equipment includes items such as battle lanterns, emergency first aid boxes, shoring, wrenches, life rings, equipment in life rafts and boats, portable fire pumps, fire hoses, and fuel for emergency machinery.

**510.21 Government Property**

No person shall:

a. Conceal or fail to report to proper authority the loss, removal, destruction, or damage of government property entrusted to his/her care or custody.

b. Remove without proper authority from its regular place of stowage or location, for any purpose whatever, any article of government property, including hull and damage control fittings, first aid equipment, life saving and emergency equipment, and stores and foodstuffs.

c. Have in his/her possession any article of government property except as may be necessary for the performance of his/her duty or as may be authorized by proper authority.

**510.27. Intoxicated Persons**

a. The officer of the deck or the command duty officer shall ensure that the medical officer or a qualified representative shall promptly examine all persons who return on board in an intoxicated condition, or found on board intoxicated.

***Student Notes:***

b. When restraint is imposed on an individual, it should be in such a manner as to accomplish the desired degree of restraint with a minimum of force. Attachment of an individual to a fixed or immovable object should only be authorized when all else fails, and then a continuous guard should be posted with specific instructions to care for the welfare of the person under restraint in the event of an emergency.

**510.34 Motor Vehicles**

a. No person shall operate a Government-owned motor vehicle assigned to a naval unit unless specifically designated to do so by the commanding officer, and then only for official unit business.

b. Military personnel operating Government-owned motor vehicles shall comply with all post, station, local, state, and federal directives. U.S. Government operator's permit is not required for vehicles under one ton.

c. All persons operating Government-owned motor vehicles assigned to a naval unit shall obtain the permission of the OOD before driving away from the unit and shall report to the OOD upon return.

**510.35 Working Stocks of Narcotics**

All narcotics and other controlled substances authorized for medical purposes shall be in the custody of the medical or dental officer. No one shall have access to this material except as prescribed by these officers or the commanding officer.

a. The medical and dental officers shall supervise in person all receipts and issues of narcotics and other controlled substances in their custody and shall keep proper records of all transactions to ensure strict accountability and detect losses promptly.

b. With the exception of medical and dental officers, no person shall prescribe or administer any narcotics or other controlled substances, either to oneself or to another person, except to aid the injured during action or emergencies. The medical and dental officers may authorize certain hospital corpsmen and dental technicians to administer narcotics and controlled drugs to patients in sick bay per the medical and dental officer's prescription.

c. In units to which no medical officer is attached, all narcotics and dangerous drugs shall be in the custody of the controlled substances custodian, except small quantities of necessary narcotics and dangerous drugs that may be issued to the leading petty officer in the medical department. The narcotics and dangerous drugs shall be kept in a three-combination safe or, if this is not possible, under lock and key. All transactions between the bulk custodian and medical department representative shall be receipted for. Issues from the working stock in the sick bay shall be covered by prescription. Narcotics and dangerous drugs shall be inventoried monthly by a special inventory board….

**510.44 Photographic Equipment**

No person shall:

a. Possess or introduce on board a naval unit any camera or other photographic equipment capable of exposing a photographic plate or film without permission of the commanding officer or authorized representative.

b. Make photographs of a naval unit or its equipment, or of objects from the unit, without permission of the commanding officer, and then only of the objects for which permission was specifically given.

c. While on watch or duty as a sentry or member of a patrol, knowingly permit the introduction of any camera or photographic equipment on board a naval unit unless such equipment is authorized by the commanding officer or authorized representative.

***Student Notes:***

## UNIFORM CODE OF MILITARY JUSTICE

Until 1951, the various branches of our armed forces operated under different military codes. The Army's *Articles of War* guided the administration of discipline and legal processes of the Army and Air Force. The Navy was guided by the *Articles for the Government of the Navy* ("Rocks and Shoals"), and the Coast Guard, by the *Disciplinary Laws of the Coast Guard*. Not surprisingly, an act considered an offense in the eyes of the Navy might not have been judged so in the Army. Even if an act was a breach of discipline in all branches of the armed forces, the type of trial and severity of punishment awarded varied.

A standardized code of military justice was recognized as a logical and necessary unification measure. Secretary of Defense, James Forrestal, appointed an interservice committee to study the measure. After an intensive study, the committee drafted what is now known as the *Uniform Code of Military Justice (UCMJ)*. The *UCMJ* was passed by Congress on 5 May 1950, signed into law by the President, and became effective 31 May 1951.

The *Manual for Courts-Martial, United States, 1951 (MCM)*, consolidated and standardized military legal procedures. Effective 31 May 1951, the same date as the original *UCMJ*, the *MCM* became the new standard of military justice. Case decisions of the Court of Military Appeals and changes in courts-martial procedures have made necessary several changes to the original manual. The current edition is the *Manual for Courts-Martial, 1995 Edition*.

Congress and the Navy have taken steps to ensure you will know the disciplinary laws and regulations most likely to affect your daily life. Article 137 of the *UCMJ* states that certain articles of the Code must be explained carefully to every enlisted person at certain intervals. They must be explained—

- at the time the person enters on active duty,
- after 6 months of active duty, and
- when the person reenlists.

In general, these articles concern the following topics:

| Article | Subject |
|---|---|
| 2 | Persons subject to the Code |
| 3 | Jurisdiction to try certain persons even though they have been separated from the service |
| 7-14 | Apprehension and restraint |
| 15 | Nonjudicial punishment (captain's mast) |
| 25 | Membership of courts-martial |
| 27 | Detail of trial and defense counsel |
| 31 | Compulsory self-incrimination prohibited |
| 37 | Unlawful influence on the court |
| 38 | Duties of counsel |
| 55 | Certain cruel and unusual punishments prohibited |
| 77-134 | Punitive articles |
| 137 | Articles that must be explained |
| 138 | Complaints of wrongs |
| 139 | Payment for injury or loss of property |

*Navy Regulations* supplements article 137 of the *UCMJ* by requiring each command to post the text of those articles in the preceding list in a conspicuous place. *Navy Regs* also requires each command to include these and other appropriate articles of *Navy Regulations* in the command's training and education program. Copies of the complete *UCMJ* (140 articles), *Navy Regulations*, and other general orders are available to any person who wants to read them.

### Excerpts from the *Uniform Code of Military Justice*

The purpose of this section is not to make you an expert on the *Uniform Code of Military Justice (UCMJ)* but to give you an overview of each of the articles

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prescribed by article 137. Those articles that are self-explanatory are shown in block quotation as stated in the *UCMJ*; no further explanation is given. Some of the more lengthy articles have been shortened to present only portions of these articles. Articles that are lengthy and, in some cases, difficult to interpret are paraphrased (rewritten) to give you a brief overview of what the article contains.

**NOTE**

> In this section of the chapter, the words "he," "his," and "him" do not indicate gender and are used for economy of communication.

**Art. 2. Persons Subject to this Code**

> The following persons are subject to this code:
>
> (1) Members of a regular component of the armed forces, including those awaiting discharge after expiration of their terms of enlistment; volunteers from the time of their muster or acceptance into the armed forces; inductees from the time of their actual induction into the armed forces; and other persons lawfully called or ordered into, or to duty in or for training in, the armed forces, from the dates when they are required by the terms of the call or order to obey it.

This article includes all persons on active duty, certain retired persons, prisoners, and prisoners of war.

You should specifically note the following provisions of article 2:

- Any person serving a sentence imposed by a court-martial remains subject to the *UCMJ*. Thus a prisoner who is serving a court-martial sentence may be tried for a crime committed while a prisoner. This applies even though the prisoner's term of enlistment has expired at the time of commission of the crime.

- A reservist on inactive-duty training is subject to the *UCMJ* when (a) the training is authorized by written orders; (b) the orders are voluntarily accepted by the reservist; and (c) the orders specify that the reservist is subject to the *UCMJ*.

- A reservist ordered into the active military service is subject to the *UCMJ* beginning on the date specified in the orders for the reservist to report for active duty.

- The United States Supreme Court has held unconstitutional the exercise of court-martial jurisdiction over civilians in time of peace.

**Art. 3. Jurisdiction to Try Certain Personnel**

Article 3 states that a person may be tried by court-martial, even after leaving the service, for offenses committed while subject to the *UCMJ*.

**Art. 7. Apprehension**

> (a) Apprehension is the taking of a person into custody.
>
> (b) Any person authorized under regulations governing the armed forces to apprehend persons subject to this code or to trial thereunder may do so upon reasonable belief that an offense has been committed and that the person apprehended committed it.
>
> (c) Commissioned officers, warrant officers, petty officers, and noncommissioned officers have authority to quell quarrels, frays, and disorders among persons subject to this code and to apprehend persons subject to this code who take part therein.

Enlisted persons performing police duties should not apprehend an officer except on specific orders of a commissioned officer. The exception is when such apprehension is necessary to prevent disgrace to the service, the commission of a serious offense, or the escape of one who has committed a serious offense. In such cases, the apprehending individual immediately notifies the officer to whom he or she is responsible or an officer of the security police, military police, or shore patrol.

An apprehension is effected by clearly notifying the offender that he/she is thereby taken into custody. The order may be oral or written.

***Student Notes:***

A clear distinction exists between the authority to apprehend and the authority to arrest or confine (article 9). Any person empowered to apprehend an offender, however, is authorized to secure the custody of an alleged offender until proper authority may be notified.

**Art. 8. Apprehension of Deserters**

Any civil officer having authority to apprehend offenders under the laws of the United States or of a State, Territory, Commonwealth, or possession, or the District of Columbia may summarily apprehend a deserter from the armed forces and deliver him into the custody of those forces.

When a military service sends out a description of a deserter, with a request for the deserter's apprehension, the notice gives civil officers the authority to apprehend the person.

**Art. 9. Imposition of Restraint**

(a) Arrest is the restraint of a person by an order not imposed as a punishment for an offense, directing him to remain within certain specified limits. Confinement is the physical restraint of a person.

(b) An enlisted member may be ordered into arrest or confinement by any commissioned officer by an order, oral or written, delivered in person or through other persons subject to this code. A commanding officer may authorize warrant officers, petty officers, or noncommissioned officers to order enlisted members of his command or subject to his authority into arrest or confinement.

(c) A commissioned officer, a warrant officer, or a civilian subject to this code or to trial thereunder may be ordered into arrest or confinement only by a commanding officer to whose authority he is subject, by an order, oral or written, delivered in person or by another commissioned officer. The authority to order such persons into arrest or confinement may not be delegated.

(d) No person may be ordered into arrest or confinement except for probable cause.

(e) Nothing in this article limits the authority of persons authorized to apprehend offenders to secure the custody of an alleged offender until proper authority may be notified.

**Art. 10. Restraint of Persons Charged with Offenses**

Any person subject to this chapter charged with an offense under this chapter shall be ordered into arrest or confinement, as circumstances may require; but when charged only with an offense normally tried by a summary court-martial, he shall not ordinarily be placed in confinement. When any person subject to this chapter is placed in arrest or confinement prior to trial, immediate steps shall be taken to inform him of the specific wrong of which he is accused and to try him or to dismiss the charges and release him.

As the words *normally* and *ordinarily* imply, the provisions of this article may not apply in exceptional cases. Whether to confine, arrest, or restrict a person in lieu of arrest is with the discretion of the officer having the power to do so. What this article says, in effect, is that in most instances confinement is not necessary for persons accused of minor offenses.

**Art. 11. Reports and Receiving of Prisoners**

(a) No provost marshal, commander of a guard, or master-at-arms may refuse to receive or keep any prisoner committed to his charge by a commissioned officer of the armed forces, when the committing officer furnishes a statement, signed by him, of the offense charged against the prisoner.

(b) Every commander of the guard or master-at-arms to whose charge a prisoner is committed shall, within twenty-four hours after that commitment or as soon as he is relieved from guard, report to the commanding officer the name of the prisoner, the offense charged against him, and the name of the person who ordered or authorized the commitment.

***Student Notes:***

An arrest is imposed by notifying the person to be arrested that the person is under arrest and informing the person of the limits of the arrest. The order of arrest may be oral or written. A person to be confined is placed under guard and taken to the place of confinement.

**Art. 12. Confinement with Enemy Prisoners Prohibited**

> No member of the armed forces may be placed in confinement in immediate association with enemy prisoners or other foreign nationals not members of the armed forces.

Members of the armed forces may be confined in the same jails, prisons, or other confinement facilities, however, so long as they are separated from the other categories mentioned.

**Art. 13. Punishment Prohibited Before Trial**

> No person, while being held for trial, may be subjected to punishment or penalty other than arrest or confinement upon the charges pending against him, nor shall the arrest or confinement imposed upon him be any more rigorous than the circumstances required to ensure his presence, but he may be subjected to minor punishment during that period for infractions of discipline.

The minor punishment permitted under article 13 includes that authorized for violations of discipline set forth by the place in which the person is confined. The article does not prevent a person from being required to do ordinary cleaning or policing or from taking part in routine training and duties not involving the bearing of arms.

**Art. 14. Delivery of Offenders to Civil Authorities**

> (a) Under such regulations as the Secretary concerned may prescribe, a member of the armed forces accused of an offense against civil authority may be delivered, upon request, to the civil authority for trial.
>
> (b) When delivery under this article is made to any civil authority of a person undergoing sentence of a court-martial, the delivery, if followed by conviction in a civil tribunal, interrupts the execution of the sentence of the court-martial, and the offender after having answered to the civil authorities for this offense shall, upon the request of competent military authority, be returned to military custody for the completion of his sentence.

**Art. 15. Commanding Officer's Nonjudicial Punishment**

Article 15 explains commanding officers' nonjudicial punishment. For some offenses, commanders may offer an article 15 instead of court-martial. If accepted, the commander may impose punishment as permitted by regulations (usually at captain's mast). Receiving an article 15 is not a conviction, and it does not give a person a criminal record. This article will be explained in greater detail later in this chapter under "Nonjudicial Punishment."

**Art. 25. Who May Serve on Courts-Martial**

Any commissioned officer, including commissioned warrant officers, on active duty with the armed forces is eligible to serve on a court-martial. Any warrant officer on active duty with the armed forces is eligible to serve on a general court-martial (GCM) and special court-martial (SPCM) for the trial of any person, other than a commissioned officer. Any enlisted person on active duty with the armed forces who is not a member of the same unit as the accused is eligible to serve on general and special courts-martial for the trial of enlisted persons. However, enlisted personnel may serve as a member of a court-martial only if, before the assembling of such court, the accused has personally requested in writing that enlisted personnel serve as members of the court.

**Art. 27. Detail of Trial Counsel and Defense Counsel**

Each general and special court-martial must have a trial counsel and a defense counsel, with such assistants as the convening authority deems necessary. The terms *counsel, trial counsel*, and *defense counsel* should be

***Student Notes:***

interpreted to mean the detailed counsel named in the convening order. The term *individual counsel* refers to the military counsel selected by the accused or the civilian counsel provided by the accused at his/her own expense.

The trial counsel and defense counsel detailed for a general court-martial must have equivalent legal qualifications. Each must be a judge advocate of the Army, Navy, Air Force, or Marine Corps who is a graduate of an accredited law school or is a member of the bar of a federal court or of the highest court of a state. Each must be certified as competent to perform such duties by the Judge Advocate General of the armed forces of which he/she is a member. A civilian counsel must be a member of the bar of a federal court or of the highest court of a state.

In a special court-martial, the accused must be afforded the opportunity to be represented by counsel qualified under article 27, *UCMJ*, unless such counsel cannot be obtained because of the geographical location or pressing military requirements. If qualified defense counsel cannot be obtained, the court may be convened and the trial held. The convening authority makes a written statement that states why qualified counsel cannot be obtained. The following conditions must be met:

- If the detailed trial counsel or any assistant trial counsel is qualified to act as counsel before a general court-martial, the defense counsel must be a qualified person; and
- If the detailed trial counsel or any assistant trial counsel is a judge advocate or a member of the bar of a federal court or the highest court of a state, the defense counsel detailed by the convening authority must be one of the foregoing.

**Art. 31. Compulsory Self-Incrimination Prohibited**

Article 31 explains your rights not to provide evidence against yourself (self-incrimination), a right given to all citizens under the Fifth Amendment to the U.S. Constitution. The following statements explain your rights against self-incrimination:

- You cannot be forced to answer questions or give evidence that may help to prove your guilt.
- You must be told the nature of the offense of which you are accused; that you do not have to make any statement; and that if you do, it can be used against you.
- You cannot be forced to make a statement or give evidence in a trial that is not related to the case or that may degrade you.
- No statement obtained from you by threats or trickery can be used against you in a court-martial trial.

**Art. 37. Unlawfully Influencing Action of Court**

> (a) No authority convening a general, special, or summary court-martial, nor any other commanding officer, may censure, reprimand, or admonish the court or any member, military judge, or counsel thereof, with respect to the findings or sentence adjudged by the court, or with respect to any other exercise of its or his functions in the conduct of the proceedings. No person subject to this chapter may attempt to coerce or, by any unauthorized means, influence the action of a court-martial or any other military tribunal or any member thereof, in reaching the findings or sentence in any case, or the action of any convening, approving, or reviewing authority with respect to his judicial acts.

Article 37 is designed to ensure that every court, its members, and its officers are completely free to fulfill their functions without fear of reprisal.

**Art. 38. Duties of Trial Counsel and Defense Counsel**

The trial counsel prosecutes in the name of the United States and, under the direction of the court, prepares the record of proceedings. The duties of the trial counsel might be compared to those of a civil district attorney. The prosecution must prove beyond a reasonable doubt the guilt of the accused for each offense charged. Of course, such burden of proof is

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relieved by a plea of guilty. The many duties of the trial counsel vary widely beginning at the time of assignment to the trial. The duties change throughout the preparation for trial, the trial itself, and the preparation and disposition of the record of trial.

All accused persons have the right to be represented before special and general courts-martial by defense counsel. This counsel may be a civilian or military lawyer selected by the accused or the convening authority may appoint a defense counsel. If a civilian counsel is selected, the accused must pay the counsel's expenses. If the accused prefers to select a civilian counsel, the detailed counsel and assistant counsel act as associate counsel if the accused so desires; otherwise, they may be excused.

**Art. 55. Cruel and Unusual Punishments Prohibited**

Article 55 prohibits any cruel or unusual punishment. In particular, courts-martial are forbidden to award sentences that include flogging, branding, marking, or tattooing the body. The use of irons is also prohibited except for the purpose of safe custody.

**Punitive Articles of the *UCMJ***

The punitive articles of the *UCMJ* are those numbered 77 through 134. They are the laws of Congress telling you what you must do and must not do, under pain of punishment.

What about civil laws? Can you be given military punishment for nonmilitary offenses? Yes, you can. For example, the only *UCMJ* regulations against drunkenness are for drunken driving and being drunk on duty. Many civilian communities, though, have laws against public intoxication. If you are found guilty in civil court and spend time in jail for public intoxication, the Navy can try you for being absent without leave (*UCMJ*, article 86) and for bringing discredit upon the Navy (*UCMJ*, article 134).

If you willfully refuse to pay just debts, you will be warned to pay them by your commanding officer. Continued failure to pay your debts can lead to an undesirable type of discharge. The Navy has no use for people who don't exhibit integrity and honesty. On the other hand, if unscrupulous dealers are gouging you, see your legal officer for assistance.

The punitive articles that follow are those that you are required to know. If you have any questions about their meaning, ask your division officer for guidance.

**Art. 77. Principals**

The mere fact that a person is at the scene of a crime does not make the person a principal. To be a principal of a crime, the person must be guilty of intent to aid or encourage the person(s) who committed the crime.

A person who witnesses a crime can be a principal. Evidence must show the witness had a duty to interfere and the witness's noninterference was intended to operate and did operate to encourage or protect the perpetrator.

A person may be a principal even though not at the scene of the crime if he/she commanded, advised, or obtained another person to commit an offense.

**Art. 78. Accessory After the Fact**

> Any person subject to this chapter who, knowing that an offense punishable by this chapter has been committed, receives, comforts, or assists the offender in order to hinder or prevent his apprehension, trial, or punishment shall be punished as a court-martial may direct.

A person who voluntarily gives an escaped prisoner provisions that permit him/her to avoid pursuers becomes an accessory after the fact to the prisoner's escape. Provisions include transportation, clothing, money, or any other necessities.

**Art. 79. Conviction of Lesser Included Offense**

> An accused may be found guilty of an offense necessarily included in the offense charged or of an attempt to commit either the offense charged or an offense necessarily included therein.

***Student Notes:***

Examples of what generally are held to be lesser-included offenses contained in a principal offense include the following:

| ART | PRINCIPAL OFFENSE | ART | LESSER INCLUDED OFFENSE |
|---|---|---|---|
| 94 | Mutiny | 92 | Failure to obey order or regulation |
| 94 | Sedition | 116 | Riot or breach of peace |
| 95 | Resistance, breach of arrest, and escape | 134 | General article |
| 118 | Murder | 119 | Manslaughter |
| 122 | Robbery | 121 | Larceny and wrongful appropriation |
| 124 | Maiming | 128 | Assault |

**Art. 80. Attempts**

(a) An act, done with specific intent to commit an offense under this chapter, amounting to more than mere preparation and tending, even though failing, to effect its commission, is an attempt to commit that offense.

(b) Any person subject to this chapter who attempts to commit any offense punishable by this chapter shall be punished as a court-martial may direct, unless otherwise specifically prescribed.

(c) Any person subject to this chapter may be convicted of an attempt to commit an offense although it appears on the trial that the offense was consummated.

An accused may be guilty of an attempt even though the crime turns out to be impossible to commit because of an outside intervening circumstance. For example, a pickpocket who puts a hand in the pocket of another person with the intent to steal a billfold is guilty of an attempt to commit larceny, even though the pocket is empty.

**Art. 81. Conspiracy**

*Conspiracy* is defined as an agreement between two or more persons to commit a crime. Conspiracy refers to such a plan by a group whose intent usually is to commit a crime of a bold nature, such as overthrowing a government.

The agreement in a conspiracy need not be formal. The agreement need only be a common understanding in the minds of the parties to accomplish the objective of the conspiracy.

**Art. 82. Solicitation**

(a) Any person subject to this chapter who solicits or advises another or others to desert in violation of…(article 85) or mutiny in violation of…(article 94) shall, if the offense solicited or advised is attempted or committed, be punished with the punishment provided for the commission of the offense, but, if the offense solicited or advised is not committed or attempted, he shall be punished as a court-martial may direct.

(b) Any person subject to this chapter who solicits or advises another or others to commit an act of misbehavior before the enemy in violation of…(article 99) or sedition in violation of…(article 94) shall, if the offense solicited or advised is committed, be punished with the punishment provided for the commission of the offense, but, if the offense solicited or advised is not committed, he shall be punished as a court-martial may direct.

Solicitation may be accomplished by other means than by word of mouth or by writing. Any act or conduct that may reasonably be considered as a serious request or advice to commit one of the offenses named in the article may constitute solicitation. The accused may act through other persons in committing this offense.

***Student Notes:***

**Art. 83. Fraudulent Enlistment, Appointment, or Separation**

Any person who:

(1) procures his own enlistment or appointment in the armed forces by knowingly false representation or deliberate concealment as to his qualifications for that enlistment or appointment and receives pay or allowances thereunder; or

(2) procures his own separation from the armed forces by knowingly false representation or deliberate concealment as to his eligibility for that separation;

shall be punished as a court-martial may direct.

An essential element of the offense of fraudulent enlistment or appointment is that the accused shall have received pay or allowances while under that enlistment or appointment. Acceptance of food, clothing, shelter, or transportation from the government constitutes receipt of allowances.

After apprehension, an accused charged with having fraudulently obtained separation from a branch of the armed forces is subject to the *UCMJ*. The accused is subject to the *UCMJ* while in the custody of the armed forces and while awaiting trial for the fraudulent separation.

**Art. 84. Unlawful Enlistment, Appointment, or Separation**

Any person subject to this chapter who effects an enlistment or appointment in or a separation from the armed forces of any person who is known to him to be ineligible for that enlistment, appointment, or separation because it is prohibited by law, regulation, or order shall be punished as a court-martial may direct.

**Art. 85. Desertion**

Members of the armed forces who, without permission, leave their place of duty or organization with the intent to remain away permanently are guilty of desertion.

The status of an absentee changes to that of a deserter after 30 days of absence, or sooner if the intent to desert is apparent. For example, suppose a Navy member goes ashore without permission, taking all personal belongings and announcing to shipmates that he/she is leaving the service for good. That person could be immediately declared a deserter.

After an individual is declared a deserter, notification is forwarded to the next of kin, the deserter's hometown police, and various other law enforcement agencies, including the FBI. Deserters are nearly always caught and identified because of nationwide fingerprinting and identification practices. Furthermore, expenses incurred in the return of the deserter to military control are chargeable to the returned absentee.

The effects of desertion can be many; some can be severe. If tried and convicted of desertion, the deserter is almost certainly imprisoned; in time of war, the deserter may be executed. A person whose conviction of desertion in time of war results in a dishonorable discharge can never hold any office of trust or profit in the United States government.

**Art. 86. Absence without Leave**

Any member of the armed forces who, without authority—

(1) fails to go to his appointed place of duty at the time prescribed;

(2) goes from that place; or

(3) absents himself or remains absent from his unit, organization, or place of duty at which he is required to be at the time prescribed;

shall be punished as a court-martial may direct.

This article covers every case not provided for in the other punitive articles in which an armed forces member, through that member's own fault, is not in a required location at a specified time. As opposed to desertion, whether or not the member intended to remain away makes no difference. The intent is expressed by the member's absence.

***Student Notes:***

Make sure you avoid the bad habit of taking the last bus, train, or plane when returning from leave. Always allow time for unexpected delays.

**Art. 87. Missing Movement**

> Any person subject to this chapter who through neglect or design misses the movement of a ship, aircraft, or unit with which he is required in the course of duty to move shall be punished as a court-martial may direct.

Provisions of article 87 should be self-explanatory. However, note that the violator, to be found guilty, need not have known the exact hour or even the exact date of the scheduled movement. If a person had knowledge of only the approximate date, the court may convict the absentee on the charge of missing movement. Missing movement is a serious offense in the Navy. It leaves the ship shorthanded and requires someone else to do the absentee's work and stand the absentee's watches.

**Art. 88. Contempt Toward Officials**

> Any commissioned officer who uses contemptuous words against the President, the Vice President, Congress, the Secretary of Defense, the Secretary of a military department, the Secretary of the Treasury, or the Governor or legislature of any State, Territory, Commonwealth, or possession in which he is on duty or present shall be punished as a court-martial may direct.

**Art. 89. Disrespect Toward Superior Commissioned Officer**

> Any person subject to this chapter who behaves with disrespect toward his superior commissioned officer shall be punished as a court-martial may direct.

A superior commissioned officer is a commissioned officer that is superior in rank or command. Disrespect includes insulting words, insolence, impertinence, undue familiarity or other rudeness, and failing to salute.

**Art. 90. Assaulting or Willfully Disobeying Superior Commissioned Officer**

> Any person subject to this chapter who
>
> (1) strikes his superior commissioned officer or lifts up any weapon or offers any violence against him while he is in the execution of his office; or
>
> (2) willfully disobeys a lawful command of his superior commissioned officer;
>
> shall be punished, if the offense is committed in time of war, by death or such other punishment as a court-martial may direct, and if the offense is committed at any other time, by such punishment, other than death, as a court-martial may direct.

An officer is in the "execution of his office" when performing any act the officer is required or authorized to do. Note that the article is not confined to striking a superior commissioned officer; it takes in brandishing a weapon or waving a fist at that officer.

Willful disobedience, as used here, means intentional defiance of a lawful order. You must presume that any order given by an officer is legal. If you disobey because you think otherwise, you do so at your own risk. It is better to do your questioning after you have carried out the order.

**Art. 91. Insubordinate Conduct Toward Warrant Officer, Noncommissioned Officer, or Petty Officer**

> Any warrant officer or enlisted member who
>
> (1) strikes or assaults a warrant officer, noncommissioned officer, or petty officer, while that officer is in execution of his office;
>
> (2) willfully disobeys the lawful order of a warrant officer, noncommissioned officer, or petty officer; or
>
> (3) treats with contempt or is disrespectful in language or deportment toward

***Student Notes:***

a warrant officer, noncommissioned officer, or petty officer, while that officer is in the execution of his office;

shall be punished as a court-martial may direct.

This article has the same general objectives with respect to warrant officers, noncommissioned officers, and petty officers as articles 89 and 90 have with respect to commissioned officers. Namely, it ensures obedience to their lawful orders and protects them from violence, insult, or disrespect.

**Art. 92. Failure to Obey Order or Regulation**

Any person subject to this chapter who

(1) violates or fails to obey any lawful general order or regulation;

(2) having knowledge of any other lawful order issued by a member of the armed forces, which it is his duty to obey, fails to obey the order; or

(3) is derelict in the performance of his duties;

shall be punished as a court-martial may direct.

A general order or regulation is one that applies generally to an armed force. The President or the Secretary of Defense, the Secretary of Transportation, or the Secretary of a military department may issue it. An officer having general court-martial jurisdiction, a general or flag officer in command, or a commander superior to one of these may also issue it.

Disobedience of "any other lawful order" requires that the person must have had a duty to obey the order and must have had knowledge of the order. An accused may be charged with disobedience of the lawful order of one not a superior, provided the accused had a duty to obey such order. Examples are lawful orders of a sentinel or of members of the armed forces police.

Dereliction in the performance of duties occurs when a person willfully or negligently fails to perform them or performs them in a culpably inefficient manner. To be guilty of inefficiency, an accused must have had the ability and opportunity to perform the assigned duties efficiently, but performed them inefficiently nevertheless.

**Art. 93. Cruelty and Maltreatment**

Any person subject to this chapter who is guilty of cruelty toward, or oppression or maltreatment of, any person subject to his orders shall be punished as a court-martial may direct.

The cruelty, oppression, or maltreatment must be real, although not necessarily physical. To assault and to subject to improper punishment are examples of this offense. The assignment of necessary or proper duties and the requirement for their correct performance will not constitute this offense even though such duties may be arduous and/or hazardous.

**Art. 94. Mutiny or Sedition**

(a) Any person subject to this chapter who—

(1) with intent to usurp or override lawful military authority, refuses, in concert with any other person, to obey orders or otherwise do his duty or creates any violence or disturbance is guilty of mutiny;

(2) with intent to cause the overthrow or destruction of lawful civil authority, creates, in concert with any other person, revolt, violence, or disturbance against that authority is guilty of sedition;

(3) fails to do his utmost to prevent and suppress a mutiny or sedition being committed in his presence, or fails to take all reasonable means to inform his superior commissioned officer or commanding officer of a mutiny or sedition which he knows or has reason to believe is taking place, is guilty of a failure to suppress or report a mutiny or sedition.

(b) A person who is found guilty of attempted mutiny, mutiny, sedition, or failure to suppress or report a mutiny or sedition shall be punished by death or such other punishment as a court-martial may direct.

***Student Notes:***

**Art. 95. Resistance, Breach of Arrest, and Escape**

Any person subject to this chapter who resists apprehension or breaks arrest or who escapes from custody or confinement shall be punished as a court-martial may direct.

**Art. 96. Releasing Prisoner without Proper Authority**

Any person subject to this chapter who, without proper authority, releases any prisoner committed to his charge, or who through neglect or design suffers any such prisoner to escape, shall be punished as a court-martial may direct, whether or not the prisoner was committed in strict compliance with law.

**Art. 97. Unlawful Detention**

Any person subject to this chapter who, except as provided by law, apprehends, arrests, or confines any person shall be punished as a court-martial may direct.

**Art. 98. Noncompliance with Procedural Rules**

Any person subject to this chapter who—

(1) is responsible for unnecessary delay in the deposition of any case of a person accused of an offense under this chapter; or

(2) knowingly and intentionally fails to enforce or comply with any provision of this chapter regulating the proceedings before, during, or after trial of an accused;

shall be punished as a court-martial may direct.

**Art. 99. Misbehavior before the Enemy**

Any person subject to this chapter who before or in the presence of the enemy—

(1) runs away;

(2) shamefully abandons, surrenders, or delivers up any command, unit, place, or military property, which it is his duty to defend;

(3) through disobedience, neglect, or intentional misconduct endangers the safety of any such command, unit, place, or military property;

(4) casts away his arms or ammunition;

(5) is guilty of cowardly conduct;

(6) quits his place of duty to plunder or pillage;

(7) causes false alarms in any command, unit, or place under control of the armed forces;

(8) willfully fails to do his utmost to encounter, engage, capture, or destroy any enemy troops, combatants, vessels, aircraft, or any other thing, which it is his duty so to encounter, engage, capture, or destroy; or

(9) does not afford all practicable relief and assistance to any troops, combatants, vessels, or aircraft of the armed forces belonging to the United States or their allies when engaged in battle;

shall be punished by death or such other punishment as a court-martial may direct.

**Art. 100. Subordinate Compelling Surrender**

Any person subject to this chapter who compels or attempts to compel the commander of any place, vessel, aircraft, or military property, or of any body of members of the armed forces, to give it up to an enemy or to abandon it, or who strikes the colors or flag to any enemy without proper authority, shall be punished by death or such other punishment as a court-martial may direct.

Although these offenses are similar to mutiny, they do not require concert of action. The compulsion to surrender must be by acts, rather than words. To "strike the colors or flag" is to surrender. The offense is committed by anyone subject to the *UCMJ* who assumes the authority to surrender a military force or position when that person is not authorized to do so either by competent authority or by the necessities of battle.

***Student Notes:***

**Art. 101. Improper Use of Countersign**

Any person subject to this chapter who in time of war discloses the parole or countersign to any person not entitled to receive it or who gives to another who is entitled to receive and use the parole or countersign a different parole or countersign from that which, to his knowledge, he was authorized and required to give, shall be punished by death or such other punishment as a court-martial may direct.

A *countersign* is a word designated by the principal headquarters of a command to aid guards and sentinels in their scrutiny of persons who apply to pass the lines. It consists of a secret challenge and a password. A *parole* is a word used as a check on the countersign; it is imparted only to those who are entitled to inspect guards and to commanders of guards.

**Art. 102. Forcing a Safeguard**

Any person subject to this chapter forces a safeguard shall suffer death or such other punishment as a court-martial may direct.

A *safeguard* is a detachment, guard, or detail posted by a commander. It protects persons, places, or property of the enemy or of a neutral affected by the relationship of the opposing forces in their prosecution of war or during a state of conflict. The term also includes a written order left by a commander with an enemy subject or posted upon enemy property for the protection of the individual or property concerned. The effect of a safeguard is a pledge of honor by a nation that its armed force will respect the person or property concerned.

**Art. 103. Captured or Abandoned Property**

(a) All persons subject to this chapter will secure all public property taken from the enemy for the service of the United States, and shall give notice and turn over to the proper authority without delay all captured or abandoned property in their possession, custody, or control.

(b) Any person subject to this chapter who—

(1) fails to carry out the duties prescribed in subsection (a);

(2)buys, sells, trades, or in any way deals in or disposes of captured or abandoned property, whereby he receives or expects any profit, benefit, or advantage to himself or another directly or indirectly connected with himself; or

(3) engages in looting or pillaging;

shall be punished as a court-martial may direct.

Immediately upon its capture from the enemy, public property becomes the property of the United States. Persons subject to military law have an immediate duty to take those steps within their power and functions to secure such property to the service of the United States. They then have the duty to protect that property from destruction or loss.

**Art. 104. Aiding the Enemy**

Any person who—

(1) aids, or attempts to aid, the enemy with arms, ammunition, supplies, money or other things; or

(2) without proper authority, knowingly harbors or protects or gives intelligence to, or communicates or corresponds with or holds any intercourse with the enemy, either directly or indirectly;

shall suffer death or such other punishment as a court-martial or military commission may direct.

This article applies to all persons whether or not they are otherwise subject to military law. Enemy denotes citizens as well as members of military organizations. All the citizens of hostile nations, as well as their government, are our enemies.

***Student Notes:***

**Art. 105. Misconduct as Prisoner**

Any person subject to this chapter who, while in the hands of the enemy in time of war—

(1) for the purpose of securing favorable treatment by his captors acts without proper authority in a manner contrary to law, custom, or regulation, to the detriment of others of whatever nationality held by the enemy as civilian or military prisoners; or

(2) while in a position of authority over such persons maltreats them without justifiable cause; shall be punished as a court-martial may direct.

**Art. 106. Spies**

Any person who in time of war is found lurking as a spy or acting as a spy in or about any place, vessel, or aircraft, within the control or jurisdiction of any of the armed forces, or in or about any shipyard, any manufacturing or industrial plant, or any other place or institution engaged in work in aid of the prosecution of the war by the United States, or elsewhere, shall be tried by a general court-martial or by a military commission and on conviction shall be punished by death.

The words *any person* brings within the jurisdiction of courts-martial and military commissions all persons of whatever nationality or military or civilian who commit the offense of spying.

**Art. 106a. Espionage**

Any person subject to this chapter who, with intent or reason to believe that it is to be used to the injury of the United States or to the advantage of a foreign nation, communicates, delivers, or transmits, or attempts to communicate, deliver, or transmit, to any entity described … either directly or indirectly, any thing described … shall be punished as a court-martial may direct, except that if the accused is found guilty of an offense that directly concerns nuclear weaponry, military spacecraft or satellites, early warning systems, or other means of defense or retaliation against large scale attack, war plans, communications intelligence or cryptographic information, or any other major weapons system or major element of defense strategy, the accused shall be punished by death or such other punishment as a court-martial may direct.

The term *entity* can be any of the following:

- A foreign government
- A faction or party or military force within a foreign country…
- A representative, officer, agent, …. of such government, faction, party, or force

**Art. 107. False Statements**

Any person subject to this chapter who, with intent to deceive, signs any false record, return, regulation, order, or other official document, knowing it to be false, or makes any other false official statement knowing it to be false, shall be punished as a court-martial may direct.

Several articles of the *UCMJ* provide for the punishment of untruths: articles 83 and 84 (fraudulent and unlawful enlistment, appointment, or separation), article 107 (false statements), article 131 (perjury), and article 132 (fraud). You can see how highly *truth* is regarded in the military service.

A statement, whether oral or in writing, is official when it is made pursuant to regulations. A statement is also official when made in response to a request or question from one's commanding officer or a person acting under the commanding officer's authority. Official statements thus include all those made in the line of duty.

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**Art. 108. Military Property of the United States—Loss, Damage, Destruction, or Wrongful Disposition**

Any person subject to this chapter who, without proper authority—

(1) sells or otherwise disposes of;

(2) willfully or through neglect damages, destroys, or loses; or

(3) willfully or through neglect suffers to be lost, damaged, sold, or wrongfully disposed of;

any military property of the United States, shall be punished as a court-martial may direct.

Whether the property in question was issued to the accused, whether it was issued to someone other than the accused, or whether it was issued at all is immaterial.

*Willful* means intentional. *Neglect* means inattention to duty or failure to take action that, under the circumstances, should have been taken to prevent the loss, destruction, or damage of any military property.

**Art. 109. Property Other Than Military Property of United States—Waste, Spoilage, or Destruction**

Any person subject to this chapter who willfully or recklessly wastes, spoils, or otherwise willfully and wrongfully destroys or damages any property other than military property of the United States shall be punished as a court-martial may direct.

*Wastes* and *spoils* refer to wrongful acts of voluntary destruction, such as burning down buildings, burning piers, tearing down fences, or cutting down trees. To be destroyed, property need be only sufficiently damaged to be useless for the purpose for which it was intended. *Damage* consists of any physical injury to the property. The property must be other than military property of the United States and must belong to one other than the accused.

**Art. 110. Improper Hazarding of Vessel**

(a) Any person subject to this chapter who willfully and wrongfully hazards or suffers to be hazarded any vessel of the armed forces shall suffer death or such punishment as a court-martial may direct.

(b) Any person subject to this chapter who negligently hazards or suffers to be hazarded any vessel of the armed forces shall be punished as a court-martial may direct.

The word *suffers* means to allow or permit. A person suffers a ship to be hazarded who, although not in direct control of the vessel, knows a danger to be imminent but takes no steps to prevent it. For example, a plotting officer of a ship under way inadvertently fails to report observation of a radar target on a collision course with, and dangerously close to, the ship. The officer has negligently suffered the ship to be hazarded.

**Art. 111. Drunken or Reckless Driving**

Any person subject to this chapter who operates any vehicle while drunk, or in a reckless or wanton manner, or while impaired by a substance described in… (article 112a(b)), shall be punished as a court-martial may direct.

Operating a vehicle includes not only driving or guiding it while in motion, it also includes starting it or manipulating its controls to cause the vehicle to move. The term *vehicle* applies to all types of land transportation, whether motor-driven or passenger carrying. Drunken or reckless operation of water or air transportation may be charged as a violation of article 134. For the meaning of *drunk(en)*, see the remarks following article 112.

**Art. 112. Drunk on Duty**

Any person subject to this chapter, other than a sentinel or lookout, who is found drunk on duty, shall be punished as a court-martial may direct.

The term *on duty* in article 112 refers to routine or detailed duties on board a ship or station. The term does not cover periods of leave or liberty (which come under

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a different article), but does include duties of a standby nature. A person whose mental or physical abilities are impaired by either liquor or drugs may be considered drunk.

**Art. 112a. Wrongful Use, Possession, etc., of Controlled Substances**

(a) Any person subject to this chapter who wrongfully uses, possesses, manufactures, distributes, imports into the customs territory of the United States, exports from the United States, or introduces into an installation, vessel, vehicle, or aircraft used by or under the control of the armed forces a substance described in subsection (b) shall be punished as a court-martial may direct.

(b) The substances referred to in subsection (a) are the following:

(1) Opium, heroin, cocaine, amphetamine, lysergic acid diethylamide [LSD], methamphetamine, phencyclidine, barbituric acid, and marijuana and any compound or derivative of any such substance.

(2) Any substance not specified in clause (1) that is listed on a schedule of controlled substances prescribed by the President for the purposes of this article.

(3) Any other substance not specified in clause (1) or contained on a list prescribed by the President under clause (2) that is listed in schedules I through V of section 202 of the Controlled Substances Act (21 U.S.C. 812).

Don't do drugs! Just say NO!

**Art. 113. Misbehavior of Sentinel**

Any sentinel or lookout who is found drunk or sleeping upon his post, or leaves it before being regularly relieved, shall be punished, if the offense is committed in time of war, by death or such other punishment as a court-martial may direct, but if the offense is at any other time, by such punishment other than death as a court-martial may direct.

Some actual or imaginary line does not limit a post, nor is it confined to those times when you may be on watch as a sentry. This article covers all periods when you are standing a watch of any kind, such as guarding stores or prisoners or acting as a bow lookout. It also covers periods when you are performing any other duty that requires you to remain alert at all times.

A sentinel on post who is found asleep or drunk is guilty of a serious offense. In time of war, the offense may be punishable by death. For persons in the armed forces, drunkenness is prejudicial to good order and discipline whenever and wherever it appears. Being drunk in public, whether a person is in uniform or civilian clothes, may bring discredit upon the service, while being drunk on station is a breach of military discipline. But being drunk while on duty as a sentinel or lookout in time of war endangers every person in the command.

**Art. 114. Dueling**

Any person subject to this chapter who fights or promotes, or is concerned in or connives at fighting a duel, or who, having knowledge of a challenge sent or about to be sent, fails to report the fact promptly to the proper authority, shall be punished as a court-martial may direct.

**Art. 115. Malingering**

Any person subject to this chapter who for the purpose of avoiding work, duty, or service—

(1) feigns illness, physical disablement, mental lapse or derangement; or

(2) intentionally inflicts self-injury;

shall be punished as a court-martial may direct.

*Malingering* is an offense defined as any act to avoid duty by *feigning* (pretending) to be ill or physically/mentally disabled.

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**Art. 116. Riot or Breach of Peace**

Any person subject to this chapter who causes or participates in any riot or breach of the peace shall be punished as a court-martial may direct.

The term *riot* is used when a disturbance is caused by a group of three or more persons and is engaged against anyone who may oppose them.

*Breach of the peace* is an unlawful disturbance by violent or turbulent means that disturbs the peace of the community. Engaging in a fight and using abusive words in public are examples of breach of the peace. As used in this article, *community* includes any military installation or ship, as well as a civilian community.

**Art. 117. Provoking Speeches or Gestures**

Any person subject to this chapter who uses provoking or reproachful words or gestures towards any other person subject to this chapter shall be punished as a court-martial may direct.

**Art. 118. Murder**

Any person subject to this chapter who, without justification or excuse, unlawfully kills a human being, when he—

(1) has a premeditated design to kill;

(2) intends to kill or inflict great bodily harm;

(3) is engaged in an act that is inherently dangerous to another and evinces a wanton disregard of human life; or

(4) is engaged in the perpetration or attempted perpetration of burglary, sodomy, rape, robbery, or aggravated arson;

is guilty of murder, and shall suffer such punishment as a court-martial may direct, except that if found guilty under clause (1) or (4), he shall suffer death or imprisonment for life as a court-martial may direct.

**Art. 119. Manslaughter**

(a) Any person subject to this chapter who, with an intent to kill or inflict great bodily harm, unlawfully kills a human being in the heat of sudden passion caused by adequate provocation is guilty of voluntary manslaughter and shall be punished as a court-martial may direct.

(b) Any person subject to this chapter who, without an intent to kill or inflict great bodily harm, unlawfully kills a human being—

(1) by culpable negligence; or

(2) while perpetrating or attempting to perpetrate an offense, other than those named in clause (4) of... article 118, directly affecting the person;

is guilty of involuntary manslaughter and shall be punished as a court-martial may direct.

*Manslaughter* is the unlawful killing of another. There are two basic types of manslaughter: *voluntary* and *involuntary.*

*Voluntary* manslaughter is the unlawful killing of another when there is intent to kill or inflict great bodily harm, but the act is committed in the heat of sudden passion caused by adequate provocation.

*Involuntary* manslaughter is the unlawful killing of another committed without intent to kill or inflict great bodily harm.

**Art. 120. Rape and Carnal Knowledge**

(a) Any person subject to this chapter who commits an act of sexual intercourse, by force and without consent, is guilty of rape and shall be punished by death or such other punishment as a court-martial may direct.

(b) Any person subject to this chapter who, under circumstances not amounting to rape, commits an act of sexual intercourse with a female not his wife who has not attained the age of sixteen years, is guilty of carnal knowledge and shall be punished as a court-martial may direct.

(c) Penetration, however slight, is sufficient to complete either of these offenses.

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**Art. 121. Larceny and Wrongful Appropriation**

(a) Any person subject to this chapter who wrongfully takes, obtains, or withholds, by any means, from the possession of the owner or of any other person any money, personal property, or article of value of any kind—

(1) with intent permanently to deprive or defraud another person of the use and benefit of property or to appropriate it to his own use or the use of any person other than the owner, steals that property and is guilty of larceny; or

(2) with intent temporarily to deprive or defraud another person of the use and benefit of property or to appropriate to his own use or the use of any person other than the owner, is guilty of wrongful appropriation.

(b) Any person found guilty of larceny or wrongful appropriate shall be punished as a court-martial may direct.

**Art. 122. Robbery**

Any person subject to this chapter who with intent to steal takes anything of value from the person or in the presence of another, against his will, by means of force or violence or fear of immediate or future injury to his person or property or to the person or property of a relative or member of his family or of anyone in his company at the time of the robbery, is guilty of robbery and shall be punished as a court-martial may direct.

**Art. 123. Forgery**

Any person subject to this chapter who, with intent to defraud—

(1) falsely makes or alters any signature, to, or any part of, any writing which would, if genuine, apparently impose a legal liability on another or change his legal right or liability to his prejudice; or

(2) utters, offers, issues, or transfers such a writing, known by him to be so made or altered;

is guilty of forgery and shall be punished as a court-martial may direct.

A forgery may be committed by a person signing his/her own name to an instrument. For example, presume a check payable to the order of a certain person comes into the hands of another person of the same name. The receiver commits forgery if, knowing the check to be another person's, he/she endorses it with his/her own name with the intent to defraud.

Some of the instruments most frequently subject to forgery are checks, orders for delivery of money or goods, military orders directing travel, and receipts. A writing may be falsely "made" by materially altering an existing writing; by filling in or signing the blanks in a paper, such as a blank check; or by signing an instrument already written.

**Art. 123a. Making, Drawing, or Uttering Check, Draft, or Order Without Sufficient Funds**

Any person subject to this chapter who—

(1) for the procurement of any article or thing of value, with intent to defraud; or

(2) for the payment of any past due obligation, or for any other purpose, with intent to deceive;

makes, draws, utters, or delivers any check, draft, or order for the payment of money upon any bank or other depository, knowing at the time that the maker or drawer has not or will not have sufficient funds in, or credit with, the bank or other depository for the payment of that check, draft, or order in full presentment, shall be punished as a court-martial may direct….

This article provides specific statutory authority for the prosecution of bad-check offenses. In the absence of evidence indicating otherwise, bad faith might be shown by the maker's or drawer's failure to effect redemption within the 5-day period provided for in the

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article. The offense of wrongfully and dishonorably failing to maintain sufficient funds for payment of checks upon presentment is a violation.

**Art. 124. Maiming**

Any person subject to this chapter who, with intent to injure, disfigure, or disable, inflicts upon the person of another an injury which

(1) seriously disfigures his person by a mutilation thereof;

(2) destroys or disables any member or organ of his body; or

(3) seriously diminishes his physical vigor by the injury of any member or organ;

is guilty of maiming and shall be punished as a court-martial may direct.

Maiming includes putting out a person's eye; cutting off a person's hand, foot, or finger; or knocking out a person's front teeth, as these injuries destroy or disable those members or organs. Maiming also includes cutting off a person's ear or scaring a person's face, as these injuries seriously disfigure the person. Injuring an internal organ so as to seriously diminish the physical vigor of a person is also considered maiming.

**Art. 125. Sodomy**

(a) Any person subject to this chapter who engages in unnatural carnal copulation with another person of the same or opposite sex or with an animal is guilty of sodomy. Penetration, however slight, is sufficient to complete the offense.

(b) Any person found guilty of sodomy shall be punished as a court-martial may direct.

**Art. 126. Arson**

(a) Any person subject to this chapter who willfully and maliciously burns or sets on fire an inhabited dwelling, or any other structure, movable or immovable, wherein to the knowledge of the offender there is at the time a human being, is guilty of aggravated arson and shall be punished as court-martial may direct.

(b) Any person subject to this chapter who willfully and maliciously burns or sets fire to the property of another, except as provided in subsection (a), is guilty of simple arson and shall be punished as a court-martial may direct.

In aggravated arson, danger to human life is the essential element; in simple arson, it is injury to the property of another. In either case, the fact that no one is injured is immaterial.

**Art. 127. Extortion**

Any person subject to this chapter who communicates threats to another person with the intention thereby to obtain anything of value or any acquaintance, advantage, or immunity is guilty of extortion and shall be punished as a court-martial may direct.

A threat may be communicated by word of mouth or in writing, the essential element of the offense being the knowledge of the threat to the victim. An acquittance is, in general terms, a release or discharge from an obligation.

**Art. 128. Assault**

(a) Any person subject to this chapter who attempts or offers with unlawful force or violence to do bodily harm to another person, whether or not the attempt or offer is consummated, is guilty of assault and shall be punished as a court-martial may direct.

(b) Any person subject to this chapter who—

(1) commits an assault with a dangerous weapon or other means of force likely to produce death or grievous bodily harm; or

(2) commits an assault and intentionally inflicts grievous bodily harm with or without a weapon;

is guilty of aggravated assault and shall be punished as a court-martial may direct.

Section (a) describes the offense of simple assault. Swinging your fist, pointing a gun at a person, or raising

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a club over someone's head, even though no harm is actually done, is each an act of simple assault. When the threat is consummated and force is applied to the victim, the offense becomes assault and battery.

Section (b) describes aggravated assault, of which there are two types. The first is assault with a dangerous weapon and other means of force likely to kill or grievously harm the victim (like shoving a person over the fantail). The second type takes place when an assailant intentionally inflicts severe bodily harm, with or without a weapon. If, after you have knocked an individual down, you repeatedly kick him/her so as to break the person's ribs, you have committed aggravated assault.

**Art. 129. Burglary**

> Any person subject to this chapter who, with intent to commit an offense punishable under… articles 118 - 128, breaks and enters, in the nighttime, the dwelling house of another, is guilty of burglary and shall be punished as a court-martial may direct.

The house must be a dwelling place at the time of the breaking and entry, but the residents do not have to actually be in it. A simple act such as opening a closed door or window or some other similar fixture or cutting out the glass of a window or the netting of a screen constitutes breaking. Entry gained through a trick, false pretense, impersonation, intimidation, or collusion also constitutes breaking. For the intruder to succeed in carrying out the intent for which the house was broken into is not an essential element.

**Art. 130. Housebreaking**

> Any person subject to this chapter who unlawfully enters the building or structure of another with intent to commit a criminal offense therein is guilty of housebreaking and shall be punished as a court-martial may direct.

The initial entering must amount to trespassing; this article is not violated if the accused entered the building or structure lawfully, even though the person had the intent to commit an offense therein. This offense is broader than burglary in that the place entered need not be a dwelling house; also, the place need not be occupied. A breaking is not essential. The entry may be either in the nighttime or in the daytime. The criminal intent is not limited to those offenses punishable under articles 118 through 128.

**Art. 131. Perjury**

> Any person subject to this chapter who in a judicial proceeding or in a course of justice willfully and corruptly—
>
> (1) upon a lawful oath or in any form allowed by law to be substituted for an oath, gives any false testimony material to the issue or matter of inquiry; or
>
> (2) in any declaration, certificate, verification, or statement under penalty or perjury as permitted under section 1746 of title 28, United States Code, subscribes any false statement material to the issue or matter of inquiry;
>
> is guilty of perjury and shall be punished as a court-martial may direct.

**Art. 132. Frauds against the United States**

> Any person subject to this chapter—
>
> (1) who, knowing it to be false or fraudulent—
>
> (A) makes any claim against the United States or any officer thereof; or
>
> (B) presents to any person in the civil or military service thereof, for approval or payment, any claim against the United States or any officer thereof;
>
> (2) who, for the purpose of obtaining the approval, allowance, or payment of any claim against the United States or any officer thereof—
>
> (A) makes or uses any writing or other paper knowing it to contain any false or fraudulent statements;
>
> (B) makes any oath to any fact or to any writing or other paper knowing the oath to be false; or

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(C) forges or counterfeits any signature upon any writing or other paper, or uses any such signature knowing it to be forged or counterfeited;

(3) who, having charge, possession, custody, or control of any money, or other property of the United States, furnished or intended for the armed forces thereof, knowingly delivers to any person having authority to receive it, any amount thereof less than that for which he receives a certificate or receipt; or

(4) who, being authorized to make or deliver any paper certifying the receipt of any property of the United States furnished or intended for the armed forces thereof, makes or delivers to any person such writing without having full knowledge of the truth of the statements therein contained and with intent to defraud the United States;

shall, upon conviction, be punished as a court-martial may direct.

This article deals with frauds against the United States. It pertains to making false claims against the government to obtain money or property.

It also pertains to the offense of making a writing or other paper known to contain a false statement for the purpose of obtaining the approval, allowance, or payment of a claim. The offense is complete when the writing or paper is made for that purpose, whether or not the use of either one has been attempted and whether or not the claim has been presented.

**Art. 133. Conduct Unbecoming an Officer and a Gentleman**

Any commissioned officer, cadet, or midshipman who is convicted of conduct unbecoming an officer and a gentleman shall be punished as a court-martial may direct.

**Art. 134. General Article**

Though not specifically mentioned in this chapter, all disorders and neglects to the prejudice of good order and discipline in the armed forces, all conduct of a nature to bring discredit upon the armed forces, and crimes and offenses not capital, of which persons subject to this chapter may be guilty, shall be taken cognizance of by a general, special or summary court-martial, according to the nature and degree of the offense, and shall be punished at the discretion of that court.

Article 134 makes punishable acts or omissions not specifically mentioned in other articles. Those acts include wearing an improper uniform, abusive use of a military vehicle, the careless discharge of a firearm, or impersonating an officer. They also include offenses involving official passes, permits, and certificates; and the wrongful possession of a habit-forming narcotic drug.

*Discredit* means to injure the reputation of; that is, to bring the service into disrepute. Examples include acts in violation of state or foreign laws, failure to pay one's debts, adultery, bigamy, and indecent acts.

*Crimes and offenses not capital* include those acts or omissions, not punishable by another article, denounced as crimes or offenses by enactment of Congress or under authority of Congress and made triable in the federal civil courts. Some of these offenses are punishable wherever committed; others are punishable only if committed within the geographical boundaries of the areas in which they are applicable.

**Art. 137. Articles to be explained**

Articles 2, 3, 7 through 15, 25, 27, 31, 37, 38, 55, 77 through 134 and 137 through 139 of this chapter shall be carefully explained to each enlisted member at the time of his entrance on active duty, or within six days thereafter. They shall be explained again after he has completed six months of active duty, and again at the time when he reenlists. A complete text of the *Uniform Code of Military Justice* and of the regulations prescribed by the President thereunder shall be made available to any person on active duty upon his request, for his personal examination.

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**Art. 138. Complaints of wrongs**

Any member of the armed forces who believes himself wronged by his commanding officer, and who, upon due application to that commanding officer, is refused redress, may complain to any superior commissioned officer, who shall forward the complaint to the officer exercising general court-martial jurisdiction over the officer against whom it is made. The officer exercising general court-martial jurisdiction shall examine into the complaint and take proper measures for redressing the wrong complained of; and he shall, as soon as possible, send to the Secretary concerned a true statement of that complaint, with the proceedings had thereon.

This article provides for redress of wrongs inflicted by a commanding officer on subordinates, and it prescribes the procedure to be followed by subordinates to apply for such redress.

**Art. 139. Redress of injuries to property**

(a) Whenever complaint is made to any commanding officer that willful damage has been done to the property of any person or that his property has been wrongfully taken by members of the armed forces, he may, under such regulations as the Secretary concerned may prescribe, convene a board to investigate the complaint. The board shall consist of from one to three commissioned officers and, for the purpose of that investigation, it has power to summon witnesses and examine them upon oath, to receive depositions or other documentary evidence, and to assess the damages sustained against the responsible parties. The assessment of damages made by the board is subject to the approval of the commanding officer, and in the amount approved by him shall be charged against the pay of the offenders. The order of the commanding officer directing charges herein authorized is conclusive on any disbursing officer for the payment by him to the injured parties of the damages as assessed and approved.

(b) If the offenders cannot be ascertained, but the organization or detachment to which they belong is known, charges totaling the amount of damages assessed and approved may be made in such proportion as may be considered just upon the individual members thereof who are shown to have been present at the scene at the time the damages complained of were inflicted, as determined by the approved findings of the board.

**Nonjudicial Punishment**

If you break a rule or are negligent, careless, or unmilitary in your conduct, an officer or petty officer may put you on report. Being *put on report* means you may appear before the commanding officer at a specified time for nonjudicial punishment (*UCMJ*, art. 15); that is, you may appear at captain's mast.

**Art. 15. Commanding Officer's nonjudicial punishment**

(a) Under such regulations as the President may prescribe, and under such additional regulations as may be prescribed by the Secretary concerned, limitations may be placed on the powers granted by this article with respect to the kind and amount of punishment authorized, the categories of commanding officers and warrant officers exercising command authorized to exercise those powers, the applicability of this article to an accused who demands trial by court-martial, and the kinds of courts-martial to which the case may be referred upon such a demand. However, except in the case of a member attached to or embarked in a vessel, punishment may not be imposed upon any member of the armed forces under this article if the member has, before the imposition of such punishment, demanded trial by court-martial in lieu of such punishment. Under similar regulations, rules may be prescribed with respect to the suspension of punishments authorized hereunder. If authorized by regulations of the Secretary concerned, a commanding officer exercising general court-martial jurisdiction or an officer of general or flag rank in command may delegate his powers under this article to a principal assistant.

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(b) Subject to subsection (a) any commanding officer may, in addition to or in lieu of admonition or reprimand, impose one or more of the following disciplinary punishments for minor offenses without the intervention of a court-martial…

Commanding officer's nonjudicial punishment is often referred to as captain's mast. Captain's mast gets its name from the old sailing days when the setting for this form of naval justice was the weather deck near the ship's mainmast.

Cases are heard and punishments given at captain's mast. Anyone who is not attached to or embarked in a vessel may, however, demand trial by court-martial in lieu of punishment at mast, before such punishment is imposed.

The punishments permitted at captain's mast depend upon the rank of the officer holding mast. Figure 2-3 shows the punishment that may be awarded.

A commanding officer that decides an offense deserves a punishment more severe than he/she is authorized to award at mast may order a court-martial.

The following paragraphs explain some of the punishments that may be given at captain's mast.

**RESTRICTION.—**Restriction is the requirement to remain within certain specified limits (ship, station, etc.). Although required to muster at certain times, the restricted person usually continues to perform his/her regular duties.

**CORRECTIONAL CUSTODY.—**Correctional custody is the physical restraint (confinement) of a person during duty or nonduty hours, or both. The person may be required to perform extra duties or hard labor. A typical example is an individual who is free to carry out regular duties during the day but is confined in a confinement facility at night.

**CONFINEMENT ON BREAD AND WATER OR DIMINISHED RATIONS.—**Confinement on bread and water or diminished rations may be imposed only on enlisted persons E-3 and below aboard ship.

**EXTRA DUTY.—**Extra duty is the assignment of any duty (except guard duty) to be performed after the person's regular working hours. Extra duty is not to exceed 2 hours daily or to be performed on holidays.

| ENLISTED | | |
|---|---|---|
| | **Any officer commanding, LCDR and above** | **Commanding officers below LCDR; OICs, any grade** |
| **Admonition or reprimand** | Yes | Yes |
| **Confinement on B&W or diminished rations** | 3 consecutive days (aboard ship) E-3 and below | 3 consecutive days (aboard ship) E-3 and below |
| **Correctional custody** | 30 consecutive days E-3 and below | 7 consecutive days |
| **Forfeiture of pay** | 1/ 2 of 1 month pay per month for 2 months | 7 days' pay |
| **Reduction in grade** | To next inferior grade | To next inferior grade |
| **Extra duty** | 45 consecutive days | 14 consecutive days |
| **Restriction** | 60 consecutive days | 14 consecutive days |

**Figure 2-3.—One or more of the maximum punishment authorized by article 15, *UCMJ*.**

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Petty officers may not be assigned extra duties that would demean their grade or position.

**FORFEITURE OF PAY.—**Forfeiture of pay is a permanent loss of a specified amount or a temporary withholding of a certain amount of pay. The detention period must be specified. The money detained is normally returned at the end of the detention period, but it can be detained for a period of 1 year.

**APPEALS.—**If persons consider their punishment under article 15 to be unjust or out of proportion to the offense, they may appeal to the next superior authority in the chain of command. The appeal must be made within a reasonable time (generally 5 days) and promptly forwarded. If the superior authority upholds the appeal, all rights, privileges, and property are restored.

**PROTECTION AGAINST SELF-INCRIMINATION**.—Under article 31 of the *UCMJ*, compulsory self-incrimination is prohibited. The accused must be informed of the nature of the charges against him/her. The accused must also be advised that he/she does not have to make any statement regarding the offense of which accused, but that any statement made may be used as evidence against him/her in a trial by court-martial. No statement obtained through the use of coercion, unlawful influence, or unlawful inducement may be used as evidence against the accused.

**MERITORIOUS AND REQUEST MASTS**.—Not all masts are for disciplinary purposes. A meritorious mast may be held by the commanding officer to give awards or commendations to those persons who have earned them.

Article 1107 of *Navy Regs* grants the right for any person to communicate with the commanding officer. You can't just walk up to the captain, however, and start talking. For the purpose of hearing valid requests or complaints from crew members, the CO sets certain times aside. This practice is called *request mast*. The person having a request or grievance should first try to resolve the problem through the chain of command. Failing that, the person may request mast.

## COURTS-MARTIAL

Based on article 16 of the *UCMJ*, courts-martial are of three types: summary, special, and general. The captain decides the type of court-martial to award based on the nature, time, and place of the offense.

### Summary Courts-Martial

A summary court-martial consists of one commissioned officer. If the commanding officer is the only officer with the command, that officer acts as the summary court officer. A summary court can award any sentence that may be given at mast. It can also award the additional punishments of confinement for 1 month and hard labor without confinement for 45 days. Any person awarded confinement at a summary court-martial will then be held, as appropriate.

### Special Courts-Martial

A special court-martial consists of not less than three members; or a military judge and not less than three members; or only a military judge. When a military judge (a qualified lawyer) is detailed to the court, the accused has the right to know the identity of the military judge. The accused also has the right to consult with the defense counsel and to request that the court consist of only the military judge. The request must be in writing, submitted before the court is assembled, and approved by the military judge. A special court-martial may award the same punishment as a summary court, or it may award a more severe punishment. For example, it can award a bad-conduct discharge, confinement for 6 months, loss of two-thirds pay per month for 6 months, and hard labor without confinement for 3 months.

### General Court-Martial

A general court-martial consists of a military judge and not less than five members; or only a military judge. Under the conditions described for a special court, the accused may request that the court consist of only a military judge. A general court-martial can award any punishment not forbidden by the *UCMJ*, including death when specifically authorized for the offense.

All accused persons have the right to be represented before special and general courts-martial by defense counsel. This counsel may be a civilian or a military lawyer selected by the accused or a defense counsel appointed by the convening authority. If a civilian counsel is selected, the accused must pay the counsel's expenses.

***Student Notes:***

## REVIEW 4 QUESTIONS

Q1. What chapter of the *Navy Regs* deals with your responsibility and authority while carrying out orders?

Q2. What chapter of the *Navy Regs* deals with rights and responsibilities?

Q3. Who is responsible for ensuring the *Navy Regs* conforms to the current needs of the Department of the Navy?

Q4. New *Navy Regs* and changes to it are issued by whom and approved by whom?

Q5. The instructions found in the OPNAVINST 3120.32 provide guidance and regulations for—

Q6. What was the purpose for developing and signing into law the *Uniform Code of Military Justice*?

Q7. When was the *UCMJ* signed into law?

Q8. Article 137 of the *UCMJ* states that certain articles of the Code must be explained carefully to every enlisted person at what minimum interval?

Q9. List the three types of court-martials.

a.

b.

c.

## SUMMARY

*Discipline* is training that develops self-control, character or orderliness, and efficiency. *Justice* is impartiality—fairness. *Conduct* is the way one acts—behavior. We all deal with discipline, justice, and conduct in our day-to-day dealings as members of the U.S. Navy. We have certain standards of behavior, both on and off duty, by which we must abide. Our justice system sets those standards of behavior; therefore, it should not intimidate us.

We also have standards of conduct by which we must abide if we are taken prisoner. These standards are fundamental to our safety and to our fellow prisoners.

Discipline or conduct could sometimes make the difference between saving or losing a unit. Without discipline, ships would not have the efficient fire or repair parties that have kept many of them afloat after major damage. Imagine the panic that would take place if Sailors didn't have the discipline, self-control, and efficiency they have been taught.

Our justice system has its own checks and balances. For example, if a person does something wrong, the commanding officer is restricted as to the type of punishment he/she may award. A person also has a right to appeal punishment awarded—a right all people enjoy. A person also has the right to communicate with the commanding officer.

Our justice system protects us. Because of naval regulations and standards of conduct, we know what the Navy expects of us. Our conduct, both on and off duty, should reflect our pride in the Navy and in our unit.

***Student Notes:***

## REVIEW 1 ANSWERS

A1. The three sources that contain the basic disciplinary laws for the U.S. Navy are—

a. ***U.S. Navy Regulations***

b. ***Standard Organization and Regulations of the U.S. Navy***

c. ***Uniform Code of Military Justice (UCMJ)***

A2. One of the most important characteristics of a good Sailor is a **sense of moral responsibility**.

A3. To succeed in your work in the Navy, you should value and take part in **teamwork**.

A4. The Code of Conduct was established to **govern situations where Sailors were POW's.**

A5. There are **six articles in the Code of Conduct**.

A6. Under article V, the only information you are allowed to give is your **name, rank, service number, and date of birth**.

## REVIEW 2 ANSWERS

A1. In the Navy, the military police are known as the **shore patrol**.

A2. Shore patrol personnel are identified by **armbands bearing the letters *SP***.

A3. When military police are from different armed forces and combined to form one unit, they are known as an **Armed Forces Police Detachment (AFPD)**.

A4. The primary duties of the shore patrol are to—

a. **Render assistance to military personnel ashore**

b. **Maintain good order and discipline among military personnel**

c. **Report conditions or practices that appear prejudicial to the welfare of military personnel**

## REVIEW 3 ANSWERS

A1. **Motivation and correction through reward and punishment** are used to help Sailors work as a unit.

A2. The purpose of discipline in the military is **to bring about an efficient military organization**.

A3. **Deterrent** theory of punishment is used by the Navy.

A4. The two things a recipient of Navy punishment should remember are—

a. **Punishment is a result of their behavior.**

b. **They won't be punished again if they learn to conform to Navy's standard of conduct.**

## REVIEW 4 ANSWERS

A1. **Chapter 10 of the *Navy Regs*** deals with your responsibility and authority while carrying out orders.

A2. **Chapter 11 of the *Navy Regs*** deals with your rights and responsibilities.

A3. **Chief of Naval Operations** is responsible for making sure that the *Navy Regs* conform to the current needs of the Department of the Navy.

A4. **Secretary of the Navy issues and the President approves** new *Navy Regs* and changes to *Navy Regs*.

A5. The instructions found in the OPNAVINST 3120.32 provide guidance and regulations for **the duties and responsibilities for all personnel within a unit or organization.**

A6. The purpose for developing and signing into law the *Uniform Code of Military Justice* was **to standardize legal procedure and discipline throughout all branches of service**.

A7. The *UCMJ* was signed into law on **31 May 1951**.

A8. Article 137 of the *UCMJ* states that certain articles of the Code must be explained carefully to every enlisted person **at the time of entrance or no later than 6 days later, 6 months on active duty, and every reenlistment**.

A9. The three types of courts-martial are—

a. **Summary**

b. **Special**

c. **General**

***Student Notes:***

# CHAPTER 3

# WATCH STANDING

*Thank God I have done my duty.*

—Admiral Horatio Nelson

In this chapter, you will learn about the basic shipboard watch organization. You will learn about a typical watch, quarter, and station bill; the terms used during watches; and some typical watches, both ashore and afloat. You will also learn about procedures for reporting bearings and using binoculars.

## WATCH STANDING

**Learning Objectives:** When you finish this chapter, you will be able to—

- Recognize the responsibilities of personnel for the Watch, Quarter, and Station Bill.
- Identify types of watches, general orders of a sentry, procedures to follow when relieving an armed watch, and when a weapon may be fired.
- Recognize the duties of lookouts.

During a ship's entire commissioned life, it will always have Sailors on watch. There are probably more than a hundred different types of watches, depending on the ship or station.

Whatever type of watch, the watch stander must devote full attention to it. The ship's organization and the watches manned by its personnel keep the ship running smoothly 24 hours a day. Watches vary, of course, depending on both the type of ship and whether the ship is under way or in-port. Even when the ship is moored in-port and receiving hotel services (utilities, such as steam, water, and electricity) from the pier or another ship, it's necessary to maintain a watch for communications, security, and safety.

During your time in the Navy, you will be required to stand many watches. Some watches will be of a security nature, such as a pier sentry or roving patrol; others will be operational, such as a telephone talker and/or status board operator. Whatever the type of watch, you must devote your full attention to it. Inattention or negligence on your part can result in serious consequences for the ship and your fellow shipmates.

### DECK LOG

Probably the most important log you will maintain is the ship's deck log. The basic requirements for maintaining the deck log are contained in the *U.S. Navy Regulations and Standard Organization* and *Regulations of the U.S. Navy.* The ship's deck log is a complete daily record, by watches, of every event of importance or interest about the crew and the operation and safety of the ship.

A ship's deck log has both historical importance and legal standing. At times, it may be used in naval, admiralty, and civil courts. In an incident involving the ship, the log may be the only available evidence on which to base a legal decision. At sea, the ship's deck log is kept by the quartermaster of the watch (QOOW). In-port, chronological entries are made, but these entries are made by the petty officer of the watch (POOW).

Entries in the ship's deck log are handwritten using a black, ball-point pen. Entries must be neat and legible. Use only standard Navy phraseology. Because the log may be used as evidence in legal proceedings, do not erase an entry. If you make a mistake, draw a single line through the original entry (so that it remains legible), insert the correct entry, and place your initials in the margin. The log is signed at the end of each watch by the OOD. The name of the officer of the deck must also be printed beneath the signature. Facsimile signature is not authorized.

The following are entries that are always recorded:

- Convening of courts-martial or fact-finding bodies
- Inspections held, including administrative, material, personnel, lower deck, and magazine inspections
- Injuries, accidents, and casualties
- Official visits
- Salutes fired and flags displayed

- Arrivals and departures of the commanding officer and executive officer and, if on board, flag officers and civil officials
- Drills held
- Observance of sunrise and sunset
- Reports made to the OOD; for example, fuel and water, chronometer, magazine temperatures, and so forth
- Equipment casualties

## WATCH, QUARTER, AND STATION BILL

For any ship to carry out its assigned missions and tasks, it must have an administrative organization. In the organization, every person is assigned one or more tasks. Personnel are trained so they can do their jobs.

The ship's organized plan for action is contained in the battle bill. The battle bill is based on the organization manual and other publications and directives. The battle bill contains lists of stations that must be manned during battle and at other specified times. Using the organization manual and the battle bill as references, each division officer and division chief assigns qualified personnel in the division to the stations and enters their names on the watch, quarter, and station (WQS) bill.

The WQS bill displays in one place your duties for each emergency and watch condition. It also shows your administrative and operational duties.

### Contents of the Watch, Quarter, and Station Bill (WQS)

The WQS bill lists, by billet number and rate, divisional stations to be manned for various situations. The billet number consists of either four numbers or a letter and three numerals. The first number (or letter) indicates the person's division; the second number indicates the section; the last two numbers show the person's seniority in the section. Figure 3-1 shows the assignments for personnel in the first section of the first division.

Look at figure 3-1. The first column shows the billet number. The second column shows your name. Your bunk and locker numbers are usually the same. There are three columns under rate: the first column shows the

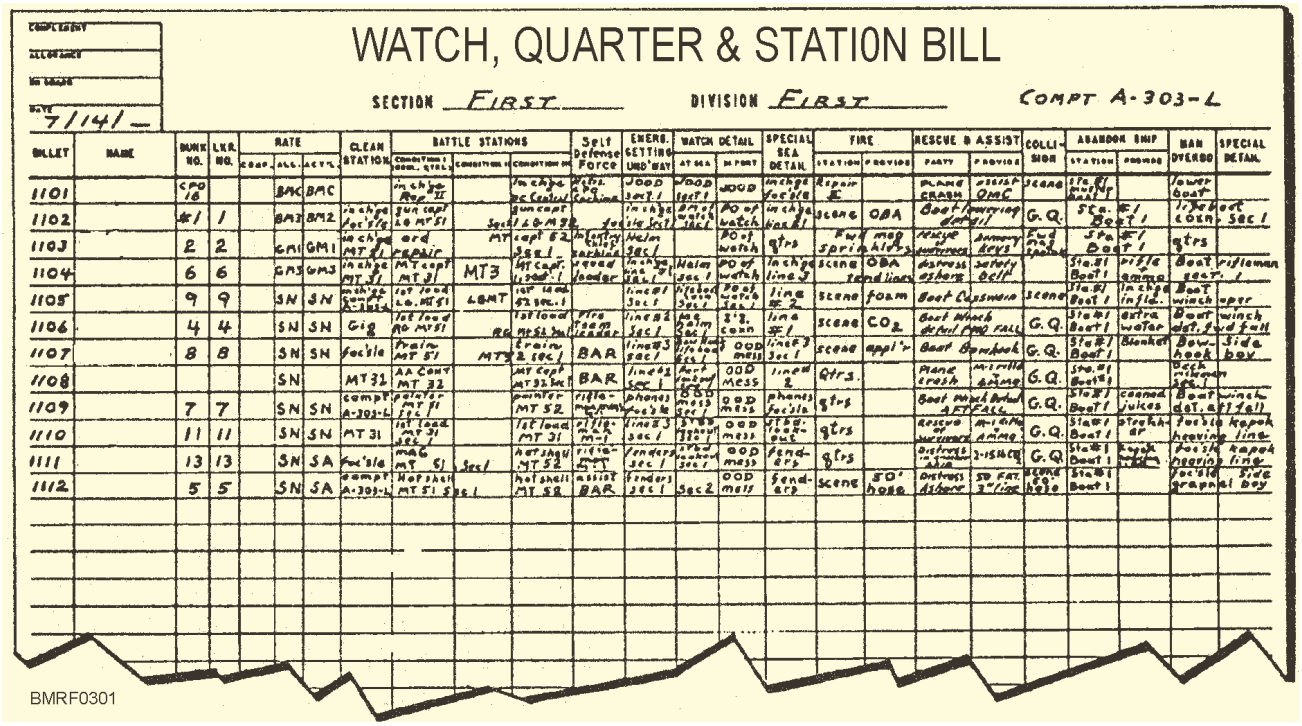


**Figure 3-1.—Watch, quarter, and station bill.**

***Student Notes:***

wartime complement, the second the peacetime allowance (usually less than for wartime), and the third lists the rates actually on board.

Often, cleaning stations are omitted, since they are posted in a separate cleaning bill.

There are three columns under the BATTLE STATIONS—Condition I, Condition II, and Condition III. **Condition I** is general quarters. Under Condition I all battle stations are manned, and usually surface or air action is imminent (about to take place). Condition I is sometimes modified to let a few persons at a time rest on station or to let designated personnel draw rations for delivery to battle stations (condition IE). **Condition II** is a special watch used by gunfire support ships for situations such as extended periods of shore bombardment. **Condition III** is the normal wartime cruising watch. Normally, when cruising under Condition III, the ship's company stands watch on a basis of 4 hours on, 8 hours off; about one-third of the ship's armament is manned in the event of a surprise attack.

Assignments to the SELF-DEFENSE FORCE vary according to ship type. The purpose of the self-defense force is to provide a capability for reacting to emergency security situations aboard ship and at pierside to protect the ship, its sensitive equipment, and its personnel.

The next column, EMERGENCY GETTING UNDER WAY, is for use in-port when most of the crew is ashore and the ship must get under way before personnel can be recalled.

There are two columns under WATCH DETAIL. The **left column** is for normal peacetime cruising, or **Condition IV**. The number of watch sections depends on the type of ship and the number of personnel aboard. The **right column** lists the type of watch personnel will stand in-port (Condition V). The time of the watch is posted on a separate in-port watch list.

The SPECIAL SEA DETAIL is manned whenever the ship leaves and enters port. Because of the critical nature of mooring or anchoring, getting under way, and maneuvering in restricted waters, only the most experienced persons are assigned to these details. You can expect to be assigned to a station, however, so that you can learn what to do and how to do it.

The remaining columns of the WQS bill (except the last one) show assignments to the ship's emergency bills. Always be prepared to man your emergency station and know where to get the equipment you may be required to provide.

For a MAN-OVERBOARD situation, you go to quarters or some other designated place of muster if you are not assigned a specific detail. The final column is for assignments to such miscellaneous details as mess cooking, MAA duty, and side boys.

### Responsibilities

It is your responsibility to check the WQS bill daily. You should check for any changes made in your assignments and to refresh your memory for assignments to seldom-used details (such as to a prize crew). When abandon ship drill is held, for instance, you should not have to take time to find out what your station is and where it is located. A shipmate's life may depend on you to be where you're assigned to be.

## WATCHES

Most of the watches in the Navy are of 4 hours duration. Time off between watches depends on the number of sections and the number of personnel in each station. Normally, watches start on the even hours, such as 0400, 0800, or 1200. However, you should arrive at your station **at least 15 minutes ahead of time** to receive any pertinent information from the person you are relieving. Regardless of the type of watch you stand, observe proper military bearing. Proper grooming standards and uniform appearance is a must. Stand your watch in strict adherence to the eleven general orders of the sentry (covered later in this chapter). Know the chain of command as it relates to watch standing. If there is an emergency, it's important to know who and when to call.

### Military Time

The Navy uses the 24-hour system of keeping time. The day starts at midnight. Four numbers are used to indicate the time—the first two digits indicate hours and the last two show the minutes. Midnight is expressed two ways—0000 to indicate the start of the day, and

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2400 to indicate the end of the day. Each succeeding hour, starting at midnight, is increased by 100 (0000, 0100, 0200, and so on) until 2400 is reached, then a new day starts.

Time is spoken in hundreds. For example, 0100 (1:00 a.m.) is spoken "zero one hundred"; 2000 (8 p.m.) is pronounced "twenty hundred"; 2315 (11:15 p.m.) is spoken "twenty three fifteen."

Converting time on a 12-hour clock to Navy time is an easy matter. The hours from midnight to noon aren't any problem; from noon to midnight, simply add 12 hours to the time indicated.

The ship's bell may also indicate time. The bell is struck once for each half hour, with a maximum of eight bells. At 0830, for instance, one bell is sounded; at 0900, or two bells; and so on until eight bells are struck at 1200. The use of this system is usually restricted to the hours between reveille and taps.

### Watch Terms

Two methods are used in identifying watches. One method uses a descriptive name that identifies the type of watch—for example, pier sentry. The other method also uses a name, but it identifies the time of the watch. Standard watch times and their names are given in the following listing:

| TIME | TYPE OF WATCH |
|---|---|
| 0000 to 0400 | Midwatch |
| 0400 to 0800 | Morning watch |
| 0800 to 1200 | Forenoon watch |
| 1200 to 1600 | Afternoon watch |
| 1600 to 1800 | First dog watch |
| 1800 to 2000 | Second dog watch |
| 2000 to 2400 | Evening watch |

The dog watches permit rotation of the watches; otherwise, personnel would stand the same watch every day. (Usually the 1600-2000 watch is dogged only at sea.) Normally, Sailors having the midwatch are permitted to sleep 1 hour past reveille (late sleepers).

Often, particularly in foreign ports when extra security precautions are required, the ship's crew is placed in two sections—port and starboard. In such instances, one of the normal three sections (usually the third) is split between the first and second sections. The resulting first section becomes the starboard section; the second section, the port section. If the crew is divided into four sections, the odd-numbered sections make up the starboard section; the even-numbered ones, the port section. The actual watches, though, conform to the times described.

### Types Of Watches

Hundreds of different types of watches are required throughout the Navy, both under way and in-port. Most of them are of a professional nature; that is, they are peculiar to a specific rating or rating group. In this chapter, you will learn about the watches that are more or less of a security nature and that most Sailors stand at one time or another.

Security watches are stood to prevent sabotage, protect property from damage or theft, prevent access to restricted areas by unauthorized persons, or protect personnel. Security watches include sentry duty, barracks watches, fire watches, and watches stood under way.

## WATCH OFFICERS

Some key assignments for officers in the watch organization include the command duty officer (CDO), officer of the deck (OOD), junior officer of the deck (JOOD), and junior officer of the watch (JOOW). (**NOTE**: Senior petty officers can qualify for some of the officer's assignments.)

### Command Duty Officer (CDO)

Although an official watch stander, the command duty officer (CDO) may be on duty for a period of several watches. The CDO is eligible for command at sea and is designated and empowered by the captain to advise, supervise, and direct the officer of the deck (OOD) in matters concerning the general operation and safety of the ship or station.

***Student Notes:***

### Officer of The Deck (OOD)

The officer of the deck (OOD) is in charge of the ship and is responsible to the commanding officer (CO) for the safe and proper operation of the ship or station. That includes navigation, ship handling, communications, routine tests and inspections, reports, supervision of the watch, and carrying out the plan of the day (POD).

### Junior Officer of the Deck (JOOD)

The junior officer of the deck (JOOD) is the principal assistant to the OOD. Anyone making routine reports to the OOD normally makes them through the JOOD or the JOOW.

### Junior Officer of the Watch (JOOW)

The junior officer of the watch (JOOW), when assigned, is in training for qualification as the OOD.

### Combat Information Center (CIC) Watch Officer

The combat information center (CIC) watch officer supervises the operation of the CIC, which reports, tracks, and evaluates air, surface, and submarine contacts.

## WATCH STANDERS

Senior enlisted watch standers also have a number of important assignments. While there are scores of other enlisted watch assignments, those described in the following sections are the most important and the most responsible. The majority of other enlisted watch standers report to, or through, watch officers.

### Quartermaster of the Watch (QMOW)

The quartermaster of the watch (QMOW) is an enlisted assistant to the OOD while under way (and in-port on certain classes of ships). The QMOW assists the OOD in navigational matters and maintains the ship's deck log. Additional duties include reporting and recording weather changes and executing required ship's navigational lighting changes. The QMOW, who must be a qualified helmsman, supervises the helmsman if senior to the BMOW.

### Boatswain's Mate of the Watch (BMOW)

The boatswain's mate of the watch (BMOW) is an enlisted assistant to the OOD during under way watches. The BMOW must see that all deck watch stations are manned with qualified personnel and all watch standers in previous watch sections are relieved. Although the section leader and the division petty officer have the duty of instructing the personnel they send on watch, the BMOW must verify that every person in the watch has been properly instructed and trained. A BMOW must be a qualified helmsman and supervises the helmsman if senior to the QMOW.

### Lookouts, Sky and Surface

The lookout watch mans assigned lookout stations and performs duties as prescribed in the ship's lookout instructions. Lookouts should be rotated at least hourly. They are under the direct supervision of the OOD. Lookouts are trained in their duties by the CIC officer. The posting and training of lookouts will, as a minimum, conform to the requirements of the *International Regulations for Preventing Collisions at Sea.*

### Messenger of the Watch (MOW)

The messenger of the watch stands the watch on the bridge (under way) and the quarterdeck (in-port). The MOW delivers messages, answers telephones, and carries out such duties as the OOD may direct. Messengers need to be familiar with various departments of the ship and ship's company. The underway messenger is normally assigned from the weapons/deck department.

### Fog Lookouts

Fog lookouts are required during fog or reduced visibility. The watch is stood in those locations where approaching ships can best be seen or heard (normally in the bows). The fog lookouts stand a vigilant watch to detect, either by hearing fog signals or actually sighting, approaching ships or craft. Posting and training of fog lookouts will, as a minimum, meet the requirements of the International Regulations for Preventing Collisions at Sea. This watch will consist of two personnel—one phone talker and one lookout. The addition of the phone

***Student Notes:***

talker allows the fog lookout to work without his or her hearing being impaired by wearing sound-powered phones. As with other lookouts, the fog lookouts are in contact with the OOD through the bridge phone talker.

**Helmsman**

The helmsman is a qualified steersman who steers courses prescribed by the conning officer. The helmsman alternates with other members of the deck watch as directed by the BMOW and as approved by the conning officer (who is generally the OOD or the JOOD). The helmsman is normally assigned from the weapons/deck department.

**Lee Helmsman**

The lee helmsman who stands watch at the engine order telegraph on the bridge rings up the conning officer's orders to the engine room, making sure all bells are correctly answered. The lee helmsman alternates with other members of the deck watch as directed by the BMOW and as approved by the conning officer. The lee helmsman is normally assigned from the weapons/deck department.

**After Steering Watch**

This watch, stationed in after steering, is set when positive steering control must be maintained, such as during general quarters, under way replenishment, and sea and anchor detail. During these evolutions, a qualified member from the navigation department is assigned as the after steersman along with a member from the engineering department. This watch is responsible for lining up and operating the steering engines according to orders received from the conning officer. During normal under way steaming, this watch is not usually manned, except on board the larger types of vessels (such as CVNs or LHAs).

**Gangway Watch**

When required, the gangway watch is posted at the foot of the brow or gangway to perform such duties as directed by the OOD. These duties normally include security of the brow and ceremonial duties.

**Security Watches and Patrols**

Security watches and patrols, in addition to those described elsewhere in this chapter, may be assigned at the discretion of the CO. Security watches and patrols are established to increase the physical security of the ship. Sailors assigned to security watches and patrols will be trained and qualified by the department head responsible for the areas to which specific watches and patrols are assigned. Duties of security watches and patrols include but are not limited to the following:

- Maintaining continuous patrols above decks and below decks
- Checking classified stowage, including spaces containing classified equipment
- Being alert for evidence of sabotage, thievery, and fire hazards
- Checking security of weapons magazines
- Obtaining periodic sounding of designated tanks and spaces
- Periodically inspecting damage control closures

**Sounding and Security Patrol**

The watch of the sounding and security patrol is regular and continuous. It is essential that only well-indoctrinated, experienced personnel are assigned this watch. The patrol follows an irregular route while conducting a continuous inspection of all spaces (except those on which a watch is posted or those spaces designated as limited or exclusion areas) to detect and prevent fire hazards, fire, flooding, theft, sabotage, or other irregularities affecting the physical security of the ship. Soundings and results of the inspection will be reported to the OOD and are logged in the ship's deck log. Any unusual conditions are reported to the OOD immediately.

**Fire Watch**

The purpose of a shipboard fire watch is to immediately extinguish fires caused by welding or burning operations. (Burning means cutting through

***Student Notes:***

metal with an oxyacetylene torch.) Often two persons are assigned to this duty—one is stationed at the scene, the other in the space behind the one in which the cutting or welding is being done. Heat generated by welding or burning can pass through a bulkhead or deck and ignite material on the other side.

When assigned a fire watch, you will be given a portable fire extinguisher and eye protectors, such as goggles. If you use the fire extinguisher or if the seal is broken, be sure you inform the person who issued it so that the bottle can be weighed to determine if it needs refilling.

The fire watch may become boring, but you must remain alert at all times. For example, when undergoing a shipyard overhaul, the ship's fire mains may be inoperative. The shipyard fire department then assumes responsibility for fighting shipboard fires. If you are goofing off on your watch or are absent from your station, a fire could gain considerable headway before arrival of the fire department, resulting in extensive (and unnecessary) damage to the ship and possible personnel casualties.

**Barracks Security Watch**

A security watch is maintained in all barracks for protection against fire, for the safety of personnel and material, and for carrying out routines. A security watch stander is responsible for knowing and carrying out the provisions of the fire bill, emergency bill, barracks regulations, and the like. The barracks security watch stander is responsible for maintaining prescribed standards of order and discipline.

If you are standing the security watch and an officer approaches, you salute and sound off with your name and rate. The formula for sounding off may vary from place to place, but it goes something like this: "Smith, Seaman, security watch, Barracks K, Sir/Ma'am."

A barracks security watch is usually a roving one and, depending on the type of barracks, it may cover two or more wings and/or decks. You must be alert to spot any fires that may be started by personnel smoking in their bunks (which is against regulations). If you see anyone smoking in a bunk, have that person put out the cigarette. Persons returning from liberty after taps must be prevented from disturbing the sleep of other personnel. Watch standers have the additional responsibility of making sure that unauthorized personnel don't enter the barracks. Usually, you must report periodically to the duty officer in the barracks office or, in some instances, to the OOD by telephone. Normally, you report that all is secure; however, you must report all disturbances and any unusual circumstances, such as illness or mishap. You may also have to enforce taps and hold reveille.

In the event of a fire, your duties are to do the following:

1. Report the fire. (Know the fire department number and the locations of the fire alarms.)
2. Spread the alarm—pass the word. Ensure all personnel except fire parties are clear of the area.
3. If time permits, close doors and windows to confine the fire and prevent drafts. Do not endanger yourself or others in this effort.
4. Fight the fire if possible, using the proper equipment at hand to extinguish the fire, pending the arrival of the fire department.

**SENTRIES**

Sentries are required at a number of locations, such as at gates to military bases, aboard ship, along a fence, or in a hangar. Although our discussion concerns a sentry walking a post, the same provisions apply to other types of sentry watches.

Sentries are governed by two types of orders—**general** and **special**. General orders (which do not change) cover situations of a routine nature common to most sentry posts. Special orders cover a certain time or situation peculiar to a particular post and are issued in addition to the general orders. Special orders may be written or verbal. Usually, written orders are issued by the CO and remain in effect until canceled or changed with subsequent (new) orders from the CO. These instructions are called standing orders. Verbal orders may be issued by any responsible officer or petty officer. Normally, they remain in effect for a limited period of time.

***Student Notes:***

**Eleven General Orders of a Sentry**

Normally, general orders for a sentry call for reporting to the petty officer of the guard. However, at any given station, you will make your reports to the petty officer of the watch, officer of the day, officer of the deck, or to the person designated as your immediate supervisor of the watch. Before standing watch, you need to know your chain of command for the watch.

There are 11 general orders for a sentry. They are reproduced here in **bold** letters, along with a brief explanation of each. You should memorize them word for word. You don't need to memorize the explanations, but you should understand the meaning of each order.

1. **To take charge of this post and all government property in view**. The number of the post, type of sentry duty, and limits of your post are part of your special orders. Within the limits of your post, you have authority over all persons, and it's your duty to challenge and, if necessary, detain all persons acting in a suspicious manner. You should apprehend all persons involved in disorder or discovered committing a crime. All persons detained or apprehended are turned over to the petty officer of the guard. You should fire your weapon only as a last resort. Smoking in a prohibited area, for example, is hardly a shooting offense. There are times, however, when firing at another person may be justified, but only after all means of defense or crime prevention have failed. In general, such times are as follows:

   a. To protect your own or another's life

   b. To prevent the escape of a person known to have committed a serious crime, such as armed robbery, rape, or murder

   c. To prevent sabotage, espionage, arson, and other crimes against the government

   d. If you must fire your weapon, try to wound instead of kill the person you're aiming at

2. **To walk my post in a military manner, keeping always alert and observing everything that takes place within my sight or hearing**. Keep turning your head as you walk your post, observing everything ahead and to the sides. If you hear a strange noise, investigate it.

You cannot expect to stand all your watches in fair weather. When the weather is bad, you will be issued appropriate clothing. Do not stand under a tree to keep out of the rain or stay behind a building to get out of a cold wind; during times of bad weather and darkness, you must be particularly alert.

3. **To report all violations of orders I am instructed to enforce**. If a person is acting from thoughtlessness, you need only remind the offender of the regulation being broken. For example, if you see a person starting to light a cigarette in a no smoking zone or a visitor blundering into a restricted area, you need only tell the person the regulation in effect. If the person is willfully violating a regulation, however, like trying to jump the fence or stealing Navy property, you must stop the person and place the offender under apprehension; then call for the petty officer of the guard. If the person tries to escape, give the order to halt. If the person does not obey, fire into the air; if the person does not stop, fire at the fleeing party's legs, subject to the limitations given under general order 1. If the offender escapes, report the matter as quickly as you can to the petty officer of the guard. In every instance, try to remember what the offender looked like so that you may identify the person. Do not leave your post to chase the offender unless immediate action is essential.

By firing your weapon and shouting, you can alert other sentries to intercept the offender. Do not fire at an offender if anyone else is around who could be hit by your shot. It is better to let the wrongdoer escape for the time being than to shoot an innocent person.

4. **To repeat all calls from posts more distant from the guardhouse (quarterdeck) than my own**. Suppose your post is number 3. To call the petty officer of the guard for any purpose other than relief, fire, or disorder, you call, "Petty officer of the guard (or corporal of the guard), post number 3." Sentry number 2 will repeat your call, giving your number, and so will sentry number 1. Thus the petty officer will know immediately which post to go to. Similarly, if sentry number 4 calls out, repeat the call, giving his or her number.

5. **To quit my post only when properly relieved**. If you aren't relieved on time, don't abandon your post, but call the petty officer of the guard for instructions. If you require a relief because of sickness or other reason,

***Student Notes:***

call, "Petty officer of the guard, post number ____, relief."

6. **To receive, obey, and pass on to the sentry who relieves me all orders from the commanding officer, officer of the day, and officers and petty officers of the guard only**. During your tour of duty, you are subject to the orders of the CO, XO, OOD, and the officers and petty officers of the guard only. Other officers and petty officers have no authority to take or inspect your weapon, to tell you how to stand your watch, or to order you to leave your post. Such other officers, however, still have the authority to investigate your conduct and to report it. Thus an enemy agent cannot dress up in an officer's uniform and order you from your post. You obey orders only from officers whom you know are authorized to give you commands related to your sentry duty. However, a passing naval officer who believes you are standing a poor watch may ask your name and post and report any observations to your superiors.

7. **To talk to no one except in the line of duty**. When you challenge or talk with a person, take the position of port arms. Answer questions briefly but courteously. Normally, if you maintain silence and military bearing, visitors will not try to engage you in long conversations. If, however, visitors or other naval personnel show a desire to pass the time of day with you, you must say politely to them "Excuse me, I am on duty and cannot talk with you further. Please move on." If they refuse to move on or show signs of becoming disorderly, you should call for the petty officer of the guard. Remember, if your superiors see you chatting while on duty, they will hold you responsible-not your visitor.

8. **To give the alarm in case of fire or disorder**. In case of fire, you immediately call, "Fire, post number ____" and sound whatever alarm is available. When you are sure your alarm has been heard by the other sentries or by the petty officer of the guard see what you can do to put out the fire. (If you can do so safely and without leaving your post, do so; otherwise, remain where you can direct apparatus to the fire.)

Remember that the fire may be a trick to lure you away from your post. You must remain vigilant (alert), even amid the confusion and excitement that accompanies a fire.

What we have said about fire applies also for disorder. In the event of a disorder, call the guard immediately; then try to quiet the trouble. If you approach the disorder first, you might be overcome and then could not give the alarm. Sometimes you can stop a disorder before it becomes too serious by calling to the persons involved, "I have reported you to the guard, who will be along immediately. Come to order now; further trouble will make matters worse for you." The persons concerned might realize you are right and follow your orders. If they do, maintain watch over them but do not approach too closely. Keep your weapon at port arms.

9. **To call the petty officer of the guard in any case not covered by instructions**. When you do not know what to do, call the petty officer of the guard.

10. **To salute all officers and all colors and standards not cased**. As used here, colors and standards both refer to the national ensign. The ensign is called the national colors (or just colors) when it is flying from a staff or pike carried by an individual or displayed in a fixed location, as from a flagpole. When mounted on a vehicle, the ensign is called the national standard. (Colors and standards are cased when they are furled and placed in a protective covering.) For sentries, the rules for saluting are the same as those described in chapter 9 of this manual with the following modifications:

a. If you are walking your post or patrolling while armed with a rifle, you halt and salute by presenting arms; when at sling arms, you render the hand salute.

b. If you're in a sentry box, you stand at attention in the doorway when an officer approaches; if you're armed with a rifle, you present arms. If otherwise armed, render the hand salute. If you're on duty in front of a building or passageway entrance where there is heavy traffic of officers, you may render the rifle salute at order arms. If you're in conversation with an officer, you don't interrupt the conversation to salute another officer. If the officer with you salutes a senior, however, then you also salute.

c. During the time of challenging, you don't salute an officer until the officer has advanced and has been duly recognized. You don't salute if to do so will interfere with the proper execution of your specific duties.

***Student Notes:***

11. **To be especially watchful at night and during the time for challenging, to challenge all persons on or near my post, and to allow no one to pass without proper authority**. When you see a person approaching your post, take the position of port arms and call, "Halt! Who is there?" The challenge must be made at a distance sufficient to prevent your being rushed by the person being challenged. If the person answers "Friend" or "Petty officer of the guard" or gives another reply indicating a friendly nature, call, "Advance (friend, and so on) to be recognized."

If you challenge a party of persons, after receiving a reply indicating the party is friendly, you call, "Advance one person to be recognized." When you have identified the one, you have the person bring up the rest of the party and identify each individual.

You must positively identify all persons challenged before permitting them to pass. If you can't identify them to your satisfaction, detain them and call the petty officer of the guard.

Never let more than one person advance at a time. If two persons approach at the same time, have them halt; then advance the senior and pass that person (if properly identified) before advancing the other person.

If the people are in a vehicle, you halt the vehicle and inspect the driver's or the passengers' credentials, as appropriate. (Normally, inspecting the driver of a military vehicle is sufficient; but for a commercial truck or taxi, you should check the passengers too.) If you believe there's something suspicious about the vehicle or its occupants, direct one of the occupants to get out and approach you for recognition. If you aren't satisfied beyond a reasonable doubt that the people are authorized to pass, detain the person or party and call the petty officer of the guard.

When challenging, advancing, and passing persons and patrols, always stand where you can get a good look at them in such a way that you are protected from a surprise attack.

**Relieving an Armed Watch**

Two methods are used for relieving armed sentries. One way (usually used ashore) is for the Petty Officer of the Watch (POOW) to fall in the reliefs and march them to their posts. Normally, each person in the relieving detail is armed with a rifle. At each post, the petty officer halts the ranks, and both the sentry being relieved and the reporting sentry come to port arms while the person being relieved passes any special orders or other information the relief should know.

In the other method (usually used aboard ship), each relieving sentry goes alone to the post. This sentry normally is unarmed and will relieve the sentry of the rifle or pistol as well as the post. The relief reports to the sentry, "I am ready to relieve you." The sentry executes inspection arms and port arms and repeats the orders; the relief says, "I relieve you." The relieving procedure is completed when the sentry being relieved passes the rifle to the relief and says, "I stand relieved."

**NOTE**

Refer to the ship's Standard Operating Procedures (SOP) for relieving an armed watch.

When standing an armed watch with a pistol, you must strictly observe the following additional precautions:

1. Keep the pistol in its holster except when the watch is relieved or circumstances require you to use it. Never engage in horseplay with the pistol—it is a deadly weapon and must always be treated as such.

2. Do not surrender the pistol to any unauthorized person.

3. The pistol normally is carried loaded aboard ship with one round in the chamber. Two loaded clips (magazines) are in the pouches attached to the pistol belt. Leave the clips in their pouches.

4. When being relieved, a safe area for unloading a pistol must be established. In a safe area, remove the magazine from the pistol. With the weapon pointed in a safe direction (i.e., barrel full of sand), carefully jack the slide to the rear and remove the round from the chamber. Check the chamber, ensuring no rounds are present. Release the slide and let the hammer go home (weapons terminology for returning the hammer to the uncocked position). Dry fire the weapon and then engage the safety.

***Student Notes:***

## CIRCUMSTANCES UNDER WHICH A WEAPON MAY BE FIRED

**Only** the CO can authorize the use of deadly force. (The term *deadly force* is defined as that force which, if used, has the potential to cause death or serious bodily harm.) The pistol or rifle should be used only as a last resort and then only under the following conditions:

1. To protect your life or the life of another person where no other means of defense will be effective in the particular situation
2. When no other effective means is available to prevent the commission of or to prevent the escape of a person known to have committed robbery, murder, rape, arson, or kidnapping
3. To prevent acts of sabotage, espionage, or other crimes against the government after failure of all other available means of preventing such crime

## LOOKOUTS

You may wonder why visual lookouts are needed today when U.S. Navy radar and sonar are the best. Well, there are some objects radar can't detect, and water conditions may severely limit the sonar detection range. For example, you might be able to see a submarine's periscope that's beyond sonar detection range and whose radar indication is lost in the surrounding sea return echoes.

Lookouts are important members of the ship's operating team. As mentioned above, there are some objects radar can't detect. Smoke, flares, swimmers, torpedo wakes, debris, low-flying aircraft, and life rafts are either impossible or very difficult to detect. Sometimes, radar also indicates the presence of objects that actually are not there. A lookout may be able to verify the validity of a radar contact report and identify the objects detected. During conditions of electronic silence, lookouts are the only means of detection.

The number of lookout stations varies according to the type of ship and whether it is peacetime or wartime. Naturally, large ships have more personnel available than do small ships; therefore, they can man more lookout stations. More lookouts are required in wartime than in peacetime. When enough personnel are available in peacetime, and always in wartime, three basic lookout searches are established.

1. **Surface lookouts**, who search from the ship to the horizon
2. **Low sky lookouts**, who search from the horizon to 5 degrees above it
3. **High sky lookouts**, who search from the horizon to the zenith (directly overhead)

Additionally, several persons may be assigned to each search, each person being responsible for a specified sector. Adjacent sectors have about 10 degrees overlap so that no area will be overlooked.

The normal peacetime lookout organization has three persons in each watch section.

- Two persons are located on the bridge or atop the pilothouse (for destroyer-type ships)—one searches to port, the other to starboard. Their sectors extend from just abaft the beam forward to dead ahead.

- The third person is stationed aft and is called the *after lookout/life buoy watch*. This sector extends from the starboard beam aft and around to the port beam. In addition to reporting all objects behind the ship, you would have the responsibility for promptly throwing overboard a life buoy if you see a person fall over the side, hear the cry "Man overboard," or hear cries for help coming from the water. If you are the first to see the accident, you call, "Man overboard, (port/starboard) side." You also relay reports made by others.

When you are on lookout watch, always report everything you see or hear. Trash in the water may seem unimportant to you, but it indicates a vessel has passed that way. In wartime, such a disclosure could lead to the sinking of the vessel. Discolored water may mean you are entering a shoal area. The OOD will never reprimand you for reporting objects but will reprimand you for not reporting them. There is no excuse for letting the OOD see something before you do.

***Student Notes:***

## REVIEW 1 QUESTIONS

Q1. List the three main reasons for a ship to maintain a watch.

a.

b.

c.

Q2. To find the ship's organized plan for action, you would look in the—

Q3. What person assigns qualified personnel to stations and enters their names on the Watch, Quarter, and Station Bill?

Q4. Write the condition on the right that matches the battle station situation on the left.

| SITUATION | CONDITION |
|---|---|
| a. A special watch used by gunfire support | |
| b. The normal wartime cruising watch | |
| c. All battle stations manned | |

Q5. You are relieving a watch. How many minutes ahead of time should you arrive at your station?

a. 15

b. 20

c. 25

d. 30

Q6. The ship's bell is usually restricted to what hours?

Q7. How many bells are sounded at 0700?

Q8. List the type of the watches for the times listed on the left.

| TIME | TYPE |
|---|---|
| a. 0000 to 0400 | |
| b. 0400 to 0800 | |
| c. 0800 to 1200 | |
| d. 1200 to 1600 | |
| e. 1600 to 1800 | |
| f. 1800 to 2000 | |
| g. 2000 to 2400 | |

Q9. What is the purpose of the dog watch?

Q10. What type of watch is stood by most Sailors?

Q11. The watch system is divided into what two parts?

a.

b.

Q12. List four purposes of a security watch.

a.

b.

c.

d.

***Student Notes:***

Q13. What person is responsible for maintaining the ship's deck log while under way?

Q14. The fog lookout normally stands—

Q15. List the conditions under which you would normally stand an after steering watch.

a.

b.

c.

Q16. The sound and security watch reports directly to the (a) _____, and the results of their inspections are logged in (b) _____.

Q17. There are 11 general orders and these orders don't change. General orders cover what situation(s)?

Q18. List the precautions that must be strictly adhered to while standing an armed watch with a pistol.

a.

b.

c.

d.

e.

Q19. List the conditions under which deadly force may be used.

a.

b.

c.

## BEARING

**Learning Objectives:** When you finish this chapter, you will be able to—

- Recognize the procedures to use when reporting bearings, to include scanning procedures and reports.
- Identify the procedures to follow when using binoculars to include night vision.

The direction of an object from a ship is called the *bearing*. Bearings are measured in degrees clockwise around a circle from 000° to 360°. There are three types of bearings.

1. Relative bearings use the ship's bow as a reference point.
2. True bearings use true north (the geographic north pole) as the reference point.
3. Magnetic bearings use the magnetic north pole as the reference point.

Sometimes, all three types of bearings coincide, but such situations are rare and of a temporary nature. Lookouts report objects (contacts) in degrees of relative bearing.

Figure 3-2 shows the relative bearings around a ship. An object dead ahead bears 000°, while an object abeam to starboard bears 090°, and so on. Study this figure, practice pointing to various objects. Compare your estimates of their bearings to what the objects actually bear. With practice, you should be able to report a contact within 5° to 10° of its actual bearing.

***Student Notes:***

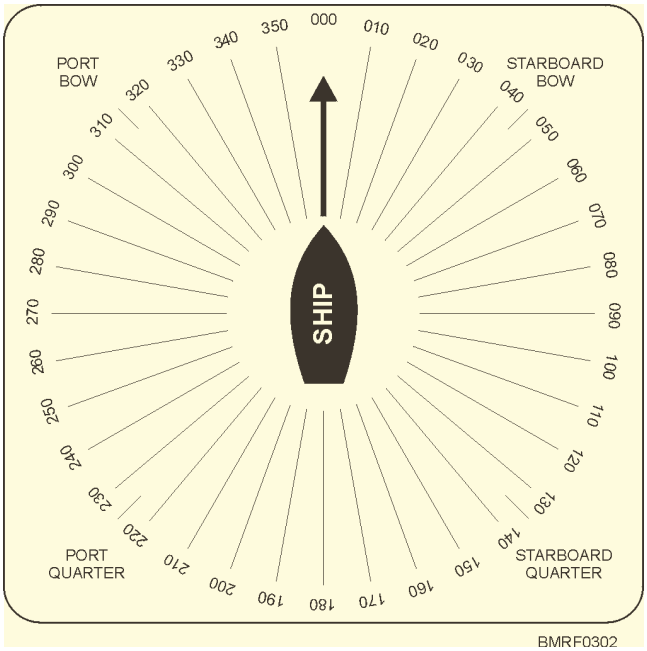



**Figure 3-2.—Relative bearings.**

To prevent confusion, the Navy uses a standard system for pronouncing numerals. The following list shows how numerals (numbers) are spoken:

| NUMERAL | PRONOUNCED |
|---|---|
| 0 | Zero |
| 1 | Wun |
| 2 | Too |
| 3 | Tree |
| 4 | Fo-wer |
| 5 | Fife |
| 6 | Six |
| 7 | Seven |
| 8 | Ate |
| 9 | Niner |

Bearings are always reported in three digits and spoken digit by digit, except that objects dead ahead or astern (000° or 180°), on either beam (090° or 270°), or on either bow (045°or 315°) or quarter (135° or 225°) may be reported as such. For example, a ship bearing 090° may be reported as being "abeam to starboard."

Do not become excited when you report contacts or other sightings. Failing to use the proper terminology can result in the OOD wasting time trying to find the object. Take a few seconds to think about how you are going to report the sighting. Taking that few seconds could mean the difference between the entire bridge looking on the wrong side of the ship for a sighting that is actually on the other side. Note that the word *relative* was not included. It is understood that lookouts report only in relative bearing.

## REPORTING TARGET ANGLE

Target angle is the relative bearing of your ship from another ship. You may wonder why you would care what your ship bears from another ship. The OOD uses target angles as an aid in determining the course of actions when another ship is sighted. (Target angles are useful during gunnery and antisubmarine operations.)

Look at figure 3-3. You are the starboard lookout and you detect a ship on your starboard bow heading at a right angle across your course. You report to the OOD, "Bridge, starboard lookout, ship broad on the starboard bow (or zero, fo-wer, fife), target angle tree wun fife." Assuming that your course is 000°, the OOD knows the other ship's course is approximately 270° and, depending upon the speed of the two ships, the possibility of collision exists. Your target angle report has alerted the OOD that a change of course or speed or both may be required. A change in target angle can mean that the contact has changed course, which is not always immediately apparent to the radar plotters in CIC.

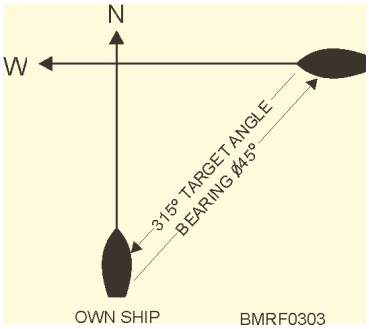



**Figure 3-3.—Target angle.**

***Student Notes:***

## REPORTING POSITION ANGLE

An object located in the sky is reported by its bearing and position angle. The position angle of an aircraft is its height (in degrees) above the horizon as seen from the ship. The horizon is 0° and directly overhead is 90°. A position angle can never be more than 90°, as shown in figure 3-4. Position angles are reported in one or two digits and spoken as a whole—not digit by digit.

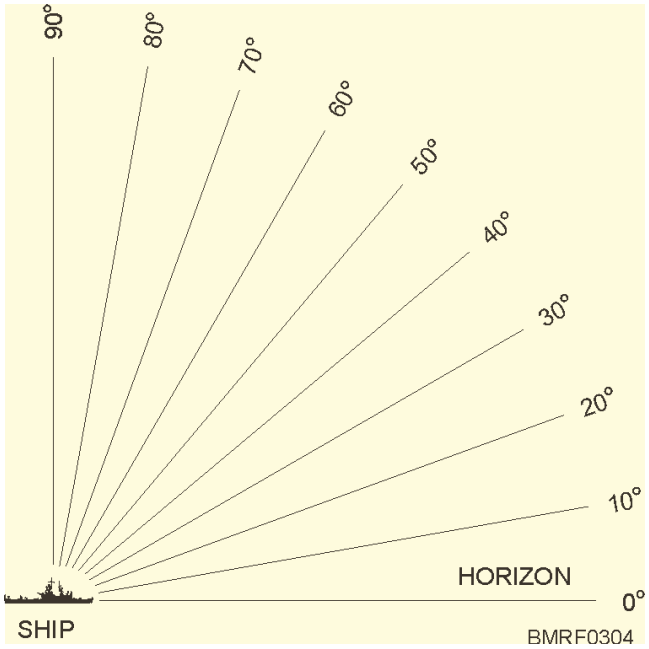



**Figure 3-4.—Position angle.**

Position angles should be reported on all aircraft. Look at figure 3-5. As the aircraft approaches the ship, the position angle increases. Whenever the position angle changes significantly, all stations should be informed. To help you more accurately determine an aircraft's position angle, you can use the aids shown in figure 3-6. The width of the thumb between the horizon and the aircraft is approximately 2°; the width of the closed fist, approximately 8°; and the open hand, approximately 15° (at arm's length).

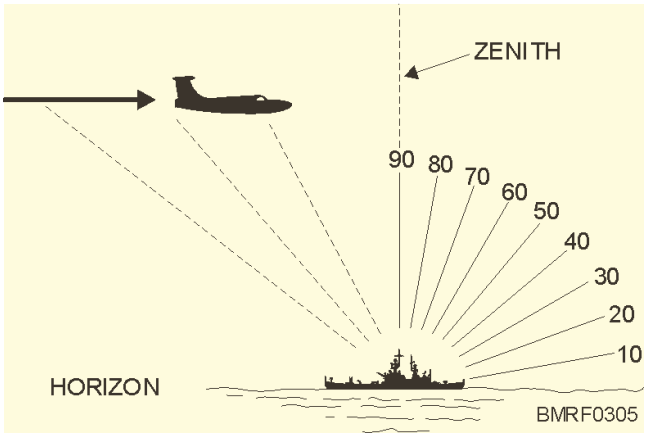



**Figure 3-5.—Position angle.**

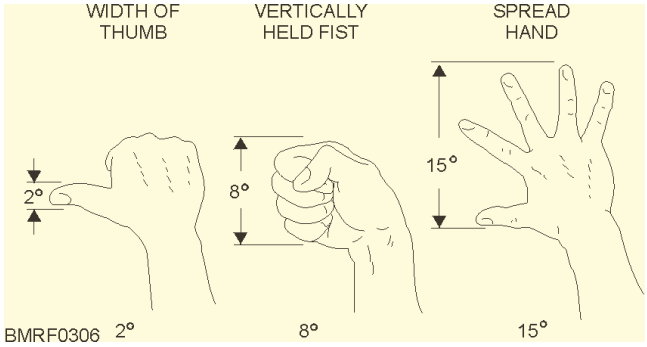



**Figure 3-6.—Position angle aids.**

## REPORTING RANGES

Most of the time, if you give reasonably good bearings and position angles when reporting contacts, the OOD will have little difficulty in locating them. But suppose you sight a submarine periscope, a person, or some other object low in the water. In these instances, you can save valuable time by reporting the object's approximate distance. Ranges are always reported in yards. Estimating distances over water is difficult for the inexperienced lookout. Distances can be very deceptive.

***Student Notes:***

A ship that looks like it's 1/2 mile away may actually be twice, or more than twice, that distance from you. Sometimes objects that seem to be half the distance to the horizon may actually be considerably closer.

Knowing your height above the water helps you to estimate ranges. For example, at a height of 50 feet, the distance to the horizon is about 16,000 yards (8 miles); at a height of 100 feet, the distance is about 23,000 yards (11 1/2 miles). Practice estimating distances to known objects. Until you become proficient at estimating ranges, use phrases, such as "close aboard," "on the horizon," and "hull down."

Ranges are reported in yards and spoken digit by digit, except that multiples of hundreds and thousands are spoken as such.

## USE OF BINOCULARS

Using binoculars for searching isn't always better than using the naked eye. Several factors govern when and how binoculars should be used. For example, in fog binoculars should not be used. At night, they should be used quite often. Another factor is their field of view, which is about 7°. Depending on the type of search, such a narrow field may hamper proper scanning techniques.

### Adjusting Binoculars

Three adjustments are required to obtain proper focus and to gain maximum benefit from the light-gathering quality of binoculars—two adjustments for focus and one for the proper distance between lenses.

To properly focus your binoculars, you should do the following:

1. Set both eyepieces to the +4 mark. Place the binoculars firmly against the eyebrows and locate a small, well-defined object about 1/2 mile away.
2. Cover one lens. (Do not touch the glass.)
3. Slowly turn the other eyepiece until a sharp image is obtained, then back off as far as possible without losing the sharpness. (Keep both eyes open; closing one will give an incorrect focus.)
4. Note the reading on the scale; then repeat the previous procedures two or three times to obtain the exact setting. Follow the same procedure for the opposite eye.

The final adjustment is to establish the interpupillary distance (IPD), which is the distance between your eyes. Move the barrels up and down until you see a single circle (fig. 3-7). Then note the reading on the IPD vernier between the barrels. An incorrect IPD setting will strain the eyes and waste part of the binoculars' light-gathering ability.

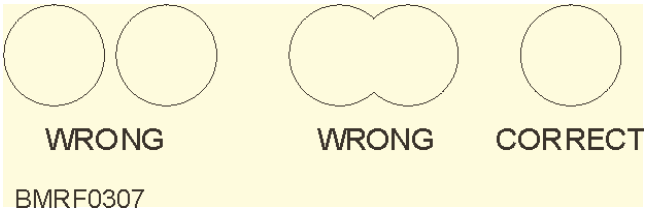



**Figure 3-7.—Proper IPD setting.**

You won't have your own personal binoculars. They are passed from watch to watch. Therefore, it's important for you know your focus and IPD settings so that the binoculars may be properly adjusted at night or when there are no objects on which to focus in the daytime. For nighttime use, the focus setting is one mark less than for daytime.

Daytime use of binoculars depends upon the type of search being conducted. Surface lookouts should use them to scan across their sector—they should then use the naked eye on return sweeps. Sky lookouts should use them only to identify a contact detected with the naked eye.

The binoculars should be used more frequently at night than during daylight, but searches should still be made with the naked eye. You often can see objects, particularly moving ones, out of the corner of your eye. These objects might not be detected with the binoculars because of their narrow field of view.

Binoculars should never be used in fog, rain, snow, or thick haze.

***Student Notes:***

### Care of Binoculars

Binoculars are fairly delicate instruments; they cannot stand much knocking about. Therefore, keep them on a short strap when wearing them to prevent their banging against solid objects. **Always** keep the strap around your neck. **Never** hold binoculars over the side of the ship without the strap being around your neck. Many pairs of binoculars have been lost over the side in this manner. Keep the lenses dry; otherwise, you will not be able to see properly. Don't let them become overheated; the cement around the lenses might melt. Above all, keep them clean. You must be careful, however, not to damage the lenses when cleaning them. First, blow off loose dust; then breathe on the lenses (except in freezing weather) and gently clean them with lens paper. Rags, plain paper, handkerchiefs, or your sleeve or shirttail should not be used, as they might scratch the lens. You can usually get a supply of lens paper from the QMOW.

## NIGHT VISION

Have you ever walked from a lighted theater lobby into the darkened theater? You would almost be blind for a few minutes. As your eyes become accustomed to the weak light, your vision gradually improves. The same situation exists when you go on night watch directly from a lighted compartment. After 10 minutes, you can see fairly well. After 30 minutes, you reach your best night vision. This improvement of vision in dim light is called *dark adaptation*.

Specially designed red goggles are provided for you to use before you go on night lookout duty. These goggles prepare your eyes for darkness without affecting your ability to play games, write letters, or read before going on watch. You should wear them without interruption for at least half an hour before going on watch. Even then, it will still take you at least 5 minutes more in darkness to develop your best night vision.

After your eyes are dark adapted, you must learn to use your *night eyes*. In the daytime, you should look directly at an object to see it best. In the dark, you need to look above, below, or to one side of an object to see it. This is called *off-center vision*. At night, it's also easier to locate a moving object than one standing still. Because most objects on or in the water have a relatively slow speed, we move our eyes instead, and the effect is nearly as good. Therefore, while scanning at night, lookouts move their eyes in slow sweeps across the area instead of stopping the eyes to search a section at a time.

Your ship may be equipped with night vision equipment. Before standing watch, be sure you are trained in operating the night vision equipment assigned to your ship.

## SCANNING PROCEDURES

A well-trained lookout will see much more than a "green" hand would see. In good weather, lookouts can easily spot planes with the naked eye at 15 miles. With binoculars and in unusually clear weather, lookouts have detected planes at 50 miles. At night, skilled lookouts will detect objects that the untrained lookout would never suspect were there.

The lookout's technique of eye search is called *scanning*, which is a step-by-step method of looking. It is the only efficient and sure way of doing the job. Scanning does not come naturally. You must learn to scan through practice. In the daytime, your eyes must stop on an object to see it. Try moving your eyes around the room or across the water rapidly. Note that as long as your eyes are in motion, you see almost nothing. Allow your eyes to move in short steps from object to object. Now you can really see what is there.

Figure 3-8 shows how you should search along the horizon. (You also must cover the surface between your ship and the horizon.) Search your sector in 5° steps, pausing between steps for approximately 5 seconds to scan the field of view. At the end of your sector, lower the glasses and rest your eyes for a few seconds; then search back across the sector with the naked eye.

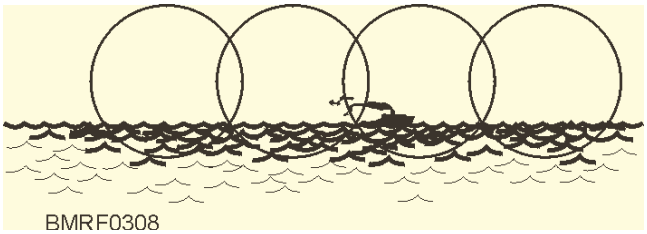



**Figure 3-8.—Scanning using the step-by-step method.**

Lookouts also search from the horizon to the zenith (overhead), using binoculars only to identify a contact. Move your eyes in quick steps (about 5°) across your

***Student Notes:***

sector just above the horizon. Then, shift your gaze upward about 10°, and search back to the starting point. Repeat this process until the zenith is reached; then rest your eyes for a few seconds before starting over.

When searching at night, keep your eyes moving. Try to adhere to (stay with) the sector scan (and upward shift) even though the horizon may not be visible. If you spot a target (or even think you have), don't stare at it. Instead, look slightly to either side.

**REPORTS**

Every object sighted should be reported, no matter how insignificant it may seem to you. The initial report consists of two basic parts—what you see and its bearing (direction) from the ship. Aircraft sighting reports also include altitude (position angle). Report the contact as soon as you see it, then follow with an amplifying report. Include the object's identity (destroyer, periscope, log, and so on) and direction of travel (closing, crossing, and so on). Refer to the ships SOP on reporting procedures.

**REVIEW 2 QUESTIONS**

Q1. Describe how bearings are measured?

Q2. List the three different types of bearings.

a.

b.

c.

Q3. Explain the difference between reporting bearing angles and position angles.

Q4. You are using your hand as an aid to determine the position angle of an aircraft. What is the approximate width of a closed fist (in degrees)?

Q5. If the binocular IPD is adjusted properly, what will you see when viewing through them?

a. One circle

b. Two separate circles

c. Two circles

Q6. List the three adjustments that must be made when using binoculars.

a.

b.

c.

Q7. The improvement of vision in dim light is known as—

Q8. How many minutes will it take for you to reach your best night vision?

Q9. Explain the difference between the method used for a day lookout and a night lookout.

**SUMMARY**

In this chapter, you learned about the basic fundamentals of the watch organization and some of the procedures associated with standing a proper watch. We also covered the importance of communications in relation to watch-standing duties. Having well-trained and competent watch standers would be useless without

***Student Notes:***

a means of relaying information. You also learned how bearings are reported.

Every person in the Navy has, at one time or another, been assigned some type of watch. Your safety, and that of your shipmates, depends on how well you execute these duties. Just one moment of inattention could mean the difference between a shipmate that has fallen overboard being recovered or lost. A minute of "slacking off" as a fog lookout may be the difference in reaching home port safely or being involved in a collision at sea. No watch is more or less important than others. Every watch on board your ship or station is interdependent. The safety of all crew members depends upon each watch stander carrying out his or her assigned duties in a proper military fashion and according to the eleven orders of the sentry.

## REVIEW 1 ANSWERS

A1. The three main reasons for a ship to stand watch are—

a. **Communications**

b. **Security**

c. **Safety**

A2. The ship's organized plan for action is located in the **battle bill**.

A3. The **division officer** and **division chief** are responsible for assigning qualified personnel to stations and entering their names on the Watch, Quarter, and Station Bill.

A4. The condition on the right matches the battle station situation on the left.

| SITUATION | CONDITION |
|---|---|
| a. A special watch used by gunfire support | **Condition II** |
| b. The normal wartime cruising watch | **Condition III** |
| c. All battle stations manned | **Condition I** |

A5 When relieving a watch, you should arrive at your station **15 minutes** ahead of time.

A6. The ship's bell is usually restricted to the hours between **reveille and taps**.

A7. **6 bells** are sounded at 0700.

A8. The type of the watches for the times listed.

| TIME | TYPE |
|---|---|
| a. 0000 to 0400 | **Midwatch** |
| b 0400 to 0800 | **Morning watch** |
| c. 0800 to 1200 | **Forenoon watch** |
| d. 1200 to 1600 | **Afternoon watch** |
| e. 1600 to 1800 | **First dog watch** |
| f. 1800 to 2000 | **Second dog watch** |
| g. 2000 to 2400 | **Evening watch** |

A9. The purpose of the dog watch is to **rotate watches**.

A10. Most Sailors stand **security watches**.

A11. The watch system is divided into (a) **underway** and (b) **in-port watches**.

A12. Security watches—

a. **prevent sabotage**

b. **protect property from theft**

c. **prevent access to restricted areas**

d. **protect personnel**

A13. The **QMOW** maintains the ship's deck log while under way.

A14. The fog lookout normally stands **in the bow where approaching ships can better be seen and heard**.

A15. Normally, an after steering watch is stood under the following conditions:

a. **General quarters**

b. **Under way replenishment**

c. **Sea and anchor detail**

A16. The sound and security watch reports directly to the **(a) OOD**, and the results of their inspections are logged in **(b) ship's deck log**.

A17. General orders cover situations of a **routine nature common to most sentry posts**.

A18. The precautions to be strictly adhered to while standing an armed watch with a pistol include—

a. **keep the pistol in the holster.**

b. **don't engage in horseplay with the pistol.**

c. **don't surrender the pistol to any unauthorized person.**

d **leave two loaded magazine clips in their pouch and remember there is one round loaded in the chamber.**

e. **when relieved, unload the pistol in a safe designated area. Remove the round from the chamber and check the chamber clear. Release the slide and let the hammer go home. Dry fire the pistol then engage the safety**.

A19. Deadly force can be used—

a. **to protect your life or the life of another person where no other means of defense will be effective**

b **when no other means is available to prevent the commission of or to prevent the escape of a person known to have committed robbery, murder, rape, arson, or kidnapping**

c. **to prevent acts of sabotage, espionage, or other crimes against the government after failure of all other available means of preventing such crime**

## REVIEW 2 ANSWERS

A1. Bearings are measured **in degrees, clockwise around a circle from 000° to 360°**.

A2. The three different types of bearings are—

a. **Relative**

b. **True**

c. **Magnetic**

A3. Bearings are reported in **three digits, spoken digit by digit**; positions are reported in **one or two digits and spoken whole**.

A4. When using your hand as an aid to determine the position angle of an aircraft, your closed fist is **approximately 8°**.

A5. If the binocular IPD is adjusted properly, you will see **one circle** when viewing through them.

A6. T he three adjustments that must be made when using binoculars are **to adjust each eyepiece and set the IPD**.

A7. The improvement of vision in dim light is known as **dark adaptation**.

A8. It will take **30 minutes** for you to reach your best night vision.

A9. The different methods used for a day lookout and a night lookout are the day lookout **moves his/her eyes in 5 steps, pausing at each step**; the night lookout **keeps moving his/her eyes**.

# CHAPTER 4

# COMMUNICATIONS

*A glance at a globe is all it takes to appreciate the meaning of control of the sea in the nuclear age.*

—Admiral Arleigh Burke

Communications are of vital importance to a shipboard organization and are sometimes referred to as *the voice of command.* Without proper communication among the different parts of the ship, the whole organization could break down and fail in its mission.

Communications, as discussed in this chapter, are grouped into two basic categories—interior and exterior. Interior communications are concerned only with the exchange of information between individuals, divisions, and departments aboard a single ship or station. Exterior communications deal with conveying information between two or more ships, stations, or commands.

One of the most important communications systems used aboard ship is the sound-powered telephone. Sometime in your Navy career, you **will** "man" a sound-powered telephone set. You must become familiar with the proper usage and care of the equipment. In addition, you must learn the correct procedures used with the sound-powered telephone system, including the use of the phonetic alphabet.

## THE PHONETIC ALPHABET

**Learning Objective**: When you finish this chapter, you will be able to—

- Identify the phonetic alphabet as applied to communications.

It is easy to confuse the sounds of certain letters, such as bee and dee, cee and zee. To avoid confusion, the Navy requires that phonetic equivalents of letters be spoken instead of the letters themselves.

The Navy has had a phonetic alphabet for many years. From time to time, it's been changed in attempts to use words that would instantly bring to mind the letter represented by the word. The phonetic alphabet (table 4-1) was adopted by the armed forces of the various NATO nations as a means of overcoming many language difficulties. Each word is accented on the

**Table 4-1.—Phonetic Alphabet**

| LETTER | EQUIVALENT | SPOKEN |
|---|---|---|
| A | ALFA | AL fah |
| B | BRAVO | BRAH voh |
| C | CHARLIE | CHAR lee |
| D | DELTA | DELL ta |
| E | ECHO | ECK oh |
| F | FOXTROT | FOKS trot |
| G | GOLF | GOLF |
| H | HOTEL | hoh TELL |
| I | INDIA | In dee ah |
| J | JULIETT | JEW lee ett |
| K | KILO | KEY loh |
| L | LIMA | LEE mah |
| M | MIKE | Mike |
| N | NOVEMBER | no VEM ber |
| O | OSCAR | OSS cah |
| P | PAPA | pah PAH |
| Q | QUEBEC | kay BECk |
| R | ROMEO | ROW me oh |
| S | SIERRA | see AIR rah |
| T | TANGO | TANG go |
| U | UNIFORM | YOU nee form |
| V | VICTOR | VIK tah |
| W | WHISKEY | WISS key |
| X | XRAY | ECKS ray |
| Y | YANKEE | YANG key |
| Z | ZULU | ZOO loo |

capitalized syllable. You should memorize the phonetic alphabet and use it along with correctly pronounced numbers, as described earlier in chapter 3, for all telephone and lookout reports.

### REVIEW 1 QUESTION

Q1. You are manning the sound-powered telephone in a repair locker. DC central calls and wants the serial number of the P-100 pump (23DBCX14) in your repair locker. How should you say this number over the phone?

## SOUND-POWERED TELEPHONES

**Learning Objectives**: When you finish this chapter, you will be able to—

- Recognize the components of the sound-powered telephone.
- Identify the procedures to follow when using sound-powered telephones.

Sound-powered phones are just what the name implies—phones that operate on your voice power and require no batteries or external electrical power source.

When you speak into the mouthpiece, the sound waves of your voice cause a diaphragm to vibrate. The vibrations are transferred from the diaphragm through a drive rod to an armature centered in a wire coil. The coil is located in a magnetic field supplied by two permanent magnets. Movement of the armature in the magnetic field causes a current to be induced into the coil. The current then is transmitted to a receiver (the earpiece) where the process is reversed, and the person at the other end of the circuit hears the same sounds you transmitted.

The mouthpiece and earpiece, though shaped differently, function in the same manner and thus can be used interchangeably. You can talk into an earpiece and hear through a mouthpiece. This feature is important to remember not only in the event of a breakdown of one or the other pieces but also because undesired noises can be fed into the system through an earpiece turned away from your head.

### THE HEADSET

Figure 4-1 shows a headset type of sound-powered telephone. The mouthpiece is suspended from a yoke that is attached to a metal breastplate. The earpieces are connected by an adjustable band. The mouthpiece and earpiece are connected by wire from a junction box on the breastplate. The plug cord is also connected into this junction.

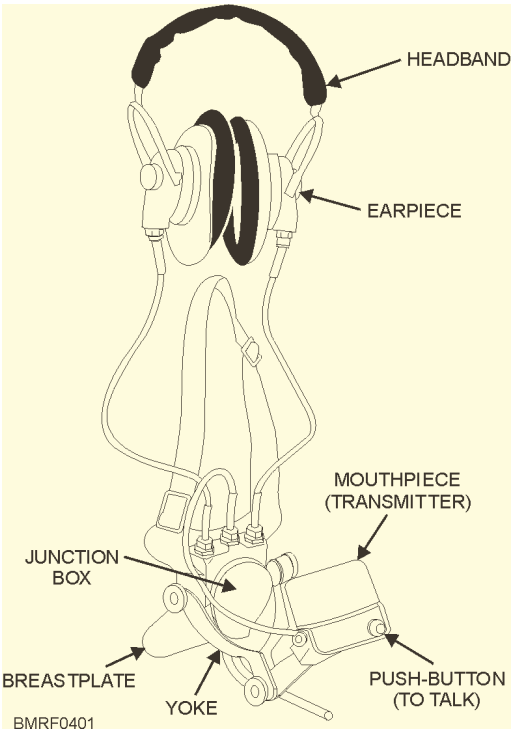



**Figure 4-1.—Headset.**

The headset is delicate and can be easily damaged. When you pick up the set to put it on, hold the entire unit in your left hand. You will find the headset is hung over the transmitter's supporting yoke and the lead wires are coiled.

To put the gear on—

1. Unhook the right side of the neck strap from the breastplate, put the strap around your neck, and then fasten it to the breastplate again.
2. Take off the coil of lead wires; then put the earpieces on and adjust the headband so that the center of the earpiece is directly over the opening of the ear.

***Student Notes:***

3. Insert the plug into the jack box and screw the collar on firmly.

Adjust the mouthpiece to bring it directly in front of your mouth when you stand erect. When you speak into the transmitter, it should be about 1/2 to 1 inch from your mouth. In making this adjustment, remember that the fine wire that goes to the transmitter can be broken easily. Be sure there aren't any sharp bends in it, and don't allow it to get caught between the transmitter and the yoke.

When you are wearing the headset, always keep some slack in the lead cord and be sure it is flat on deck. If you have the cord stretched taut (tight), someone may trip over it and damage the wires, receive an injury, or injure you. Don't allow objects to roll over or rest on the cord.

After plugging in the phones, test them with someone on the circuit. If the phones aren't in order, report that fact to the person in charge of your station and don a spare set; do not attempt to repair the set yourself.

If you are on lookout and should be listening as well as searching, cover only one ear with an earpiece so that you can hear outside noises as well as telephone communications. Keep the unused earpiece flat against the side of your head so that noises will not enter the circuit.

Never secure the phones until you have permission to do so. When permission is given, make up the phones for stowage according to the following instructions:

1. Remove the plug from the jack box (fig. 4-2) by holding the plug in one hand and unscrewing the collar with the other. When the collar is loose, grasp the plug and pull it out. Don't pull on the lead to remove the plug; that will weaken and eventually break the connection. When the plug is out, lay it carefully on the deck. Immediately screw the cover on the jack box, as dust and dirt will soon cause a short circuit in a jack box left uncovered. (**NOTE**: If you see an uncovered jack box, cover it, even though you were not responsible for the carelessness.)

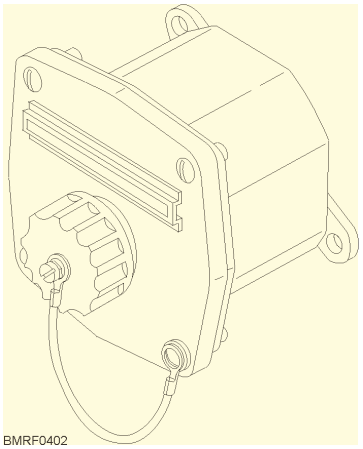



**Figure 4-2.—Sound-powered telephone jack box.**

2. Remove the headset and hang it over the transmitter yoke, as shown in figure 4-3.

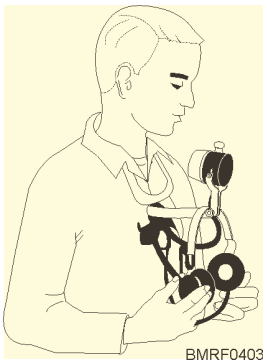



**Figure 4-3.—Hanging the headset on the yoke.**

3. Coil the lead cord, starting from the end at the phone. Coil the lead in a clockwise direction, holding the loops in one hand, as shown in figure 4-4. The loops should be 8 to 10 inches across, depending on the size of the space where the phones are stowed. When you are coiling the lead, be careful not to bang the plug against the bulkhead or deck.

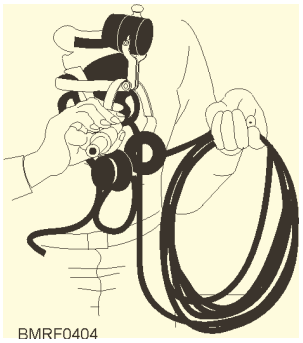



**Figure 4-4.—Coiling the lead cord.**

***Student Notes:***

4. When the lead is coiled, remove the headset from the transmitter yoke and put the headband in the same hand with the coil. Use this same hand to hold the transmitter while you unhook one end of the neck strap from the breastplate. Fold the transmitter yoke flat, being careful not to put a sharp bend in the transmitter cord.

5. Wrap the neck strap around the coil and the headband two or three times and snap the end back on the breastplate; then fold the mouthpiece up against the junction box. You now have a neat, compact package for stowage, as shown in figure 4-5.

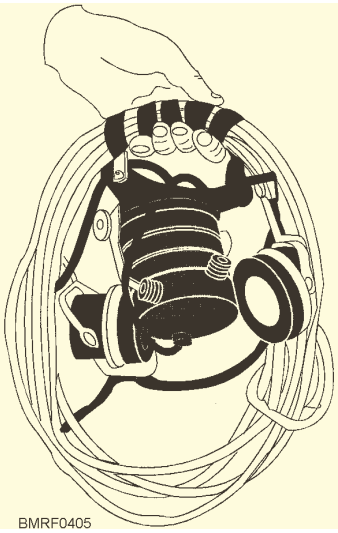



**Figure 4-5.—Coiling completed.**

6. Put the phone into the box or hang them on the hook provided. Be careful not to crowd or jam the leads.

Headset phones should always be unplugged when they are not in use. If they are left plugged in, the earpieces will pick up noise and carry it into the circuit. Never place the phones on the deck. Not only is it possible that someone may step on them, but decks are good conductors of noise, which can be picked up by the phones.

## THE HANDSET

The handset telephone shown in figure 4-6 is held in one hand with the receiver over one ear and the transmitter in front of the mouth. A button, located on the bar connecting the transmitter and the receiver, is pushed down for talking. (The button must also be depressed [pushed down] to listen.) (**NOTE**: If the button is held down at other times, all of the noise at the talker's station will go throughout the circuit and make it difficult for other talkers on the line to understand each other.)

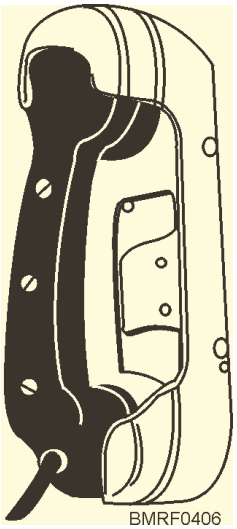



**Figure 4-6.—Handset.**

When not in use, the handset telephone is held on a bracket on a bulkhead with a lever or spring attachment that keeps it from being jarred loose. When you replace the handset in its bracket, be sure it is secured so that it cannot fall to the deck and be damaged.

## REVIEW 2 QUESTIONS

Q1. True or False. The mouthpiece and earpiece of a sound-powered phone are interchangeable.

Q2. Describe the reason why you pick the headset phones up as a whole unit.

Q3. You are finished using the headset sound-powered phone. You should then unplug the headset for what reason?

***Student Notes:***

Q4. When using a handset sound-powered phone, what action should you take to talk or listen through the phone?

## SOUND-POWERED CIRCUITS

**Learning Objective**: When you finish this chapter, you will be able to—

- Recognize the function of the primary, auxiliary, and supplementary systems of a sound-powered circuit.

Sound-powered telephone circuits aboard ship fall into three categories—primary, auxiliary, and supplementary systems.

The **primary system** includes all circuits necessary for controlling armament, engineering, damage control, maneuvering, and surveillance functions during battle. These circuits are designated JA through JZ.

The **auxiliary system** duplicates many of the primary circuits for the purpose of maintaining vital communications in the event of damage to the primary system. Auxiliary circuits are separated as much as possible from primary circuits. Circuit designations are the same as the primary system, preceded by the letter *X* (XJA, X1JV, and so on).

The **supplementary system**, X1J through X61J, consists of several short, direct circuits, such as from the bridge to the quarterdeck or from the quarterdeck to the wardroom. Circuits in the primary and auxiliary systems can be tied together at various switchboards or individual stations may be cut out of the circuits, but the supplementary system does not have these provisions. Because circuits in the supplementary system usually are not manned, most circuits contain a buzzer system so that one station can alert another station that communications between the two are desired.

Circuit designations are characterized by a letter and number code. The 21JS4 primary battle circuit, for example, is identified as follows: numerals 21 indicate the specific purpose of the circuit; the letter *J* denotes sound power; the letter *S* means general purpose (radar, sonar, and ECM information); and the numeral 4 indicates a particular station in the circuit. The same circuit in the auxiliary system is X21JS4. All auxiliary and supplementary circuit designations are preceded by the letter *X*, but supplementary circuits are easily identified as such because they have no letter after the letter *J*.

The following are some typical shipboard sound-powered circuits:

| | |
|---|---|
| JA | Captain's battle circuit |
| JC | Weapons control |
| JL | Lookouts |
| 21JS | Surface search radar |
| 22JS | Air search radar |
| 61JS | Sonar information |
| 1JV | Maneuvering and docking |
| 2JZ | Damage control |
| X8J | Replenishment at sea |

If you are on a lookout watch, your reports will go over the JL circuit to the bridge and the ship's CIC. On small ships, the JL circuit sometimes is crossed with another circuit, such as the 1JV, to reduce manning requirements. The bridge talker then has the lookout, CIC, engineering, and after steering (emergency) stations on the same circuit.

## TELEPHONE TALKERS

**Learning Objective**: When you finish this chapter, you will be able to—

- Identify the responsibilities of telephone talkers to include telephone talking procedures.

As you have learned, you'll probably stand some form of watch aboard ship as a telephone talker. A ship at sea requires many talkers even during a peacetime cruising watch. In addition to the lookouts, there are talkers on the bridge, in firerooms, and in engine rooms, to mention only a few of the many spaces. To be a good sound-powered telephone talker, you must learn proper telephone procedures.

***Student Notes:***

Sound-powered telephone talkers are essential to the operation of a ship at sea because the ship must have a reliable interior communicating system. Imagine the difficulties the captain would have without means of communication with the engine room, with gunnery stations during battle, or with all the other spaces that help run the ship.

## GENERAL TELEPHONE TALKING PROCEDURES

Here are some tips on how to be a telephone talker.

- Because all the power for the phones is generated by your voice, you must speak loudly and clearly if your message is to get through. However, do not shout unnecessarily. Do not run your words together; make every part of your message stand out clearly. Repeat all messages word for word to the intended receiving station; if you try to paraphrase a message, its meaning may be changed.

- Never have gum or food in your mouth while you are using the phones. Talk from the front of your mouth, never from the corners. Remember, you must project your voice to every station on the circuit.

- You gain nothing by talking too rapidly; a message spoken slowly, so that it is understood the first time, is better than a message spoken so rapidly that it must be repeated.

- During an emergency, remember that it is doubly important to get the message through. By talking slowly, some of your own excitement will subside. If you are calm and sure of yourself, you will influence other talkers on the circuit to behave in the same way.

- Nearly everyone has a manner of speech that reveals to others what part of the country they are from. On occasion, you may have found it difficult to understand the speech of a person from a different part of the country. With this thought in mind, try to speak without local accents.

## CIRCUIT DISCIPLINE

The sound-powered system resembles a party line—everyone can talk and listen at once. For that reason, strict circuit discipline must be maintained. Otherwise, the circuit will become clogged with private conversation just when someone is trying to transmit an important message.

The rules for circuit discipline are as follows:

1. Transmit only official messages.
2. Keep the button in the OFF position except when actually transmitting.
3. Use only standard words and phrases.

Don't use slang or profanity on the phones. Use correct nautical terms. If naval terminology is new and unfamiliar to you, make it your business to learn the correct terms.

You, as a phone talker, are a very important link in the interior communication chain; that chain is no stronger than its weakest link. Unauthorized talking means there are at least two weak links in the chain. Be efficient. If someone else on your circuit persists in useless talking, remind the person that the line must be kept clear at all times.

Circuit discipline also means you must never show impatience, anger, or excitement. You must talk slowly, clearly, and precisely. Circuit discipline means self-discipline.

## STANDARD TELEPHONE TALKING PROCEDURES

Most messages are divided into the following parts:

1. Name of the station called
2. Name of the station calling
3. The message

You call the station for which you have a message, identify yourself, and send the message without waiting for the receiving station to answer.

When a message is received, it must be acknowledged (receipted for) as soon as it is understood. You acknowledge a message by identifying your station and saying "Aye."

***Student Notes:***

**NOTE**

"Aye" is not used as an answer to a question; instead, "Affirmative," "Negative," or other appropriate reply is given.

When a message is received, it must be repeated back word for word. An example would be "Catapult center deck, primary; raise the starboard jet blast deflector." The response would be "Primary, catapult center deck; raise the starboard jet blast deflector, aye." The catapult center deck operator would then wait for a few seconds for the primary operator to confirm that the order was understood. The catapult center deck operator would then raise the jet blast deflector.

Communications on the sound-powered phone system is phrased in the declarative (statement) instead of the interrogative (question). For example, the questions "What is the status of the jet blast deflector?" or "When will the jet blast deflector be repaired?" would be rephrased to "Report the status of the jet blast deflector" and "Report the estimated repair time of the jet blast deflector."

Slang expressions or locally devised codes should not be used. The use of abbreviations should be avoided. Some abbreviations may be easily misunderstood, such as SSTG, SSDG, and SFMG.

When a subordinate station requests permission to carry out an action, do not say, "Permission granted." Another station might think you are giving it permission to carry out some other action. Respond to a request with a direct order. For example, when permission is requested to change phone talkers, the proper response, if approved, would be "Change phone talkers."

If you "belay an order," immediately order what action is needed. For example, when the throttleman is given an order to "Close the throttle" and that order is belayed, then you tell the throttleman what you want him or her to do, such as "Return throttle to original position" or "Open throttle to _____."

Never receipt for a message unless you are sure you understand it. If you do not understand, tell the sender, "Say again." If the message is long and you need only a part of it to be repeated back, you can say, "Say again all after ..." or "Say again all before ..."

When you are leaving the circuit for any reason, you must obtain permission from the controlling station. You may be leaving the circuit to change headphones because of a faulty set, to be relieved by someone else, or to secure. In any case, when leaving the circuit, **request permission**.

When a circuit is in use and a station has a more important message to transmit (to report a fire, for example), the talker says, "Silence on the line." Whenever you hear that command, you must immediately stop talking so that the message can be transmitted.

## EXAMPLES OF TELEPHONE TALKER PROCEDURES

The following examples of sound-powered telephone transmissions are representative of the types of messages sent over the phones. Study them until you are sure you have the procedures correct; only practice can make you into a reliable talker.

### Circuit Test

To find out if telephone stations are manned and ready, the talker at control says, "All stations, control; phone check."

Each talker then acknowledges in assigned order. On a gun circuit it would go like this:

> Each station responds in order, but does not wait more than a few seconds for the station immediately preceding to acknowledge. If you are on gun 3, and gun 2 does not respond in a few seconds, you acknowledge and let gun 2 come in at the end. A circuit test is not complete until every person has answered and faults in equipment have been checked

### Sending

In sending a message, first call the station you want, and then identify your own station; finally, state the message:

> "Foc'sle, bridge; prepare to anchor in fife minutes."
>
> "Fantail, bridge; slack off stern line."

***Student Notes:***

**Receiving**

When receiving a message, first repeat back the message, identify yourself, and then acknowledge the message.

"Prepare to anchor in fife minutes; foc'sle, aye."

"Slack off stern line; fantail, aye."

**Both Sending and Receiving**

The following are examples of sending and receiving a message:

"Fantail, bridge; report the status of slacking off the stern line."

"Report status of slacking off the stern line; fantail, aye; stern line is slack"

"Main engine control, bridge; report which boilers are on the line."

"Report which boilers are on the line; main engine control, aye; wait."

"Bridge, main engine control; boilers too, tree, and fo-wer on the line."

"Boilers too, tree, and fo-wer on the line; bridge, aye."

**Repeats**

When a message is not clear to the listener at the receiving end, the receiver should say, "Say again." For example, damage control central wants repair two to send a submersible pump to repair three. The central talker says, "Repair too, central; send one submersible pump to repair tree."

Repair two does not understand this message, so the talker there says, "Central, repair too; say again."

Central repeats the message and repair two acknowledges by saying, "Send one submersible pump to repair tree; repair too, aye."

**Spelling**

Difficult words are spelled by using the phonetic alphabet preceded by the prowords (procedural words) "I spell." Pronounce the word before and after spelling it. For example:

"Foc'sle-I spell—FOXTROT OSCAR ROMEO ECHO CHARLIE ALFA SIERRA TANGO LIMA ECHO, Foc'sle."

**Temporarily Leaving the Circuit**

When a phone talker is relieved by another talker, the phone talker must request permission to change phone talkers. If a talker is exchanging a faulty set of phones for a good set, the phone talker must request permission to change phones.

"Bridge, after steering; request permission to change phone talkers."

"Bridge, combat; request permission to change phones."

Once the talker has been given permission to go off the circuit and the talker rejoins the circuit, the report given is,

"Bridge, combat; back on the line."

**Securing**

Before securing the phones, you must always get permission.

Fantail asks, "Bridge, fantail; request permission to secure."

Bridge says, "Request permission to secure; bridge, aye; wait."

The bridge talker gets permission from the OOD for the person on the fantail to secure, then says,

"Fantail, bridge; secure."

Fantail replies, "Fantail, aye; going off the line."

***Student Notes:***

## REVIEW 3 QUESTIONS

Q1. List the three categories of sound-powered phone circuits.

a.

b.

c.

Q2. An XJZ circuit is what type of circuit?

Q3. List four tips that you should use to be a good phone talker.

a.

b.

c.

d.

Q4. Sound-powered phone circuits are like a party line; therefore, some phone talker disciplines must be followed. List four types of good discipline.

a.

b.

c.

d.

Q5. A sound-powered-phone circuit has to be cleared to transmit an important message. What should the sender say over the circuit?

Q6. When you receive a message, what is the proper response?

## DIAL TELEPHONES

**Learning Objectives**: When you finish this chapter, you will be able to—

- Recognize the purpose of dial telephones.
- Identify the procedures to follow when using dial telephones.

At home, ashore, and at sea, the telephone is a part of everyone's life. It is an important and essential instrument in every Navy office, and you must know how to use it properly. By observing proper techniques, you will give and receive information correctly and quickly. Remember, the success of a telephone conversation depends almost entirely upon your ability to express yourself in words; whereas, when speaking to a person directly, your facial expressions, gestures, and the like, help get your point across.

### TYPES OF DIAL TELEPHONES

Different types of dial telephones currently in use are shown in figure 4-7. The desk set is used in staterooms, cabins, offices, and similar areas. A bulkhead-mounted telephone can be used in any station except those on weather decks. It is a nonwatertight unit that should not be exposed to the weather. A bulkhead-mounted telephone, is a splashproof unit that may be installed on weather decks and other areas exposed to moisture. All the phones in figure 4-7 are type 'G' telephones, general use.

### USE OF THE DIAL TELEPHONES

Good telephone technique starts with answering your telephone as promptly as possible. Don't let it ring several times while you finish what you are doing. After lifting the receiver, you should speak immediately to the person calling. Identify yourself when answering the telephone; usually the person making the call will tell you who is calling. This procedure puts the conversation on a business-like basis and eliminates that hazy feeling one has when unsure of the identity of the person on the other end.

***Student Notes:***

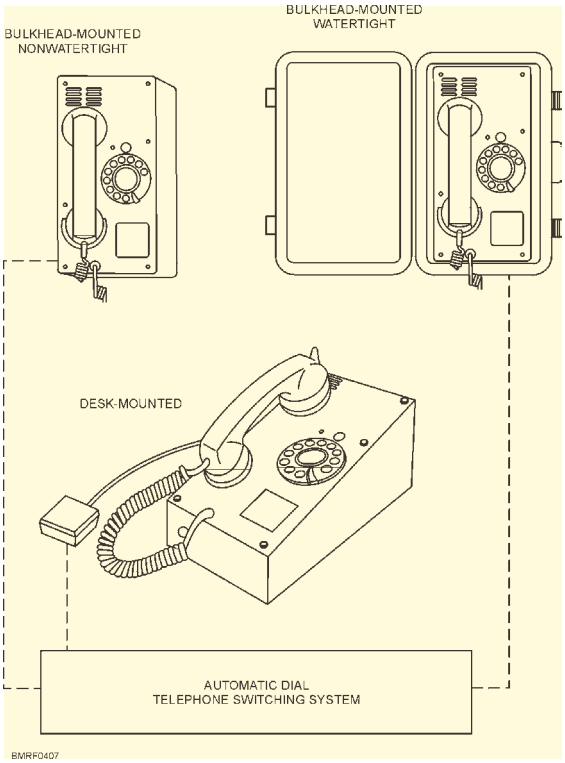



**Figure 4-7.—Telephones.**

Don't go on talking to someone in the office as you answer the telephone. You never know who your caller may be, and information inadvertently given out in this way could be harmful to national security. In addition, it is discourteous to make the caller wait while you finish your office conversation.

When you answer the phone for someone who is absent from the office, give some facts to the person making the call. Do not merely say, "He is not in right now." Rather, tell the caller when you expect the person to return, or volunteer to help if you can. If you have no information concerning the whereabouts of the person called, ask the caller if you may take a message.

Always make sure you have a pencil and pad beside the telephone for taking messages. This practice eliminates needless rummaging about while the other person is holding the line open. Also, it is worth remembering that the message will mean little to the person for whom it is intended unless you leave the following information:

1. Name of the caller
2. The message
3. Time and date of the message
4. Your name

Sometimes, you may have to leave the telephone to obtain additional information for a call. When this delay is necessary, you should make it known to the caller. If it takes more time to obtain the required information than you anticipated, give the caller an occasional progress report, such as "I'm sorry I did not find it there. If you do not mind waiting, I will look elsewhere."

When making a telephone call, there are certain rules you should observe.

1. Be sure that the number you dial is the correct one. When you dial wrong numbers, you waste other people's time as well as your own.
2. When making a call to another office, identify yourself immediately.
3. If you make the call for another person or an officer, so inform the person at the other end of the line. This courtesy eliminates the need for the other party to question you in this regard.

***Student Notes:***

If you make a call and are informed that the person called is not in, ask the person answering the telephone to take a message, if appropriate. You should make sure that the person to whom you are speaking understands the message, knows how to spell your name or the name of the person for whom you are making the call, and has your correct telephone number.

The tonal quality of your voice may or may not be subject to improvement. But by speaking correctly and distinctly and by speaking clearly and unhurriedly, you should have little difficulty in making yourself understood. Do not shout; it probably will not help and is likely to hinder.

Some people become nervous when speaking over the telephone. They take a deep breath, start at the beginning of their notes, and rush through to the end, all in the same breath. Naturally, the person at the other end of the line cannot absorb so much information so quickly, with the result that the whole conversation is unintelligible. Do not race through a conversation. The person on the other end is just as anxious to hear your information as you are to give it, so avoid the need (and the waste of time) of having to repeat your message.

### REVIEW 4 QUESTION

Q1. You are taking a telephone message. List the four elements that you should include when taking a message.

a.

b.

c.

d.

## INTEGRATED VOICE COMMUNICATIONS SYSTEM (IVCS)

**Learning Objective:** When you finish this chapter, you will be able to—

- Recognize the purpose of an integrated voice communications system (IVCS).

The IVCS is an integrated communications system that solves some of the shortcomings of older systems installed on older ships. IVCS combines the features of sound-powered telephones, dial telephones, and intercommunications units into one system. The IVCS also can interface with other shipboard communications systems. The system consists of terminals (user access devices), accessories, and two computer-controlled Interior Communications Switching Centers (ICSCs).

### NOTE

Whenever IVCS are installed, sound-powered telephone circuits are designated as secondary communications circuits.

### TERMINAL DEVICES

Two types of terminal devices (network terminal and dial terminal) are used with the IVCS. The type of terminal and the way it is connected into the system determines the type of service that is provided to you the user.

#### Network Terminal

The network terminal (fig. 4-8) provides service comparable to that provided by sound-powered telephone systems. By depressing one of the five numbered push buttons, you're connected to any one of four networks. Each network circuit is also connected to one of the ICSCs. The network circuits are manned for certain shipboard operations, similar to sound-powered telephones.

***Student Notes:***

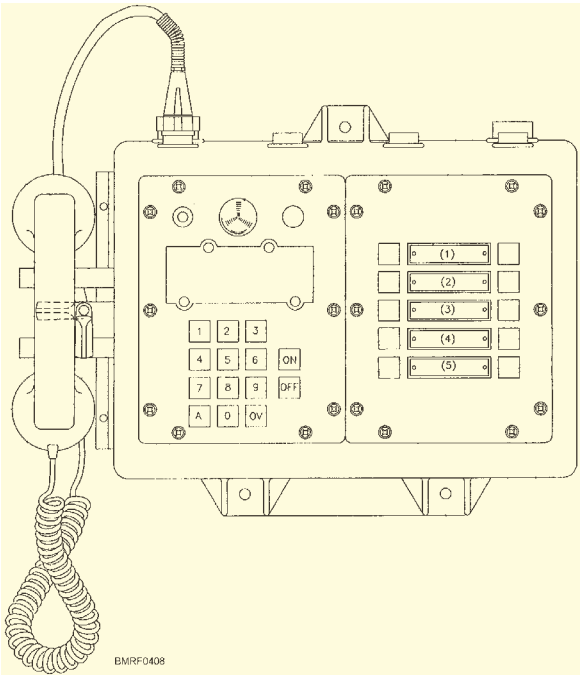



**Figure 4-8.—Network terminal.**

## Dial Terminal

The dial terminal provides services that can be most easily compared to that provided by a dial telephone system. The dial telephones terminals (fig. 4-9) are connected to ICSCs. They are used similar to a commercial dial telephone with push-button dialing.

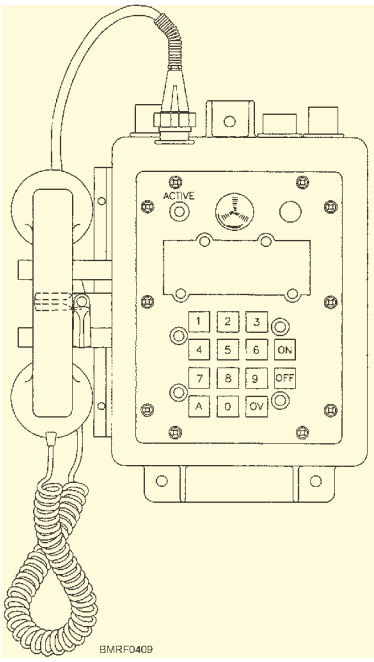



**Figure 4-9.—Dial terminal.**

## Terminal Accessories

There are several types of accessories designed for use with the dial and network terminals. These accessories include headsets, handsets, spray-tight enclosures that permit the installation of the terminals in exposed areas, and loud speaker units. The loudspeaker units (fig. 4-10) are designed for use with either the dial or network terminals. Both units are equipped with press-to-talk switches. Additionally, by depressing the hands-free push switch on the unit, the operator can communicate without using the press-to-talk switch. This permits you to communicate without a handset or headset.

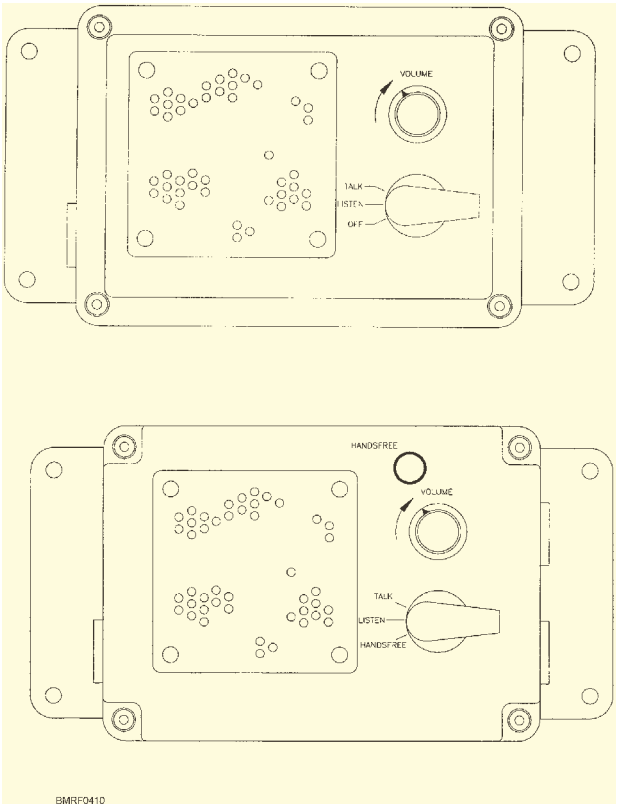



**Figure 4-10.—Loudspeaker units.**

## INTERIOR COMMUNICATIONS SWITCHING CENTER (ICSC)

The ICSCs are the heart of the IVCS. They perform the switching actions necessary to connect the calling party to the called party, similar to the automatic switchboards of a dial telephone system. Figure 4-11 shows the relationship between ICSC and the IVCS.

***Student Notes:***

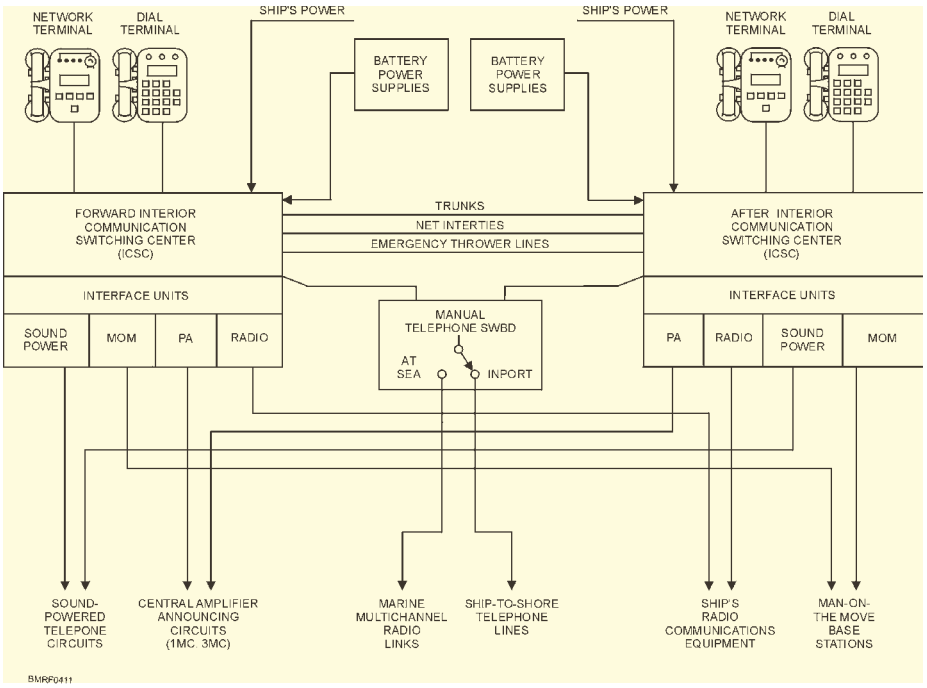



**Figure 4-11.—IVCS block diagram.**

## REVIEW 5 QUESTIONS

Q1. List the terminal devices used with IVCS.

a.

b.

Q2. What is the purpose of the ICSC within the IVCS?

## COMMUNICATIONS SECURITY

**Learning Objective**: When you finish this chapter, you will be able to—

- Identify basic communications security procedures.

*Communications security* is defined as the protective measures taken to deny unauthorized persons information derived from telecommunications of the United States government that are related to national security and to ensure the authenticity of each telecommunication.

Classified information may not be discussed in telephone conversations except as may be authorized over approved secure communications circuits. When in doubt about the classification of information necessary to answer a question asked in a telephone conversation, you should say nothing. When answering a telephone on a nonsecure communications circuit, you should inform the caller that the telephone is nonsecure. For example: "Quarterdeck, USS Never Sail messenger of the watch speaking, sir this is a nonsecure telephone."

## ANNOUNCING AND INTERCOMMUNICATION SYSTEMS

**Learning Objective**: When you finish this chapter, you will be able to—

- Recognize the purpose and use of the announcing and intercommunication systems.

The general purpose of shipboard announcing and intercom systems, circuits 1MC through 59MC, is to transmit orders and information between stations within the ship by amplified voice communication by either a central amplifier system or an intercommunication system. A central amplifier system is used to broadcast

***Student Notes:***

orders or information simultaneously to a number of stations. An intercom system is used for two-way transmission of orders or information.

## GENERAL ANNOUNCING SYSTEM

The basic MC circuit is the 1MC shown in figure 4-12. This is the general announcing system, over which word can be passed to every space in the ship. The ship's alarm system is tied into it as well. Transmitters are located on the bridge, quarterdeck, and DC central/central control station; additional transmitters may be located at other points.

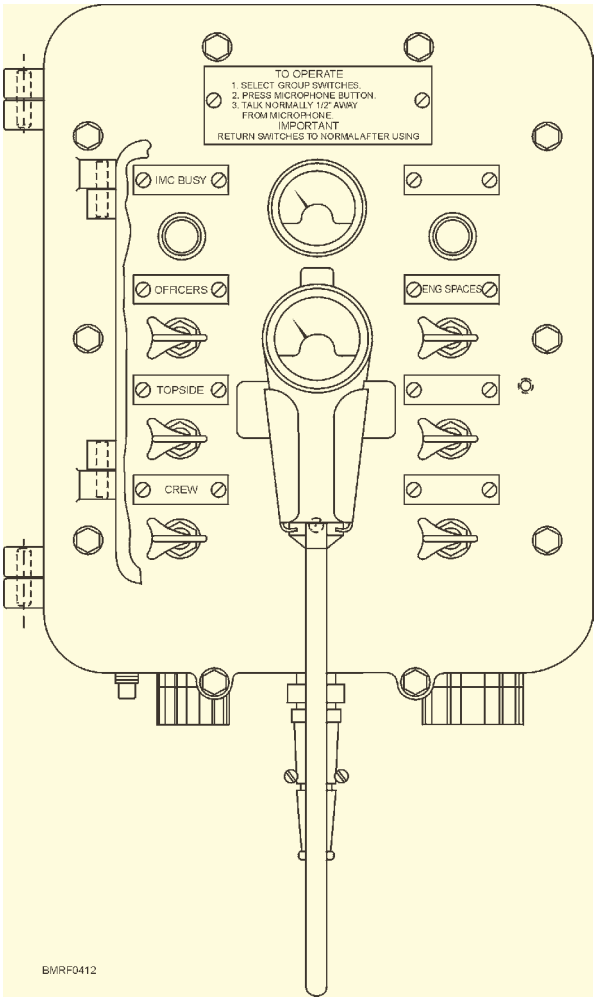



**Figure 4-12.—Loudspeaker transmitter**

The OOD is in charge of the 1MC. No call may be passed over it unless it is authorized by the OOD, the executive officer, or the captain, except for a possible emergency call by the damage control officer.

Normally, the 1MC is equipped with switches that make it possible for certain spaces to be cut off from announcements of no concern to them. The captain's cabin, for instance, should not be blasted with calls for individuals to lay down to the spud locker. The BMOW is responsible for passing the word over the 1MC. If the BMOW is absent and you are required to pass the word yourself, be sure you know which circuits should be left open. Some parts of the ship have independent MC circuits of their own, such as the engineers' announcing system (2MC) and the hangar deck announcing system (3MC).

The bullhorn (6MC) is the announcing system from one point to another. It can be used to communicate between two ships. It is a convenient means for passing orders to boats and tugs alongside or to line-handling parties beyond the range of the speaking trumpet. If the transmitter switch is located on the 1MC control panel, you must be careful to avoid accidentally cutting in the bullhorn when you are passing a routine word.

The 1MC, 2MC, 3MC, and 6MC are all one-way systems. A partial list of loudspeaker systems is shown in table 4-2.

## INTERCOMS

MC circuits, such as the 21MC (commonly known as "squawk boxes"), differ from the preceding systems in that they provide two-way communications. Each unit has a number of selector switches. To talk to one or more stations, you only need to position the proper switches and operate the PRESS-TO-TALK switch. A red signal light mounted above each selector switch shows whether the station is busy. If it is busy, the light flashes; if it burns with a steady light, you know that the station is ready to receive. Typical IC circuits are as follows:

| | |
|---|---|
| 4MC | DC |
| 19MC | Aviation ready room |
| 20MC | CIC |
| 21MC | Captain's command |
| 22MC | Radio central |
| 24MC | Flag officer |
| 26AMC | Machinery control |

***Student Notes:***

**Table 4-2.—Shipboard Announcing Systems**

| CIRCUIT | SYSTEM | CIRCUIT | SYSTEM |
|---|---|---|---|
| 1MC | General | 35MC | Launcher captains’ |
| 2MC | Propulsion plant | 39MC | Cargo handling |
| 3MC | Aviators | 40MC | Flag administration |
| 4MC | Damage control | 42MC | CIC coordinating |
| 5MC | Flight deck | 43MC | Unassigned |
| 6MC | Intership | 44MC | Instrumentation space |
| 7MC | Submarine control | 45MC | Research operations |
| 8MC | Troop administration and control | 46MC | Aviation ordnance and missile handling |
| 9MC | Underwater troop communication | 47MC | Torpedo control |
| 18MC | Bridge | 49MC | Unassigned |
| 19MC | Aviation Control | 50MC | Integrated operational intelligence center |
| 21MC | Captain’s command | 51MC | Aircraft maintenance and handling control |
| 22MC | Electronic control | 52MC | Unassigned |
| 23MC | Electrical control | 53MC | Ship administration |
| 24MC | Flag command | 54MC | Repair officer’s control |
| 26MC | Machinery control | 55MC | Sonar service |
| 27MC | Sonar and radar control | 56MC | Unassigned |
| 29MC | Sonar control and information | 57MC | Unassigned |
| 30MC | Special weapons | 58MC | Hangar deck damage control |
| 31MC | Escape truck | 59MC | SAMID alert |
| 32MC | Weapons control | | |

The following is an example of how to operate the intercom. You are on the signal bridge at the 24MC transmitter (fig. 4-13), and you want to call conn. First, you push the selector button marked CONN on the designation plate. We will assume the line is clear for your message, which means that a steady red light appears over the signal bridge selector button at the conn transmitter. When the operator at conn pushes the signal bridge button, the signal lights at both stations begin to flash. Now you can operate the PRESS-TO-TALK switch and start your message. Any other station attempting to cut in gets the flashing busy signal.

***Student Notes:***

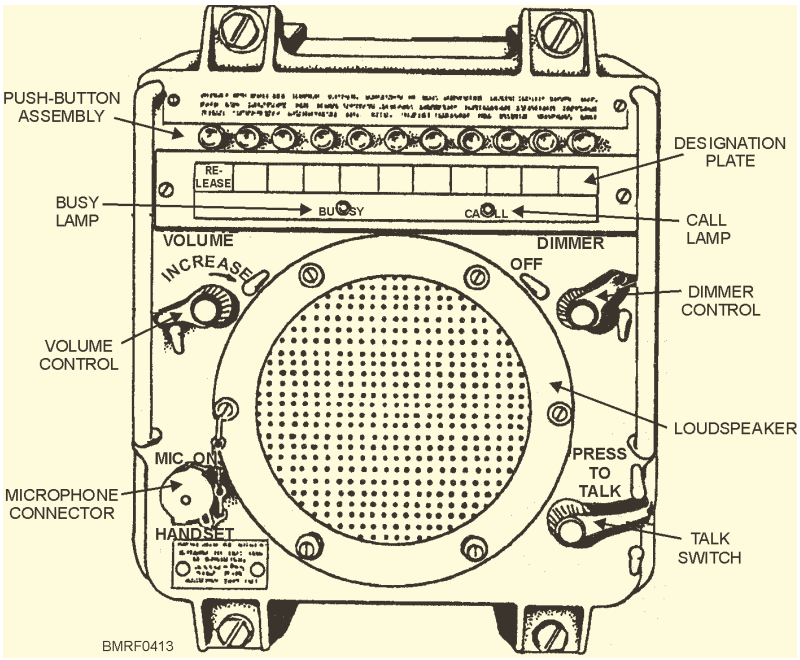



**Figure 4-13.—A 24MC transmitter.**

The chief disadvantage of the intercom is that it raises the noise level in any space in which it is located. For this reason, it seldom is used when sound-powered telephones are manned. Intercom circuits, which may be located on the bridge, are identified briefly as follows:

- 20MC, combat information announcing system, connects the same stations as the 1JS phones.
- 21MC, captain's command announcing system, is an approximate parallel to the JA phones.
- 22MC, radio room announcing system, is a substitute for the JX phones.
- 24MC, flag officer's command announcing system, is the intercom equivalent of the JF phones.

## DAMAGE CONTROL WIREFREE COMMUNICATIONS (DC WIFCOM)

**Learning Objective**: When you finish this chapter, you will be able to—

- Recognize the purpose of DC WIFCOM.

DC WIFCOM is an improved means of damage control central (DCC) using modern hand-held radios specifically designed for shipboard needs. The system is initially installed in some ships and repair lockers with radios and antennas on a horizontal plane. An improvement in the system will eventually include additional radios and vertical antennas for other stations to include the bridge and electronics casualty control team.

Where installed, DC WIFCOM is the primary means of DCC within the repair locker area. Then hand-held portable transceivers, repair locker base stations, and a radiating antenna system provide instantaneous communications between repair lockers and repair locker personnel at the scene and investigators making damage reports. Each repair locker has an installed base station and four portable hand-held transceivers. Four to 12 channels are available for use. The first four channels have the following assignments:

Channel 1—Repair 5 area

Channel 2—Repair 2 area

Channel 3—Repair 3 area

Channel 4—Designated for ship-to-ship communications. Channel 4 may also be used for communications among ship control stations such as DCC, secondary DCC, secondary conn and the bridge major configurations.

***Student Notes:***

In the DC scenarios, WIFCOM hand-held transceivers are issued to the investigators and scene leader. They are the primary means of communication in the repair station area of responsibility. The 21J (or other designated) sound-powered telephone circuits are the primary means of communication between repair lockers and DCC. Personnel using WIFCOM must be aware of specific zones of reduced transmission capability or dead zones. Secondary communications, such as messenger or via second WIFCOM operator, must be used to communicate through dead zones. If emission control is necessary, special consideration must be given WIFCOM. In watertight areas during material condition ZEBRA, WIFCOM transmissions may be interrupted. These transmissions can be made only with command approval. In case of WIFCOM failure, repair locker personnel should establish effective communications as quickly as possible using other methods.

### REVIEW 6 QUESTIONS

Q1. Your phone system is unsecured. When receiving a call, you should answer the phone by saying—

Q2. What system is tied into the IMC circuit?

Q3. What circuit is the damage control circuit?

Q4. What person(s) authorize(s) calls passed over the IMC?

a.

b.

c.

Q5. What is the difference between an IMC circuit and a 21MC circuit?

Q6. The first 4 channels of WIFCOM are assigned to—

a.

b.

c.

d.

## FLAGS AND PENNANTS

Learning Objective: When you finish this chapter, you will be able to—

- Recognize the function and use of flags and pennants.

Flags and pennants serve various functions throughout the world. They have identified nations, governments, rank, and ownership and have conveyed messages for centuries. This section introduces flags and pennants that identify persons and ships and transmit information and orders. On special occasions, flags are used as a decoration, such as “dress ship.”

The Navy uses the international alphabet flags; numeral pennants and a code/answer pennant; a set of numeral flags, special flags, and pennants; and four substitutes, or repeaters.

Each alphabet flag has the phonetic name of the letter it represents. A numeral flag takes the name of the numeral it represents; numeral pennants are used only in call signals. Special flags and pennants are used in tactical maneuvers to direct changes in speed, position, formation, and course; to indicate and identify units; and for specialized purposes. Flags and pennants are spoken and written as shown in figures 4-14 and 4-15.

***Student Notes:***

| FLAG AND NAME | SPOKEN | WRITTEN | FLAG AND NAME | SPOKEN | WRITTEN | FLAG AND NAME | SPOKEN | WRITTEN |
|---|---|---|---|---|---|---|---|---|
| A | ALFA | A | M | MIKE | M | Y | YANKEE | Y |
| B | BRAVO | B | N | NOVEMBER | N | Z | ZULU | Z |
| C | CHARLIE | C | O | OSCAR | O | 1 | ONE | 1 |
| D | DELTA | D | P | PAPA | P | 2 | TWO | 2 |
| E | ECHO | E | Q | QUEBEC | Q | 3 | THREE | 3 |
| F | FOXTROT | F | R | ROMEO | R | 4 | FOUR | 4 |
| G | GOLF | G | S | SIERRA | S | 5 | FIVE | 5 |
| H | HOTEL | H | T | TANGO | T | 6 | SIX | 6 |
| I | INDIA | I | U | UNIFORM | U | 7 | SEVEN | 7 |
| J | JULIETT | J | V | VICTOR | V | 8 | EIGHT | 8 |
| K | KILO | K | W | WHISKEY | W | 9 | NINE | 9 |
| L | LIMA | L | K | XRAY | X | 0 | ZERO | 0 |

BMRF0414

**Figure 4-14.—Alphabet and numeral flags.**

## *Student Notes:*

| PENNANT AND NAME | SPOKEN | WRITTEN |
|---|---|---|
| 1 | PENNANT ONE | p1 |
| 2 | PENNANT TWO | p2 |
| 3 | PENNANT THREE | P3 |
| 4 | PENNANT FOUR | p4 |
| 5 | PENNANT FIVE | p5 |
| 6 | PENNANT SIX | p6 |
| 7 | PENNANT SEVEN | p7 |
| 8 | PENNANT EIGHT | p8 |
| | PENNANT NINE | p9 |
| | PENNANT ZERO | p9 |
| TACK LINE | TACK | — |

| PENNANT OR FLAG | SPOKEN | WRITTEN | PENNANT OR FLAG | SPOKEN | WRITTEN |
|---|---|---|---|---|---|
| CODE OR ANSWER | CODE OR ANSWER | CODE OR ANSWER | NEGATIVE | NEGAT | NEGAT |
| SCREEN | SCREEN | SCREEN | PREPARATIVE | PREP | PREP |
| CORPEN | CORPEN | CORPEN | PORT | PORT | PORT |
| DESIGNATION | DESIGNATION | DESIG | SPEED | SPEED | SPEED |
| DIVISION | DIVISION | DIV | SQUADRON | SQUADRON | SQUAD |
| EMERGENCY | EMERGENCY | EMERG | STARBOARD | STARBOARD | STBD |
| FLOTILLA | FLOT | FLOT | STATION | STATION | STATION |
| FORMATION | FORMATION | FORM | SUBDIVISION | SUBDIVISION | SUBDIV |
| INTER-ROGATIVE | INTER-ROGATIVE | INT | TURN | TURN | TURN |

## SUBSTITUTES

| | | | | | |
|---|---|---|---|---|---|
| 1st. SUBSTITUTE | FIRST SUB | 1st. | 3rd. SUBSTITUTE | THIRD SUB | 3rd. |
| 2nd. SUBSTITUTE | SECOND SUB | 2nd. | 4th. SUBSTITUTE | FORTH SUB | 4th. |

BMRF0415

**Figure 4-15.—Numeral pennants, special flags, and pennants.**

***Student Notes:***

## EMERGENCY AND ADMINISTRATIVE SIGNALS

The flags and pennants (figs. 4-14 and 4-15) represent only a few of the thousands of signals that can be transmitted by flag hoist. Since they may be frequently seen displayed aboard Navy ships or stations, it would be to your advantage to learn to identify them and understand their meaning. Your own personal safety may someday depend on recognizing a particular signal flag.

Table 4-3 contains only those international signals most commonly used and having the same meaning as Navy signals.

**Table 4-3.—Commonly Used International Signals**

| INTERNATIONAL SIGNALS | NAVY MEANINGS |
|---|---|
| **EMERGENCY/WARNING FLAGS** | |
| CODE ALFA | (International) I have a diver(s) down; keep well clear at slow speed. |
| BRAVO | I am taking in, discharging, or carrying dangerous materials. |
| KILO | Personnel working aloft. |
| MIKE 1 | This ship has medical guard duty. |
| MIKE 2 | This ship has dental guard duty. |
| OSCAR | Man overboard. |
| FLAG FIVE | Breakdown; the vessel is having engine or steering difficulty. |
| **ADMINISTRATIVE FLAGS** | |
| HOTEL | (International) This ship has a harbor pilot on board. |
| INDIA | Preparing to come alongside in-port or at anchor. |
| JULIETT | I have a semaphore message to transmit. |
| PAPA | General recall; all personnel return to the ship. |
| QUEBEC | Boat recall; all boats return to the ship. |
| ROMEO | In port; flown by ship having READY DUTY. At sea, flow by the ship PREPARING TO REPLENISH. |
| SIERRA | Holding flag hoist drill. |
| FIRST SUBSTITUTE | Indicates the absence of the flag officer or unit commander show personal flag or pennant is flying on the ship. |
| SECOND SUBSTITUTE | Indicates the absence of the chief of staff.. |
| THIRD SUBSTITUTE | Indicates the absence of the captain. If the captain is absent over 72 hours, it indicates the absence of the executive officer. |

***Student Notes:***

## THE NATIONAL ENSIGN

Our national ensign (fig. 4-16) must always be treated with the greatest respect. It should never touch the ground or the deck. It should always be folded, stowed, and displayed properly. Our flag represents freedom to the world today and forever.

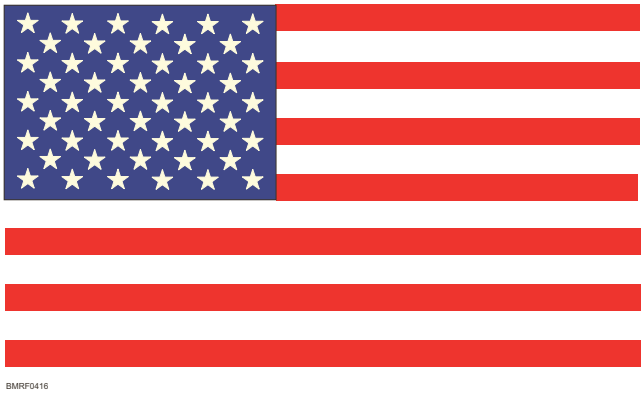



**Figure 4-16.—The United States national ensign.**

When not under way, commissioned ships display the ensign from the flagstaff at the stern and the union jack from the jack staff at the bow from 0800 to sunset. While under way, the ensign is normally flown from the gaff. In ships having more than one mast, the gaff is usually positioned on the aftermast. In ships equipped with two macks (combination masts and stacks), the location of the flag depends on which mast is configured to accept halyards or a gaff.

When a U.S. naval ship enters a foreign port during darkness, at first light it briefly displays its colors on the gaff to make known its nationality. Other ships of war that are present customarily display their colors in return.

Our national ensign, along with the union jack, is referred to as colors. At commands ashore and on U.S. naval ships not under way, the ceremonial hoisting and lowering of the national flag at 0800 and sunset is known as morning and evening colors.

When the national ensign is hoisted and lowered or half-masted for any occasion, the motions of the senior officer present are followed. This is done by flying the PREPARATIVE pennant (called *PREP*) 5 minutes before morning and evening colors. Ceremonies for colors begin when PREP is hauled to the dip (the halfway point). The PREP pennant is shown in figure 4-17.

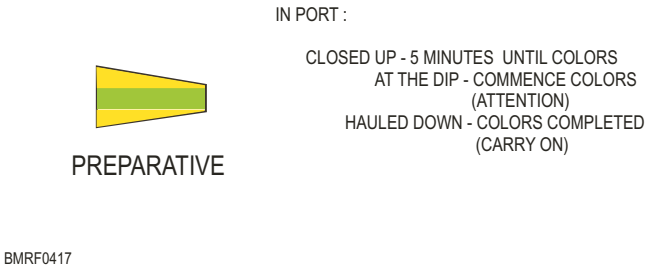



**Figure 4-17.—Preparative pennant.**

If a band or recorded music is available for the colors ceremony, "Attention" is sounded, followed by the national anthem. At morning colors, the ensign is hoisted when the music begins. It is smartly hoisted to the top of the flagstaff. Remember, a furled (folded) ensign is never hoisted to the top of the flagstaff or gaff. At evening colors, lowering of the ensign also begins at the start of the music and is so regulated as to be completely lowered at the last note of the music. "Carry On" is sounded at the completion of the music. The national flag is always hoisted smartly and lowered ceremoniously.

If a band or music is not available for colors, "To the Colors" is played on a bugle at morning colors, and "Retreat" is played at evening colors. For ships having no band, music, or bugler, "Attention" and "Carry On" are signals for rendering and terminating the hand salute.

Sometimes the music for colors from another U.S. ship can be overheard aboard your ship. When this happens and no band, music, or bugler is aboard your ship, the command "Carry On" should not be given until the music being overheard is completed.

If foreign warships are present, the national anthem of each country represented is played after morning colors. If your ship is visiting a foreign port, the national anthem of that country is played immediately following morning colors, followed by the national anthems of any other foreign nations represented.

***Student Notes:***

There are times during the year that the ensign is flown at half-mast, or half-staff ashore. This is the internationally recognized symbol of mourning. Normally, the flag is half-masted on receiving information of the death of one of the officials or officers listed in *U.S. Navy Regulations*. Notification may be through the news media or by official message. The United States honors its war dead on Memorial Day by flying the flag at half-mast from 0800 until the last gun of a 21-minute gun salute that begins at noon (or until 1220 if no gun salute is rendered).

If the ensign is flown from the flagstaff and is half-masted, the union jack is also half-masted. In half-masting the national ensign, it will, if not already hoisted, first be hoisted to the peak and then lowered to the half-mast position. Before lowering from the half-mast position, the ensign is hoisted to the peak, then lowered ceremoniously. Distinctive marks, such as commission or command pennants, are not half-masted except when the ship's commanding officer or the unit commander dies.

*U.S. Navy Regulations* stipulates that when any ship under United States registry or the registry of a nation formally recognized by the United States salutes a U.S. Navy ship by dipping its flag (hauled halfway down and then raised), the courtesy is to be returned dip for dip. A U.S. Navy ship never dips to a foreign ship (flag) first. U.S. naval ships (USNS) of the Military Sealift Command do not dip the national ensign to Navy ships since they are public ships of the United States.

Formal recognition of a foreign country does not mean that diplomatic relations must exist. The fact that diplomatic relations have been severed does not mean that the United States no longer recognizes the existence of the state or the government concerned. However, the United States does not return the dip to countries such as Albania, North Korea, Vietnam, and South Yemen. If in doubt, ask the duty Signalman.

## UNION JACK

The union jack is the rectangular blue part of the United States flag containing the stars. It is shown in figure 4-18. It symbolizes the union of the states of the United States. Each star represents a state.

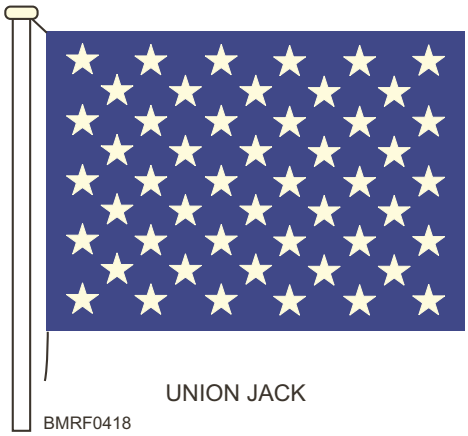



**Figure 4-18.—Union jack.**

When a naval ship is in port or at anchor, the union jack is flown from the jackstaff from 0800 to sunset. In addition to flying from the jackstaff, the union jack is hoisted at the yardarm to indicate that a general court-martial or a court of inquiry is in session.

The union jack is flown in boats as follows:

1. When a diplomatic official of the United States, at or above the rank of charge d'affaires, is embarked in a boat of the U.S. Navy and is within the waters of the country which that person represents

2. When a governor general, or a governor commissioned as such by the President, is embarked in a boat in an official capacity and the boat is within the governor's area of jurisdiction (for example, the Governor of the Virgin Islands)

When displayed from the jackstaff, the union jack is half-masted if the national ensign is half-masted. It is raised and lowered in the same manner as the national ensign. The union jack is not dipped when the national ensign is dipped.

The union jack is issued in several sizes; but, when flown at the jack staff, it must be the same size as the union of the ensign flown at the flagstaff. To make sure it is not flown upside down, always have the single point of the stars pointing toward the sky.

***Student Notes:***

## U.S. NAVY FLAG

On 24 April 1959, the President, on the recommendation of the Secretary of the Navy, established an official flag for the United States Navy. That was done to fulfill a need for an official flag to represent the Navy in displays and on a variety of occasions, such as ceremonies and parades. Figure 4-19 shows the Navy flag.

BMRF0419

**Figure 4-19.—U.S. Navy flag.**

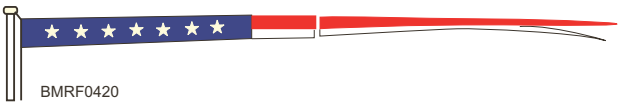
The U.S. Navy flag represents the Navy as follows:

- At official ceremonies
- In parades
- In displays during official Navy occasions
- At public gatherings when the Navy is an official participant
- On other occasions as may be authorized by the Secretary of the Navy

When used for the purposes listed above, the Navy flag accompanies, and takes the place of honor after, the national flag. However, when other branches of the armed forces are participating, the flags take precedence in the order of seniority of the services represented.

## PERSONAL FLAGS AND PENNANTS

Every Navy ship in commission flies the commission pennant except when it is replaced by a personal flag, command pennant, or Red Cross flag. The commission pennant, shown in figure 4-20, is flown at the after truck of a naval vessel and at the highest and most conspicuous point of hoist on a fixed mastless ship (submarines in particular). It is also flown from the bow of a boat when a commanding officer, not entitled to a personal flag, is embarked on an official visit.

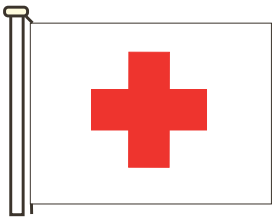


BMRF0420

**Figure 4-20.—Commission pennant.**

The commission pennant is not a personal flag, but sometimes it is regarded as the personal symbol of the commanding officer. Along with the ensign and union jack, it is half-masted upon the death of the commanding officer of a ship.

The Red Cross (Geneva Convention) flag, shown in figure 4-21, is the distinctive mark flown from the after truck of a commissioned hospital ship of the Navy. In general, the Red Cross flag is regarded as an international guarantee of amnesty from attack. None of the military services, however, fly it on the same halyard as the national ensign. Boats engaged in sanitary service and landing party hospital boats display the Red Cross flag in the bow.



BMRF0421

**Figure 4-21.—Red Cross flag.**

Some nations in the Middle East regard the cross as a symbol contrary to their religious beliefs. Therefore, they use a design such as a red crescent on a white field or a red lion and sun on a white field to indicate a mission of mercy or amnesty from attack.

No flag or pennant may be flown above or, if on the same level, to the right of our national flag. One exception is the display of flags at the United Nations headquarters, where special rules apply. The only other

***Student Notes:***

exception is during church services aboard ship conducted by Navy chaplains or visiting church dignitaries. Then the church pennant (fig. 4-22) or the Jewish worship pennant (fig. 4-23) is flown above the ensign. Many ships are fitted with two halyards to the same point of hoist at both the staff and gaff to permit display of the church pennant and ensign simultaneously.

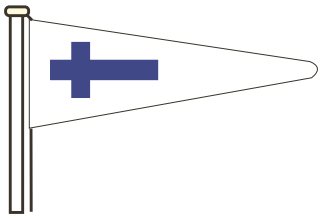


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**Figure 4-22.—Church pennant.**

Aboard ships under way, the church pennant is displayed by hoisting it to the peak or truck and then dipping the ensign just clear of it. If services are being conducted at the time of morning colors aboard ships not under way, the ensign is hoisted to the top of the flagstaff at the prescribed time. The church pennant is then hoisted and the ensign dipped just clear of the pennant. If the ensign is half-masted, the church pennant is hoisted just above the ensign. When the church pennant is lowered, the ensign is closed up (hoisted to the truck, peak, or top of the flagstaff) before the pennant is lowered. Although the church pennant may not be flown above the national flag ashore, it may be displayed separately.

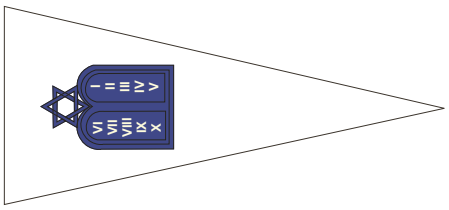

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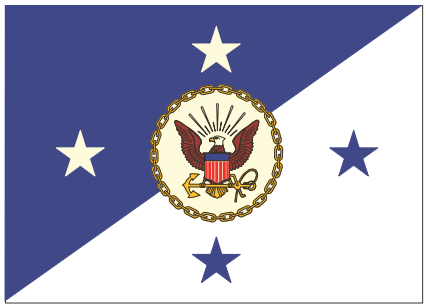
**Figure 4-23.—Jewish worship pennant.**

The Jewish worship pennant, shown in figure 4-23, is displayed during Jewish religious services afloat and ashore. This pennant was authorized by the Secretary of the Navy in 1975. The same rules governing the display of the church pennant apply to the display of the Jewish worship pennant.

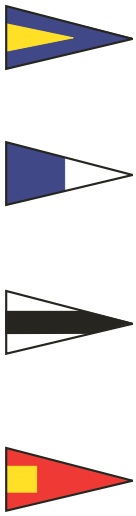
The flag of the Chief of Naval Operations (fig. 4-24) is a blue and white rectangle, divided diagonally from lower hoist to upper fly. In its center is the official seal of the Chief of Naval Operations—an eagle clutching an anchor and encircled by 50 gold links of chain. The CNO's flag is displayed in the same manner as required for displaying flags of any flag officer.



BMRF0424

**Figure 4-24.—Chief of Naval Operations flag.**

Aboard ships not under way, the absence (for a period of 72 hours or less) of various officers is indicated by the display of SUBSTITUTE pennants. These are general signal pennants. The pennants are assigned as shown in figure 4-25.



| | |
|---|---|
| 1st. SUBSTITUTE | FLAG OFFICER OR UNIT COMMANDER IS ABSENT |
| 2nd. SUBSTITUTE | CHIEF OF STAFF IS ABSENT |
| 3rd. SUBSTITUTE | COMMANDING OFFICER IS ABSENT |
| 4th. SUBSTITUTE | CIVIL OR MILITARY OFFICIAL WHOSE FLAG IS FLYING IS ABSENT |

BMRF0425

**Figure 4-25.—Substitute pennants.**

## *Student Notes:*

On many small ships, it is the responsibility of the quarterdeck watch to hoist and haul down the absentee pennants. They are flown only between sunrise and sunset.

Whenever the ship is taking aboard, transferring, or handling dangerous commodities, such as ammunition and fuel, the BRAVO flag is hoisted and the smoking lamp is put out. BRAVO is hauled down when the dangerous condition no longer exists. The BRAVO flag (fig. 4-26) is a general signal flag.

BMRF0426

**Figure 4-26.—Bravo flag.**

While standing watch, you will have many duties. One of them is to make sure special flags or pennants are displayed as required to indicate changing events aboard ship. Usually on a large ship, this is the responsibility of the duty signalman. On small ships, such as submarines, it is the duty of the topside watch (POOW). These flags or pennants are important because they tell other units what is happening within their area at any given time. A list of special flags and pennants is normally posted within the quarterdeck area for the ready reference of watch standers.

There are many more flags and pennants that have special meanings. You will have to know the meaning of some of these. They are called general signals, and those not previously discussed are shown in figure 4-27.

When flag officers of the Navy (admiral, vice admiral, rear admiral [upper half], rear admiral [lower half]) assume command of a fleet or a unit of a fleet, their personal flag (fig. 4-28) is hoisted and kept flying until they turn over their command to their successor. If the officer is absent from command for a period exceeding 72 hours, the flag is hauled down until the officer returns.

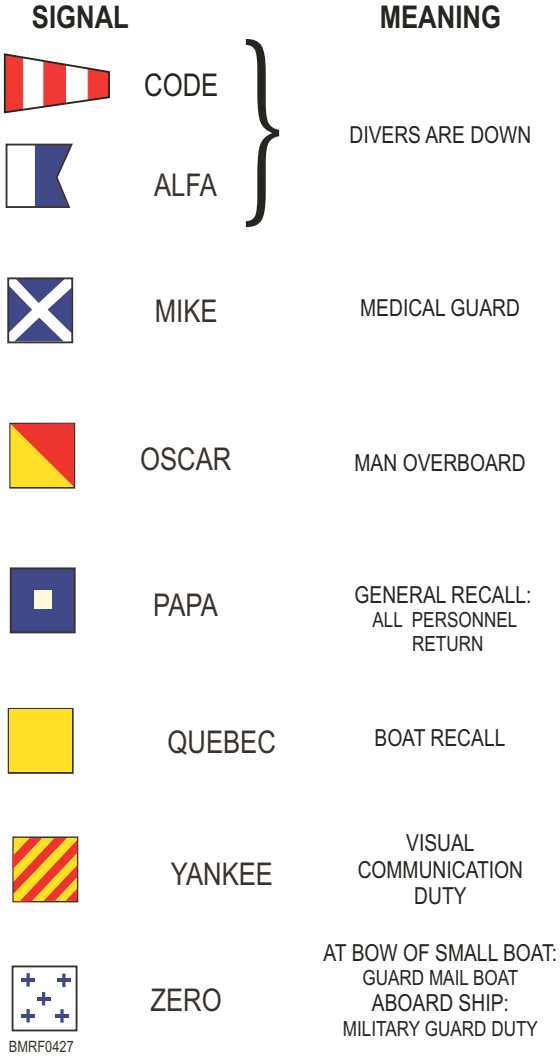



**Figure 4-27.—General signals.**

A flag officer's flag is never displayed simultaneously from more than one ship. It is flown at the main-truck of the ship the officer is aboard. Normally, no personal flag or pennant is shown at the same masthead with the national ensign. When a double display is required, the personal flag or pennant should

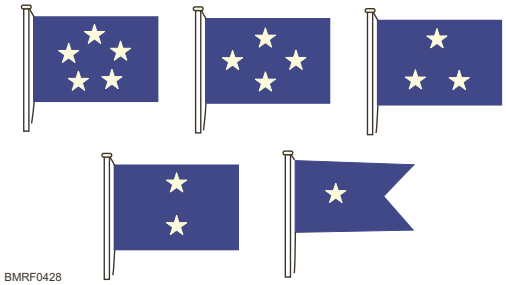



**Figure 4-28.—Personal flags.**

## *Student Notes:*

be flown at the foretruck and the national ensign flown at the main-truck. When a single masted flagship is dressed or full-dressed, however, the personal flag or pennant is hoisted at the starboard yardarm. During a gun salute, the ensign is displayed at the main-truck. Any personal flag is lowered clear of the ensign.

## FLAG DISPLAYS IN BOATS

The ensign is flown from the stern of naval boats. The ensign should never be so large that it hangs in the water when the boat is afloat. When the ensign becomes soiled, it should be changed for a clean ensign. Our flag should be flown from boats during the following times:

- When under way during daylight in a foreign port
- When ships are required to be dressed or full-dressed
- When going alongside a foreign vessel
- When an officer or official is embarked on an official occasion
- When a flag or general officer, a unit commander, a commanding officer, or a chief of staff, in uniform, is embarked in a boat of the command or in one assigned for personal use
- At other times when prescribed by the senior officer present

When an officer in command (or chief of staff) entitled to a personal flag or pennant is embarked in a boat on an official occasion, the appropriate flag or pennant is flown at the bow. (If not entitled to a personal flag or pennant, a commission pennant is displayed.) On other than official occasions, a miniature personal flag or pennant is displayed near the coxswain's station.

### Bow Markings

Many boats carry bow markings to indicate to whom the boat is assigned. A boat having an arrow in the bow is assigned for use by a commanding officer or a chief of staff who is not a flag officer. A miniature of the command pennant is on the bow of the boat assigned to a unit commander. A boat assigned for the personal use of a flag or general officer has on each bow the number of stars corresponding to the officer's rank.

### Flagstaff Insignias

Boats assigned to officers for personal use or boats in which a civil official is embarked on official business are marked with special devices on the flagstaff. The flagstaff for the ensign and for the personal flags or pennants is fitted at the peak with these special devices, shown in figure 4-29, as follows:

- Spread eagle: For any civilian official or flag officer whose official salute is 19 guns or more
- Halbert: For a flag or general officer whose official salute is less than 19 guns or for a civil official whose salute is 11 guns or more but less than 19
- Ball: For an officer of the grade, or relative grade, of captain in the Navy, and for certain diplomatic officials
- Star: For an officer of the grade, or relative grade, of commander
- Flat truck: For an officer below the grade, or relative grade, of commander, and for civil officials entitled to honors of a lesser nature than those previously described

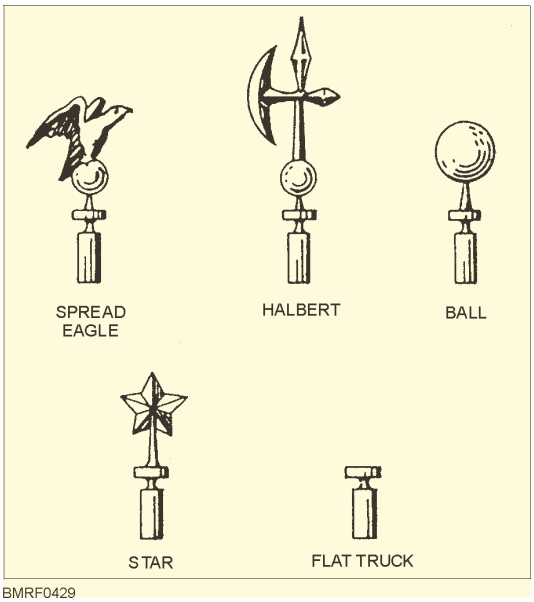



**Figure 4-29.—Flagstaff insignias.**

***Student Notes:***

Boat landings for officers usually are separate from those for enlisted personnel; but there may be times, especially overseas, when they are in the same location. Aboard ship, the bridge watch usually tells the quarterdeck that an officer's or enlisted's liberty boat is approaching the ship.

### REVIEW 7 QUESTIONS

Q1. List some of the flags and pennants used by the Navy.

Q2. In the space provided, list the flag flown for the conditions described on the right.

| CONDITIONS | FLAG |
|---|---|
| a. There is a man overboard. | |
| b. There are divers in the water. | |
| c. A general court-martial is in session. | |
| d. Worship service(s) in progress. | |
| e. The captain is absent. | |

Q3. In port, commissioned ships display the national ensign and the union jack from what locations?

Q4. In large ships, what person is usually responsible for making sure that special flags and pennants are displayed?

Q5. What is the flagstaff insignia for a captain?

Q6. A boat with a halbert insignia on the flagstaff is approaching your ship. What is the rank of the person on the ship?

## SIDE HONORS

**Learning Objective**: When you finish this chapter, you will be able to—

- Identify the purpose of and use of side honors.

Side honors, rendered to officers and officials boarding and departing the ship, are part of the honors stipulated for an official visit. The honors consist of parading the proper number of side boys and piping the side by the honors boatswain's mate. Officers appropriate to the occasion also attend the side. Side boys are not paraded on Sunday or on other days between sunset and 0800 or during meal hours of the crew, general drills and evolutions, and periods of regular overhaul, except in honor of civil officials and foreign officers; then they may be paraded at any time during daylight hours. Side boys are paraded only for scheduled (official) visits.

***Student Notes:***

The term *official* means a formal visit of courtesy requiring special honors and ceremonies. An informal visit of courtesy requiring no special ceremonies is a *call*.

**HONORS FOR OFFICIAL VISITS**

The honors specified for an official visit are rendered on arrival as follows:

- When the rail is manned, personnel are spaced uniformly at the rail on each weather deck, facing outboard. The command "Attention" is sounded as the visitor's boat or vehicle approaches the ship.

- If a gun salute is prescribed on arrival, it is fired as the visitor approaches and is still clear of the side. The proper flag or pennant is broken on the first gun and hauled down on the last gun except when it is to be flown for the duration of the visit. Other ships firing a concurrent salute also haul down, on the last gun, the flag or pennant displayed in honor of the visitor.

If the ship visited is moored to the pier in such a position that it is impractical to render the gun salute before arrival on board, the salute is rendered (provided local regulations don't forbid gun salutes) after the official arrives on board and the commanding officer is sure that the dignitary and party are moved to a position in the ship that is well clear of the saluting battery.

- The boat or vehicle is piped as it comes alongside.
- The visitor is piped over the side, and all persons on the quarterdeck salute and the guard presents arms until the termination of the pipe, flourishes, music, or gun salute, depending on which is rendered last.
- If the gun salute is not prescribed on arrival and a flag or pennant is to be displayed during the visit, it is broken at the start of the pipe.
- The piping of the side, the ruffles and flourishes, and the music are executed in the order named. In the absence of a band, "To the Colors" is sounded on the bugle, instead of the national anthem, when required.
- The visitor, if entitled to 11 guns or more, is invited to inspect the guard upon completion of the gun salute or such other honors as may be accorded.

On departure, the honors prescribed for an official visit are as follows:

1. The rail is manned, if required.

2. The command "Attention" is sounded as the visitor arrives on the quarterdeck.

3. When the visitor is ready to leave the ship, the guard presents arms, all persons on the quarterdeck salute, and ruffles and flourishes, followed by music, is sounded. The visitor then is piped over the side. The salute and present arms terminate with the call. If no gun salute is fired, the flag or pennant displayed in honor of the visitor is hauled down.

4. The boat or vehicle is piped away from the side.

5. If a gun salute is directed upon departure, it is fired when the visitor is clear of the side. If a flag or pennant is displayed in honor of the visitor, it is hauled down with the last gun of the salute.

When possible, the same honors and ceremonies are rendered for an official visit to a naval station.

**SIDE BOYS**

When required for attending the side, the required number of side boys will be on deck in the uniform of the day. Side boys are mustered, inspected, and instructed in their duties by the OOD and BMOW. They are stationed on either side of the route across the quarterdeck taken by arriving and departing high-ranking officers or civilian officials who are making official calls to the ship. When the side is piped by the BMOW on the boatswain's pipe, from two to eight side boys, depending on the rank of the honored official, will form a passageway to or from the gangway. They salute on the first note of the pipe and drop the salute together on the last note.80

Side boys must be particularly smart in appearance and groomed with polished shoes and immaculate uniforms. Enlisted women detailed to this duty are also called side boys.

***Student Notes:***

## REVIEW 8 QUESTIONS

Q1. When are side boys paraded?

Q2. When a gun salute is prescribed, when is it fired?

## SUMMARY

In this chapter, you have learned about communications equipment, telephones and telephone talker responsibilities, and how this equipment and responsibilities relate to you. You also learned about the importance of security and why the following correct procedures are important. This chapter also introduced you to the use of flags, pennants, and honors accorded various military and civilian personnel.

***Student Notes:***

## REVIEW 1 ANSWER

A1. To give the serial number (23DBCX14) of the pump over the phone, you would say—**too, tree, delta, bravo, charlie, xray, wun, fo-wer.**

## REVIEW 2 ANSWERS

A1. **True**, the mouthpiece and earpiece of a sound-powered phone are interchangeable.

A2. If you pick up the mouthpiece or the headpiece by itself, **delicate wires could break**.

A3. If you leave the headset plugged in, the **earpieces pick up background noises and transmit them over the circuit**.

A4. To talk or listen through the phone, **depress the button located between the transmitter and receiver**.

## REVIEW 3 ANSWERS

A1. The three categories of sound powered phone circuits are—

a. **Primary**

b. **Auxiliary**

c. **Supplementary**

A2. An XJZ circuit is an **auxiliary** circuit.

A3. Some of the practices that make a good phone talker include—

a. **Speak clearly and directly into the phone**

b. **Don't have food or gum in your mouth**

c. **Don't paraphrase messages; repeat them word for word**

d. **Speak slowly**

e. **In an emergency, speak calmly and precisely**

f. **Don't use local accents**

A4. Some disciplines that must be followed when talking over sound-powered phone circuits include—

a. **Transmit official message only**

b. **Keep the button in the OFF position except when transmitting**

c. **Use standard terms and phrases**

d. **Don't use slang or profanity**

A5. To clear a sound-powered phone circuit to transmit an important message, the sender should say "**silence on the line**."

A6. The proper response upon receipt of a message is as follows: **"Repeat message, identify yourself, and then acknowledge the message."**

## REVIEW 4 ANSWER

A1. The four elements you should include when taking a message are—

a. **Name of caller**

b. **The message**

c. **Time and date of message**

d. **Your name**

## REVIEW 5 ANSWERS

A1. The terminal devices used with the IVCS are—

a. **Network**

b. **Dial**

A2. Within the IVCS, the **ICSC acts like a switchboard and connects the caller with the person who called.**

***Student Notes:***

## REVIEW 6 ANSWERS

A1. Your phone system is unsecured. When receiving a call, you should answer the phone by saying **this line is unsecured.**

A2. The **alarm system** is tied into the 1C circuit.

A3. The **4MC** circuit is the damage control circuit.

A4. Calls passed over the 1MC are authorized by the—

a. **OD,**

b. **XO, or the**

c. **CO**

A5. The **1MC is a one-way system** and the **21MC is an intercom with two-way communication**.

A6. The first 4 channels of WIFCOM are assigned to—

a. **Channel 1—Repair 5**

b. **Channel 2—Repair 2**

c. **Channel 3—Repair 3**

d. **Channel 4—Ship-to-ship communications**

## REVIEW 7 ANSWERS

A1. Flags and pennants used by the Navy include **the international alphabet flags; numeral pennants and a code/answer pennant; a set of number flags, special flags, and pennants; and four substitutes or repeaters.**

A2. The flag flown for the conditions is as follows:

| CONDITIONS | FLAG |
|---|---|
| a. There is a man overboard. | **Oscar** |
| b. There are divers in the water. | **Code Alfa** |
| c. A general court-martial is in session. | **The Union Jack** |
| d. Worship service(s) in progress. | **Church pennant/ Jewish worship pennant** |
| e. The captain is absent | **The third pennant** |

A3. When in port, commissioned ships display the national ensign and the union jack. The **national ensign is flown from the flagstaff at the stern**, and the **union jack is flown from the jackstaff at the bow**.

A4. On large ships, the **signalman** is usually responsible for making sure that special flags and pennants are displayed.

A5. A **ball** is the flagstaff insignia for a captain.

A6. A boat with a halbert insignia on the flagstaff is approaching your ship. **There is a flag or general officer on board, whose official salute is less than 19 guns**.

## REVIEW 8 ANSWERS

A1. Side boys are paraded for **scheduled official visits**.

A2. A gun salute is fired when **the visitor approaches and is still clear of the side**.

***Student Notes:***

# CHAPTER 5

# NAVAL HISTORY

**Why should I bother to learn or read history? Isn't it dead and gone? Read on….The quotes from George Santayana and Alfred Thayer Mahan tell the story!**

*Those who cannot remember the past are condemned to repeat it.*
—George Santayana, American Philosopher, 1863 - 1952

*The study of history lies at the foundation of all sound military conclusions and practice.*
— Alfred Thayer Mahan, Philosopher of Naval Strategy, 1840-1914

These two quotes tell you the reasons **why** you should know what happened in the past. By studying history, you can avoid the mistakes made in the past. By studying both the failures and successes of the past, you can plan for future success.

There is another reason to study history—history is an adventure story. History is full of daring deeds, good luck and bad, heroes, cowards, and spies. The history of a country or an organization is like the biography of a person. A biography is the story of a person's life. Naval history is the story of the life of the Navy. Since this chapter is the biography of the life of the United States Navy, the logical place to start is with the birth of the Navy.

## THE BIRTHDAY OF THE UNITED STATES NAVY

**Learning Objectives**: When you finish this chapter, you will be able to—

- Identify the important events of naval history.
- Recognize the importance of naval actions and traditions

In school, you learned about the birthday of the United States. You were told about the events that happened on July 4, 1776. The United States Navy had its birth on October 13, 1775. How could this be? How could the Navy be older than the United States?

Just as there wasn't a United States of America on July 4, 1776, there wasn't a United States Navy on October 13, 1775. But, what led to the formation of the United States Navy happened on October 13, 1775.

Remember when the Second Continental Congress met on May 10, 1775, the colonists were already fighting the British. Before long, it was clear that if the Colonies were to survive, a Navy was necessary. Therefore, on October 13, 1775, the Second Continental Congress authorized the purchase of two vessels; the United States Navy was born.

## THE CONTINENTAL NAVY

**Learning Objective**: When you finish this chapter, you will be able to—

- Identify the ships of the Continental Navy to include the importance of their actions.

Navies are created from the spirit of independence and under the threat of war. They become mature by defending their country. This is the way it was with the first American Navy.

The American Colonies depended on the sea for their livelihood. All along the coast, harbors and shipbuilding docks offered work to many and provided income to thousands more. When the conflict between the Americans and the British began, these were the first ports the British attacked. These were also the ports from which the Continental Congress and the States sought to send out ships of a tiny and hastily organized naval force to harass the mightiest sea power in the world and its merchant fleet. This tiny naval force sought to capture enemy supply and munitions vessels.

What was life like in that first Navy? Where did its ships and men come from? How was it organized? And, importantly, what role did it play in building the proud tradition of the United States Navy today?

Like its beginnings, the Navy of the American Revolution was fragmented into many parts, each acting independently of the others. For instance, several naval engagements between the Americans and the British actually occurred before the Continental Congress authorized a Navy. Though the American Navy officially began in October 1775, some time passed before the new Navy had any effect on the mighty British Navy.

## SHIPS OF THE CONTINENTAL NAVY

What constituted a *warship* in the late 1700s? During the revolutionary war and into the 19th century, naval vessels were grouped into three major classes—

1. Ships-of-the-line. These were the battleships of the sailing days. These ships were the largest of all sailing warships and carried 64 to over 100 guns of various sizes. However, our Navy's ships-of-the-line didn't come into existence until years later, long after the Revolutionary War was over.
2. Frigates. These were the cruisers of the 18th century. These cruisers were next in size, usually smaller and faster than average ship-of-the-line. They generally carried 28 to 44 guns.
3. Sloops-of-war. These were the small sailing warships. They carried 10 to 20 guns.

Another group of naval vessels were the privateers. Privateers were commissioned by the Continental Congress and by individual states to capture enemy merchant ships as prizes of war.

Typical of the independent "fleet" of privateers was the schooner. The schooner was a small, fast, flexible, flush-deck ship that carried smooth-bore cannon. With small ships like these schooners, the colonists broke the British stranglehold on main New England harbors by slipping past the Royal Navy's men-of-war and hiding in inlets. Unable to meet the British head-on, the American ships outmaneuvered them and jabbed here and there instead of standing full force and slugging it out.

Navy ships in the Continental Navy included the *Providence*, a 12-gun sloop; the *Lexington*, a 16-gun brig (converted from a merchantman); and the *Bonhomme Richard*, a loan from the French, an old East Indiaman. Later in this chapter, you will find out how other ships bearing some of these names made history in their own right.

## THE FIRST UNITED STATES SUBMARINE

A young American experimented with a subsurface craft he hoped would help drive the British out of New York harbor and away from American shores for good. David Bushnell was a Yale medical student who had been working on a small submarine for some 4 years and finally completed it in 1775.

This first warfare submarine, named the *Turtle*, was described by Bushnell as having "some resemblance to two upper tortoise shells of equal size, joined together…" It was 7.5 feet deep, and under ideal conditions had a maximum speed of 3 knots. A single operator could stay down for 30 minutes.

The *Turtle* was armed with an oak casing filled with 150 pounds of explosives. This charge could be attached to the bottom of an enemy ship where it was intended to remain until detonated by a simple clockwork mechanism.

After completing the submarine, Bushnell took it for several dives to prove its seaworthiness. Finally, in September 1776, he was ready to try it against the British in New York harbor. Sergeant Ezra Lee, a volunteer from the Connecticut militia, maneuvered the *Turtle* through the use of hand-driven screw propellers. His mission was to attach a time-fuse charge of gunpowder to the hull of HMS *Eagle*. However, the mission was aborted when the auger failed to penetrate the copper sheathing of the *Eagle*.

Bushnell made a few more attempts to use the *Turtle* against the British in the Delaware River. He attached mines to the *Turtle* and floated the mines against ships. These attempts failed. The submarine was finally sunk by the British in New York harbor—the first recorded instance of an antisubmarine attack.

## CONTINENTAL NAVY ACTIONS

The new Navy ordered to be established by the Continental Congress came into being in the last months of 1775. To build a fleet, Congress authorized the construction of 13 new frigates (ranging from 24 to 32 guns) and the conversion of 6 merchant ships (ranging from 10 to 24 guns). These merchant ships included the USS *Hornet* and the USS *Alfred*. The USS *Alfred* had the distinction of being the U.S. Navy's first flagship and is said to be the first U.S. naval vessel on which the "Flag of Freedom" was hoisted (by John Paul Jones). All were solidly constructed ships with a number of guns. Even so, they were at a serious disadvantage because they were pitted against the established and superior British force—then the finest Navy in the world.

***Student Notes:***

**NOTE**

As you read along, check the maps at the back of the chapter.

The first commander in chief, Esek Hopkins, put the first squadron of the Continental Navy to sea in February 1776. Under the guns of the USS *Providence* and the USS *Wasp* and with the squadron headed by the USS *Alfred*, over 200 Sailors and Marines landed on New Providence Island in the Bahamas. John Paul Jones served as first lieutenant aboard the USS *Alfred*.

Hopkins' raid on New Providence Island was the first amphibious operation carried out by the American Navy and Marines. The squadron captured a number of cannons and supplies from the fort.

Because the British blockaded the American coast, it was difficult for the newly outfitted ships to reach the sea. The USS *Montgomery* and the USS *Congress*, ships of 28 and 24 guns, were built at Poughkeepsie, NY on the Hudson River. When the British occupied the port of New York, these ships were bottled up. To prevent their capture by the enemy, the U.S. government had to destroy them. Two more ships built in Philadelphia suffered a similar fate. Some of the others were also blockaded in their home ports, and one ship, the USS *Trumbull*, was bottled up for 3 years because it couldn't clear the sandbar in the Connecticut River.

The new frigates of the Continental Navy had their moments. The USS *Hancock* and the USS *Boston*, both built in Massachusetts, set out together in mid-1777. They captured two British brigs and were then involved in separate actions with the British warships *Somerset* and *Fox*. After escaping from the *Somerset* on May 30, 1777, they met the *Fox* a week later and successfully captured it. Later, the two Continental ships were pursued by the powerful HMS *Rainbow*. Following a 39-hour pursuit, the *Rainbow* bore down on the USS *Hancock* and captured it. The USS *Boston* escaped and continued to serve in various actions over a period of some 3 years. Its last action was in the defense of the Charleston, South Carolina, harbor where it was captured by the British in May 1780.

After its capture by the British, the *Hancock* went on to serve in the Revolution, but on the enemy's side. By a twist of fate, it was the *Hancock* (renamed the *Iris*) that captured a sister frigate, the USS *Trumbull*, one of the original 13 frigates built for the Continental Navy. (The British crew was said to have called the American built ship one of the finest frigates in which it had sailed.)

Among the names associated with this new made-in-America fleet of frigates are John Barry, who courageously commanded many ships; John Manley, who captured the *Nancy* while in Washington's Navy; and Abraham Whipple.

The skipper of the USS *Providence*, Whipple, was a member of a three-ship force that found itself on the edge of a huge, heavily guarded, enemy convoy off Newfoundland during a fog. Sending armed boarding parties to the merchant ships, the Americans managed to take 11 ships as prizes without being detected by the ships protecting the convoy. Cargoes and captured ships worth a million dollars were dispatched back to the States.

### John Paul Jones

Among the most daring commanders bringing the war to British waters was John Paul Jones (fig. 5-1). As skipper of the USS *Ranger*, he left France on April 10, 1778, for raids against the British. After capturing a number of ships, he actually landed on British soil, raiding Whitehaven, England.

**Figure 5-1.—John Paul Jones, father of our highest naval traditions, represents the seaman, leader, officer, and gentleman at their best.**

***Student Notes:***

The tiny new Navy played a significant role in the first official recognition by a foreign nation of the American "Stars and Stripes" flag. On February 14, 1778, John Paul Jones sailed into Quiberon Bay, France, in the USS *Ranger* and saluted the French fleet anchored there. A nine-gun salute was given in return. A gun salute given to a revolutionary government was a signal of that country's recognition. France became one of the first foreign powers to recognize the struggling government of the American Colonies. (In 1776, the Dutch had given recognition to an American flag [not the Stars and Stripes] at St. Eustatius, an island in the West Indies belonging to Holland.)

In 1779, John Paul Jones took command of an old, decaying French merchant ship that he renamed the USS *Bonhomme Richard*, honoring Benjamin Franklin. It carried 42 relatively light guns (some in doubtful condition). Jones headed for the coast of Ireland, capturing some ships and destroying others. On September 23, 1779, Jones met the British warship *Serapis* (with 50 guns), and a furious battle ensued near the headland of Flamborough Head. As Jones wrote later:

> *Every method was practiced on both sides to gain an advantage, and rake each other; and I must confess that the enemy's ship, being more manageable than the Bonhomme Richard, gained thereby several times an advantageous situation, in spite of my best endeavors to prevent it.*

The two ships, lashed together with grappling hooks so neither could escape, pounded away at one another. The USS *Bonhomme Richard* began taking the worst of the beating. The ship began to fill with water and fire broke out in several places. According to one story, a gunner in a state of panic was about to strike the colors when Jones hurled his pistol at him, striking him down. The battle continued and the fighting was furious. The outcome was uncertain until the end. The highlight of the battle came when, after being asked if he had struck colors, Jones replied, *Struck, sir? I have not yet begun to fight!* These words inspire Sailors to this day.

What turned the tide of victory for Jones? It was his forces aloft. Armed with muskets and climbing along the interlaced rigging of the two ships, Jones's men kept the deck of the *Serapis* clear by shooting and dropping chains and other material down on the enemy. A member of Jones' crew climbed to the *Serapis*' maintop and managed to drop a hand grenade on to the gundeck, which ignited the gunpowder and scattered cartridges. In that man-to-man sea battle, the British were finally forced to surrender. The battle of the USS *Bonhomme Richard* versus the *Serapis* went down as one of the great naval battles in history.

By the time the war was over, the official Continental Navy operated some 56 vessels at one time or another. However, it only managed to reach a peak of 27 ships, averaging 20 guns, that operated at the same time. This tiny Continental Navy, hurriedly assembled when the Colonies declared their independence, served not only to inflict damage on the proud ships of the Royal Navy but also to lift American morale with each of its victories. John Paul Jones, Gustavus Conyngham, and Lambert Wickes were among those who brought the battle to the British on their own waters. The news of daring raids and victorious battles at sea was acclaimed in the 13 youthful Colonies of the United States.

**Privateers**

American privateers harassed British shipping over lengthy sea-lanes. At first, ships of all types were converted for harassment purposes. Later, ships were specially built to do this job. These ships were fast and reasonably well armed. Men from all walks of life signed up to serve on these ships. Private financing to arm and fit the vessels was needed, but that was rarely a problem because a share in a privateer could mean a fortune almost overnight.

The British Navy began a system of convoys to protect its merchant shipping, but it was far from foolproof. The moment a merchantman dropped behind, it was in immediate danger because a warship couldn't leave the convoy to protect just one ship. Then, too, convoys could protect only so many ships.

It's estimated that Congress issued more than 1,600 commissions for privateers during the Revolutionary War. The privateers operated not only along the American coastlines, but also far out into the Atlantic and even into the English Channel and the Irish Sea.

According to one reasonable estimate, the British were said to have lost some 2,000 merchant ships, manned by crews totaling 16,000, to the American privateers. The merchant ships captured as prizes were manned by prize crews from the privateers and sailed to a friendly port where the ships and cargo were sold.

## REVIEW 1 QUESTIONS

Q1. What was the reason for the formation of the United States Navy?

Q2. During the late 18th century, battleships were classified as—

Q3. During 1775, a craft was completed to fight the British Navy. What type of craft was this, what was it named, and who was its inventor?

Q4. What is the significance of the 1776 raid on the island of New Providence in the Bahamas?

Q5. The first official recognition of the American Stars and Stripes flag by a foreign nation was given by (a) what nation in (b) what location?

a.

b.

## THE U.S. NAVY FROM 1783 TO THE CIVIL WAR

**Learning Objectives**: When you finish this chapter, you will be able to—

- Recognize the roles and responsibilities of the Navy from 1783 to the Civil War to include the War of 1812.

At the end of the Revolutionary War, a new federal government was established. In 1783, the Navy was down to five ships. The Navy was disbanded, and the last frigate, the USS *Alliance*, was sold in 1785.

Soon, Congress saw the need for a Navy. America's small merchant fleet was being molested on the high seas. In 1794, a Navy-conscious Congress authorized the construction of six frigates. They were to be of a new design—long and strong. These ships had a combination of firepower and class. One of these was the USS *Constitution* (fig. 5-2), which was completed in 1798. This ship was equipped with 44 guns, could sail at 13 1/2 knots, was 175 feet long (at its gundeck), and had a tonnage rating of 1,576 tons. Its mainmast towered 105 1/2 feet above its decks.

**Figure 5-2.—The new and radical USS *Constitution*, built for speed and firepower, helped to rid the Mediterranean of the Barbary pirates.**

### NOTE

The USS *Constitution* is still in commission and can be seen at the Boston Navy Yard.

The USS *Constitution* fulfilled the thoughts and dreams of President John Adams, who did so much to form the U.S. Navy. John Adams established the Navy Department in 1798.

### THE EARLY YEARS

Between America's first two wars with Great Britain (the Revolutionary War and the War of 1812), the early U.S. Navy was involved in two other conflicts—the Quasi War and the Barbary States War.

***Student Notes:***

### Quasi War

The "Quasi War" with France, 1798 - 1801, was entirely a naval war. It followed worsening diplomatic relations with France, including a refusal by the French Secretary of Foreign Affairs to receive U.S. representatives unless a bribe was paid and a loan granted. The famous expression "Millions for defense, but not one cent for tribute" originated at this time. The Quasi War was the baptism of fire for the United States Navy under the new Constitution.

### Barbary States War

The U.S. Navy was sent to the Mediterranean to deal with the Barbary States, who were forcing other nations to pay ransom for safe passage through the Mediterranean Sea. During the campaign, Lieutenant Stephen Decatur and 84 seamen slipped into the harbor at Tripoli on February 16, 1804, and burned the captured frigate USS *Philadelphia* (fig. 5-3). Not a single American Sailor was lost. Britain's Admiral Lord Nelson described the raid as "one of the most bold and daring acts of the age."

**Figure 5-3.—Lieutenant Stephen Decatur and 84 seamen slipped into Tripoli harbor and burned the captured American frigate USS *Philadelphia*.**

## THE WAR OF 1812

The War of 1812 was brought on, in part, because the British were impressing (forcing Americans to serve in the British Navy) American seamen. England impressed American seamen to make its presence felt and demonstrate its power on the American continent.

On August 19, 1812, Captain Isaac Hull aboard the USS *Constitution* defeated the British frigate *Guerriere* (fig. 5-4), and the USS *Constitution* earned its nickname "Old Ironsides." The victory convinced Congress and President Madison that a stronger Navy was needed to win the war and protect the country.

**Figure 5-4.—During the War of 1812, Captain Isaac Hull, aboard the USS *Constitution*, defeated the British frigate *Guerriere*.**

Almost a year after Hull's important victory, another famous event in our naval history occurred. On September 10, 1813, Captain Oliver Hazard Perry defeated a British squadron on Lake Erie and wrote his dispatch, "We have met the enemy and they are ours." Perry's win cut British supply lines on the Great Lakes, gained control of Lake Erie, and strengthened the American claim to the Northwest Territory.

The Barbary States War and the War of 1812 saw bigger ships coming into the Navy. Typical was our first ship-of-the-line, the USS *Independence*, followed by the 74-gun USS *North Carolina*.

## THE YEARS FROM 1813 TO 1815

Following the War of 1812, our Navy underwent technological changes. Before the Civil War, new scientific advances foreshadowed the incredible technological revolution that continues into today's world.

One change was the use of steam. The Navy entered a new era, an era of the "steam-driven warship." Harnessing the power of steam was the most important development in the surface Navy during the first half of the 19th century. Steam began to replace wind as a means of propulsion. It promised to eliminate some of the hazards and delays caused by ships being blown off course or left dead in the water.

***Student Notes:***

The principles of steam power were known for centuries. But, it was Robert Fulton who successfully used steam to power a commercial steamboat. After making a number of important modifications to James Watt's basic steam engine, Fulton sailed his riverboat *Clermont* up the Hudson River in 1807. Fulton helped build USS *Demologos*, the Navy's first warship to use steam. It was originally intended to defend the port of New York during the War of 1812. The USS *Demologos* was rechristened the USS *Fulton* in Robert Fulton's honor.

**1815 TO THE CIVIL WAR**

From 1815 to 1840, the Navy continued to expand its sailing fleet. In fact, more than 74 ships-of-the-line were built. In 1837 the Navy launched the 3,104-ton USS *Pennsylvania*, the largest of America's ships-of-the-line.

In 1841, the Navy launched the USS *Missouri* and the USS *Mississippi*. These were our first ocean-going, steam-driven capital ships. At the same time the US Navy was building bigger ships, it was developing steam powered ships and iron clad ships.

At the same time it was harnessing steam power for ship propulsion, the Navy was making advances in ship construction. The Navy began making its ships with iron instead of wooden hulls. In 1843, the Navy launched its first iron-hulled warship—the paddle sloop USS *Michigan*. This side-wheeler was 163 feet long and displaced 685 tons. It was powered by a 170-horsepower, two-cylinder, steam engine. Without using its sails, the USS *Michigan* was capable of making 8 knots.

Through the efforts of farseeing men like Commander Matthew Calbraith Perry, USN, the Navy was becoming more steam conscious. Perry is referred to as the "Father of the Steam Navy." He was enthusiastic about the possibilities of steam, and was in charge of construction and in command of the Navy's second steam frigate the USS *Fulton*. The harnessing of steam power was considered the most important naval development since the cannon.

The newly built steamships posed problems if engaged in battle. Their paddle wheels and steam engines could be easily damaged by enemy fire. This problem was fixed by changing the design of the ships so that the paddle-wheel housing was enclosed behind 5-foot-thick walls and set in an inboard channelway.

Steamship development overcame problems one by one. For example—

- Stronger engines were developed;
- Screw propellers replaced the paddle wheel; and
- Coal as a fuel was recognized as more efficient than wood.

These changes didn't happen overnight; they required long periods of trial and error. But in the 1840s, new ideas were being explored by their proponents. On September 5, 1843, the Navy's first successful steamship, the USS *Princeton*, was launched. Its new type of propeller eliminated the vulnerable paddle wheels and permitted the ship's engines to be placed below decks in protected spaces.

Other actions between 1815 and the Civil War included the following:

- The Navy took the first steps in Antarctic exploration. Notably, Lieutenant Charles Wilkes visited the subpolar region in January 1840 and proved conclusively that the icy land was, in fact, a continent.

- Following Texas' admission to the U.S. as the 28th state, Mexican troops crossed the Rio Grande. War broke out. The Mexican-American War was primarily a land war. However, the Navy did get involved. It blockaded port cities in the Gulf and provided protective action by the "Mosquito Fleet" during the first large-scale amphibious operation in U.S. military history—the landing of some 10,000 U.S. troops at Vera Cruz. (The Navy itself was not equipped to carry out such an operation at that time.) Marines were also involved in this war—they marched with Scott to Mexico City, coining the phrase "…from the halls of Montezuma…" in the famed Marines' song.

- The Navy was involved in diplomatic relations. Commodore Matthew C. Perry signed a treaty with Japan on March 31, 1854. This was the treaty that opened Japan's ports to American trade and provisioning of ships. England and Russia soon followed with their own treaties, all modeled after Perry's.

***Student Notes:***

## REVIEW 2 QUESTIONS

Q1. After the Revolutionary War, what was the next significant role of the U.S. Navy?

Q2. List the two conflicts that the American Navy was involved in between the Revolutionary War and the War of 1812.

a.

b.

Q3. Describe the event during the Barbary States War that Lord Nelson thought of as *one of the most bold and daring acts of the age.*

Q4. List two events that the U.S. Navy was involved in during the War of 1812

a.

b.

Q5. The Mexican-American War was primarily a land war. However, the Navy provided what service during this war?

## THE U.S. NAVY FROM THE CIVIL WAR TO THE 20TH CENTURY

**Learning Objective**: When you finish this chapter, you will be able to—

- Recognize the roles and responsibilities of the Navy from the Civil War to the 20th century to include the Civil War and the Spanish-American War.

The last half of the 19th century was a time of change for the United States. Marked by two wars and the first assassination of a United States President, it was a time of rapid change for the country and its Navy.

### THE CIVIL WAR

This bloody struggle between the States was the stage for many events in U.S. naval history. Both Union and Confederate navies engaged in shipbuilding programs. These programs brought the ironclad era into being. Launched by the Union in 1862, USS *New Ironsides*, a powerful ironclad, had the armor that allowed it to survive 50 hits in one battle.

#### Ironclads

The Civil War saw the development of two famed ironclads—the USS *Merrimack* (renamed the CSS Virginia by the Confederacy) and the Union's USS Monitor (which sported a turret). The USSMonitor was ungainly, called a *cheese box on a raft*; however, it and its Confederate counterpart began the ironclad era. The battle of the ships was indecisive; both sides claimed victory.

Also appearing on the scene were riverboats, rams, and gunboats. Probably more changes and advances were made in ship designs during the 4 years of the Civil War (1861 - 1865) than during any period since our Navy had its start in 1775.

#### Submarines

The Confederate Navy took the next steps forward in the development of the submarine. The USS *Hunley* was built with funds provided by Captain H. L. Hunley, a man blessed with imagination but lacking in practicality. The ends of this 25-foot craft were loaded with ballast tanks that could be filled for descent but had to be hand pumped for ascent. Power was supplied by a propeller fitted to a camshaft that ran the length of the ship and was turned by as many as eight men.

The CSS *Hunley* was a jinx to the Confederate Navy. On its first voyage, it nosed into the mud and refused to surface, killing its seven crew members. It was hauled up and moored at James Island, where a passing steamer swamped it and six more crewmen were lost. It was hauled up once more and manned with another crew, but was swept over by another steamer and another three men were killed.

***Student Notes:***

A young Confederate lieutenant, George Dixon, was convinced that the boat could be useful to the South. The CSS *Hunley* was moored off Charleston's Sullivan Island, just a few hundred yards from the USS *Housatonic*. In the first true submarine attack in naval history, Dixon cast off toward the large warship. The CSS *Hunely* attacked the USS *Housatonic* in calm waters in the dark of night. The submarine was sighted by lookouts on the USS *Housatonic*; however, it didn't have the time or the opportunity to strike back or set sail.

The CSS *Hunley* hit the USS *Housatonic* driving its shaft deep into the ship's hull. The heavy charge of gunpowder the submergible was carrying went off prematurely, and the CSS *Hunley* never had a chance to escape. It and all of its crew went down. The USS *Housatonic* had the same fate. It was hit on the starboard side and went down in just 4 minutes. Another northern vessel moved to its rescue, and only a few of its seamen were lost. Even though he lost his life, Lieutenant Dixon had demonstrated that submarines could be useful weapons of war.

**Other Innovations**

Some people associated with the Navy during the 19th century were interested in the air above the ocean. The USS *George Washington Parke Custis* of the Civil War days might be labeled as the Navy's first "aircraft carrier." Actually, it was a balloon boat used to launch observation balloons over enemy installations. It was 122 feet long, and its total cost was $150.

**Other Civil War Actions**

**Capture of Vicksburg**. On the Mississippi River, the capture of Vicksburg, Mississippi, by the combined naval forces of Rear Admiral David G. Farragut, Acting Rear Admiral David D. Porter, and the commander of the Army in the West, General Ulysses S. Grant gave the North control of the entire river. The capture of Vicksburg cut off important Confederate supplies of food and clothing coming from Louisiana, Texas, and Arkansas.

**Battle of Mobile Bay**. On August 5, 1864, David Farragut, the Navy's first admiral, gave his famous order "Damn the torpedoes! Full speed ahead!" (Torpedo was the name used at the time for mines.) Farragut's order won the Battle of Mobile Bay (fig. 5-5). This victory closed the South's most important port (since New Orleans had already fallen) and tightened the Union blockade.

**Figure 5-5.—Farragut (in rigging) at Mobile Bay.**

The Civil War produced many men whose names are still famous in the Navy:

- Andrew Foote, whose gunboats helped General Grant capture the Mississippi River fortresses
- John Dahlgren, the father of modern naval ordnance (fig. 5-6)

**Figure 5-6.—Rear Admiral Dahlgren, standing next to one of the guns he designed, was a leading pioneer in modern naval ordnance and gunnery.**

***Student Notes:***

- David D. Porter (son of the captain of the *Essex*), who commanded the mortar flotilla in the capture of New Orleans

## POST CIVIL WAR NAVY

Alfred T. Mahan (fig. 5-7) was one of the first instructors at the Naval War College, and he influenced naval strategy. In 1890, the first of his many books and articles on sea power was published. One of his books (*The Influence of Sea Power Upon History, 1660 - 1783*) stressed that without control of the seas, a nation at war could not expect victory. He defined sea power; showed the importance of understanding naval needs; and advocated a large, powerful Navy capable of assembling an overwhelming force to defeat the enemy's Navy. His books on sea power became the "bible" of many navies, and for many years, they influenced the thinking of naval strategists. Part of our Navy's readiness for the war with Spain was a result of the influence of his works.

**Figure 5-7.—A philosopher of naval strategy, Mahan researched military history and proved that the nation controlling the oceans is the nation that maintains its supremacy in war or peace.**

### Surface Ships

Steam power was the major development in ship propulsion during the first half of the 19th century. Iron construction of ships was the outstanding development of the second half. The two developments went hand in hand—all the navies of the world recognized the advantages of steam power, and iron warships needed large steam engines to power them. The engines, in turn, called for bigger ships to accommodate them.

Shipbuilders used iron first as framing and then as a material for the entire ship. Iron was first used as framing to reinforce ships so that they could be used to ram their opponents as well as fire on them. It was several years before an economical way to process iron strong enough for the entire construction could be found. (Wooden ships had the advantage of being cheaper to build than iron ships.)

After the Civil War, the Navy began a drawdown period. A year and a half after the war, the total number of Navy ships was 236, with only 56 in active service.

World conditions made our Country aware that the Navy was small. Therefore, in 1882 and 1883, Congress authorized the construction of the "protected cruisers" USS *Atlanta*, USS *Boston*, and USS *Chicago* and the dispatch boat USS *Dolphin*, which had both masts for sails and stacks for smoke. They were steel hulled and signaled the end of the ironclads introduced only 40 years earlier. These new cruisers were in the 13- to 14-knot class. They sported new guns, new types of turrets, and armor.

Once more, the Navy began to rebuild its strength. Continued changes were made as the new steel Navy took on new shapes. Still clinging to the past, the USS *Newark*, a 4,098-ton protected cruiser, was the last of the Navy's warships to be fitted with sails. It was launched in 1890 and commissioned the following year. Because of its many improvements, the USS *Newark* has been labeled as *the first modern cruiser in the U.S. Fleet*.

With the development of the self-propelled torpedo, long-range torpedo boats made their debut. In 1890, one of the first torpedo boats joined the fleet—the 22.5-knot USS *Cushing*. The Navy acquired 16 fast torpedo boats and three 185-ton boats capable of speeds of 27 knots.

The development of torpedo boats caused the shape of ships to change. An example was the USS *Truxtun*, which led to the design of our present-day destroyers. These ships were designed to combat torpedo boats. Later improvements resulted in destroyers themselves carrying torpedoes.

### Subsurface Ships

Since surface ships were driven by steam, why not submarines? Steam requires air, fire, and heat, and those were in limited supply aboard a submarine. During the 19th century, the internal combustion engine was developed. Use of this engine on ships had drawbacks.

***Student Notes:***

However, many of its problems were overcome by two inventors—John Holland and Simon Lake. Holland and Lake had opposite theories about the submarine.

- Holland thought submersion should be made by power-diving, using the force of the propeller and the angle of the bow planes.
- Lake said boats should descend on an even keel with slight negative buoyancy.

Lake was more interested in underwater exploration than naval warfare. He thought a submarine could be equipped with wheels and driven along the ocean's floor, although he did not pursue that idea. Holland was more practical; his design included a workable torpedo tube, which Lake's did not.

Holland received a $150,000 contract from the Navy for a subsurface vessel. His first attempt failed, but the Navy was impressed enough to award him another contract. By 1898, he had built USS *Holland*, a cigar-shaped craft, 52 feet long and 10 feet in diameter. The USS *Holland* was equipped with a gasoline engine for surface power and generators that charged batteries for underwater power. It was armed with a torpedo tube that fired an 18-inch torpedo and a bow gun recessed into the hull. A New York newspaper commented that "…the offensive powers of the *Holland* are, considering the size and method of attack, far greater than any other engine of war."

The submarine's problem of running blind when submerged was corrected after Simon Lake experimented with a set of prisms and lenses. Before that, the USS *Holland* had to surface to permit the crew to look out the conning tower; causing it to lose its greatest advantage—surprise. Lake and a professor from Johns Hopkins University worked out a design for the periscope. The periscope, with various improvements, remained the submarine's basic visual aid until 1958.

**THE SPANISH-AMERICAN WAR**

At the end of the 19th century, the United States and Spain became involved in diplomatic disputes about Cuban independence, trade, and U.S. citizens living there. On the evening of February 15, 1898, a terrific explosion suddenly tore through the battleship USS *Maine* at anchor in Cuba's Havana harbor. The explosion killed 250 American Sailors. The explosion was a major reason for the start of the Spanish-American War…*Remember the Maine* became our battle cry.

One event stood out in this short war—Commodore George Dewey's seizure of Manila Bay in the Philippines. On May 1, 1898, he steamed into Manila Bay and ordered, "You may fire when you are ready, Gridley." Dewey's resounding victory destroyed Spain's naval power in the East and was instrumental in quickly ending the war.

Shortly after the Battle of Manila Bay (fig. 5-8), U.S. naval forces at Cuba cornered the Spanish Atlantic Squadron at Santiago Bay. On the morning of July 3, 1898, the Spanish squadron tried to break out of the bay and was completely destroyed. Cuba and Puerto Rico fell shortly afterwards, effectively ending the war.

**Figure 5-8.—Battle of Manila Bay.**

***Student Notes:***

## REVIEW 3 QUESTIONS

Q1. List the naval developments during the last part of the 19th century.

a.

b.

c.

d.

e.

f.

Q2. After the development of the ironclad, what was the Confederate Navy's next achievement?

Q3. During the Civil War, the U.S. Navy's first admiral gave the famous order, "Damn the torpedoes! Full speed ahead." List the admiral's name and battle where he gave the order.

Q4. Describe how Alfred T. Mahan influenced naval strategy.

Q5. What was the major cause of the Spanish-American War?

Q6. Who was instrumental in quickly ending the Spanish-American War?

## THE NAVY FROM 1900 THROUGH WORLD WAR I

**Learning Objective**: When you finish this chapter, you will be able to—

- Recognize the roles and responsibilities of the Navy during World War I.

The 20th century began with a world at uneasy peace. Between the end of the 19th century and WWI, the U.S. Navy developed some new weapons. For example, in April 1900 the Navy accepted its first operational submarine, USS *Holland*.

### SUBMARINES

The Navy continued to experiment with the development of submarines throughout the next decade. One of the main problems continued to be the gasoline engine—it heated up and gave off fumes that overcame many of the crew.

The gasoline engine was replaced by the diesel engine. The first diesel engines were installed in the USS *Skipjack* (SS 24) and the USS *Sturgeon* (SS 25). These new engines required no complicated ignition or sparking systems, produced fewer fumes, and were cheaper to operate. The diesel engine and electric battery remained as the main propulsion systems for submarines until nuclear power emerged in the 1950s.

### DESTROYERS

Destroyers had been used primarily to deliver torpedo attacks. With the development of the submarine, they became submarine hunters. Construction of our first destroyer, which displaced 420 tons, began in 1899. Destroyers proved so successful that building these ships began on a large scale. From 1892 to 1914, the start of World War I, over 50 destroyers were built; and 273 were ordered during the war.

### CRUISERS AND BATTLESHIPS

The battleship resulted from the major changes in ship design that took place during the 19th century. Battleships carried heavy guns and corresponding armor protection. The United States had begun building its *battlewagons* in the late 1880s; each succeeding class had more firepower than the one before.

***Student Notes:***

By 1895, the heavy elements of the U.S. Fleet consisted of 15 steel cruisers, the heavy cruiser USS *New York*, and three battleships. The first two battleships were the USS *Texas*, commissioned on August 15, 1895, and the USS *Maine*, commissioned on September 17, 1895. Both were listed as "second-class" battleships. The third ship, the USS *Indiana* (BB 1), was commissioned in 1895. It was our first "first-class" battleship.

In 1906, the United States began a large battleship-building program. Five battleships were of the same class as the USS *New Mexico* and USS *Colorado*; however, they weren't completed until after World War I. Based on lessons learned from wartime experiences, many improvements were incorporated into their design. For example, battleships of the same class as the USS *Colorado* were the first ones equipped with 16-inch guns.

**NAVAL AVIATION**

As the 19th century drew to a close, the Wright brothers were working on their flying craft. The Wright brothers' first flights at Kitty Hawk, North Carolina, began the vision of the future. Most people thought of flying as a stunt or a sport, while others talked about crossing the ocean by airplane. One European wrote in part,

> *…flights over the ocean will be made possible by a new type of ship…[its] deck will be clear of all obstacles, flat and wide as possible… [it will] have the aspect of a landing field…its speed shall equal that of a cruiser…housing of planes will be arranged below deck and planes will have folding wings…and to one side there will be the service personnel workshop.*

Others saw the potential of aircraft serving as an extension of the might and range of a naval force at sea. They were convinced that airplanes wouldn't be used just for circus sideshows and crop-dusting. They believed aircraft would transport troops across oceans and be equipped to strike offensively.

The Navy was again looking upward. As the Assistant Secretary of the Navy, Theodore Roosevelt recommended that the Secretary of the Navy appoint two officers "…of scientific attainments and practical ability…" to examine Professor Samuel P. Langley's flying machine and report on its potential for military use.

One such man was Navy Captain Washington Irving Chambers, the U.S. Navy's first officer in charge of aviation. Captain Chambers' initial involvement was to answer letters from air-minded citizens and observe and report on aviation developments of particular concern to the Navy. What started as a collateral duty soon was a full-time job, and Chambers became a strong supporter of those who wanted to see the sea service add an air arm.

In April 1911, the Office of Aviation in Washington, D.C., consisted of only Captain Chambers. In May, he wrote requisitions for two machines made of wood, canvas, bamboo, rubber, and metal—two airplanes, the A-1 and the A-2. Earlier in the year, a civilian, Eugene Ely, had successfully taken off from and later landed a biplane on a platform rigged aboard USS *Pennsylvania* (ACR 4), demonstrating the practical use of naval aircraft.

Shortly thereafter, the Navy accepted delivery of its first airplane, the A-1. The A-1 was first flown by Lieutenant T. G. Ellyson, the Navy's first aviator. The A-1 was followed by the A-2; naval aviation had gotten off the ground.

By October 1911, the Navy was ready to try durability flights. Lieutenants Ellyson and J. H. Towers attempted a flight from Annapolis to Fort Monroe, Virginia. After flying 112 miles in 122 minutes, the pair was forced down somewhat short of their goal by mechanical problems. Although a failure in part, the flight paved the way for successful durability tests in the following months.

Based on tremendous headway made in a few short years, in 1914, Secretary of the Navy Josephus Daniels prophesied "…the science of aerial navigation has reached that point where aircraft must form a large part of our naval force for offensive and defensive operations." It had become evident that the airplane was no longer merely a plaything of the rich or eccentric—it had become a vital part of our nation's weaponry.

**OTHER DEVELOPMENTS FROM 1900 THROUGH WWI**

Meanwhile, the Navy was switching from coal to oil as fuel for its ships. USS *Nevada* (BB 36) was the first of the battleships to use oil. The day of the coal passer was on the way out.

***Student Notes:***

Navy involvement in exploration continued during the first decade of the century. On April 6, 1909, Commander Robert E. Peary, accompanied by Matthew Henson, reached the North Pole.

In pre-World War I days, the Navy also carried out its role as a diplomatic arm of the government. On December 16, 1907, the Great White Fleet left Hampton Roads, Virginia, for a round-the-world cruise to show the flag. The exercise demonstrated the strength of the U.S. Navy.

Although the United States entered World War I late, the Navy had plenty of time to make history. On May 4, 1917, six American destroyers commanded by Commander Joseph K. Taussig steamed into Queenstown, Ireland. They became the first U.S. Navy ships to operate in European waters during World War I. The event, billed as the "return of the *Mayflower*," was a great morale booster and aid for the Allied forces. The incident is probably best remembered by Commander Taussig's simple remark upon reporting to the British admiral in charge: "I shall be ready when refueled, sir."

Destroyers became a primary symbol of British-American cooperation during WWI. Destroyers were the main defense against German U-boats, which were practicing unrestricted warfare and terrorizing the seas. U-boat attacks were one reason for our entry into the war.

The British and Americans exchanged signals, codes, and inventions in combining their destroyer forces to seek out and attack the German submarines. Destroyers served as escorts for troopships and supply convoys for the Allies, helping to ensure their safety. On November 17, 1917, the destroyers USS *Nicholson* and USS *Fanning* were the first U.S. ships to sink an enemy submarine.

When the United States entered World War I, naval aviation assets were limited. The nation had only 54 aircraft, 1 air station, and 287 personnel assigned to aviation. The nation had no armed forces or operations abroad.

In spite of its size, the air arm proved its value as a supporting unit to surface antisubmarine (ASW) forces. Navy pilots served with Allied units in France and England. The airplane created a new breed of hero, the ace. Nineteen year-old Lieutenant David Ingalls, later Assistant Secretary of the Navy (Air), flew a Sopwith Camel to become the Navy's first ace.

In World War I, the women's role in the Navy came into its own. In 1811, a Navy surgeon recommended employing women in hospitals to care for the Navy's sick and wounded. The idea was not acted upon at that time.

**NOTE**

In the Civil War, women nurses, although not part of the Navy, served aboard the hospital ship USS *Red Rover* in the medical department. In the war of 1898, the first trained nurses in the Navy, though not an official unit, were stationed at the Norfolk Naval Hospital to care for the injured. A decade later (in 1908), the Nurse Corps was officially born.

As the nation readied itself for World War I, it needed Yeomen and personnel in related jobs to handle the growing demand from headquarters and naval shore stations. Josephus Daniels, Secretary of the Navy, asked his legal advisors, "Is there any law that says a Yeoman must be a man?" The answer was no, but until that time only men had been enlisted. "Then enroll women in the Naval Reserve as Yeomen," the Secretary said. In such jobs, he added, they would offer the best "assistance that the country can provide."

Immediately after the United States entered World War I, women were enlisted on a large scale "in order to release enlisted men for active service at sea." By the time the armistice was signed, 11,275 women were enlisted in service as Yeomen (F). They handled most of the clerical work at the Navy Department, in addition to many highly important special duties. Yeomen (F) were stationed in Guam, the Panama Canal Zone, and Hawaii, in addition to the United States and France. About 300 "Marinettes," as the female enlisted personnel of the Marine Corps were designated, were on duty during the war. Most of them were stationed at Marine Corps Headquarters at the Navy Department, although a number were assigned with Marine Corps recruiting units.

All Yeomen (F) were released from active duty by July 31, 1919. Secretary Daniels sent the following message to the Yeomen (F): "It is with deep gratitude for the splendid service rendered by the Yeomen (F) during our national emergency that I convey to them the sincere appreciation of the Navy Department for their patriotic cooperation."

***Student Notes:***

## REVIEW 4 QUESTIONS

All questions in this review concern WWI.

Q1. Before WW I, the Navy built surface ships and submarines. What other development occurred then that is still a big part of today's naval arsenal?

Q2. What was one reason why the U.S. Navy was deployed?

Q3. Describe the role of Navy destroyers.

Q4. Describe the role of the air forces.

Q5. What was the role of Navy women?

## THE NAVY FROM 1920 TO 1950

**Learning Objective**: When you finish this chapter, you will be able to—

- Recognize the roles and responsibilities of the Navy from 1920 through 1950 to include World War II and the post-war years.

The world was changing rapidly from the end of WWI to 1950. During the 1920s, the world economy boomed, then fell. In the 1930s, there was the "Great Depression." In 1939, World War II began. In this section, you will learn about some of the developments made by the U.S. Navy.

### 1920 TO 1940

Between 1920 and 1940, the U.S. Navy was developing its aviation arm to include aircraft carriers and airships and airplanes. Also, it was building up its destroyer strength.

#### Aviation

Great strides in aviation had been made during World War I, and the end of the war did not slow the pace of progress. On May 8, 1919, three Navy Curtiss (NC) flying boats taxied into the bay of Far Rockaway, New York, and took off for Europe. Plagued by mechanical difficulties, two NCs failed to make it. The NC-4, piloted by Lieutenant Commander Albert C. Read, became the first airplane to fly the Atlantic. LCDR Read's message from Lisbon, Portugal, to the President read, "We are safely across the pond. The job is finished." The NC-4 is now located at the National Museum of Naval Aviation, Pensacola, Florida.

With transoceanic aircraft a reality, the Navy continued to research the use of rigid airships in its air arm. In 1923, *Shenandoah* was launched. During a severe squall in 1925, the *Shenandoah* broke in half and killed 14 men. At that time, some authorities questioned the safety of the airship since it was fueled with highly flammable hydrogen. In spite of some opposition, the Navy continued to test rigid airships throughout the next decade. In 1931, USS *Akron* was launched. The *Akron* crashed in 1933 during a thunderstorm, killing the entire crew.

In November 1929 a Ford trimotor aircraft, named the *Floyd Bennett*, carried Commander Richard E. Byrd and his crew on the first flight over the South Pole. Commander Byrd thereby became the first man to fly over both poles.

In 1933, *Macon* was commissioned. Two years later the *Macon* also crashed into the sea. The Navy then abandoned research and construction of rigid airships.

#### Aircraft Carriers

In 1934, the USS *Ranger*, the first carrier designed from the keel up, joined the fleet. Also in the 1930s and prewar 1940s, the large aircraft carriers USS *Enterprise*, USS *Wasp*, USS *Hornet*, and USS *Yorktown* were commissioned.

***Student Notes:***

Those carriers played an important role in the prewar years. They were used in exercises to test the possibility of launching air attacks from their decks. During fleet maneuvers, naval aviators received excellent training in mock attacks on Pearl Harbor. Flying predawn missions from carriers, flyers theoretically destroyed the U.S. Fleet and its aircraft there. Fleet commanders were impressed by the flexibility of the air arm, but no one else seemed to pay much attention to the exercises.

### Destroyers

Between the two world wars, the United States built the Navy's destroyer fleet to 184 ships. Destroyers also became prime factors in America's policy to turn over older destroyers (fig. 5-9) to Britain after the British entered the war against Germany. When the Japanese attacked Pearl Harbor, a destroyer, USS *Ward* (DD 139), was among the first American forces to fire against the enemy, sinking a Japanese midget submarine. Destroyers went on to distinguish themselves in fighting enemy submarines both in the Atlantic and Pacific theaters.

**Figure 5-9.—Destroyer built shortly after World War I.**

## WORLD WAR II

On the morning of December 7, 1941, the "Rising Sun" came out of the west when the Japanese pounced on Pearl Harbor. On that morning, over 15 U.S. Navy ships were sunk or damaged, including all 8 battleships of the Pacific Fleet (fig. 5-10). Some 3,400 Navy and Marine Corps personnel were killed or wounded. The United States declared war on Japan the next day.

**Figure 5-10.—The day of infamy.**

### Pacific Arena

The Japanese attack on Pearl Harbor was the first attack in history conducted solely from aircraft carriers. The attack proved beyond a doubt that aircraft had become an essential part of naval armament. Fortunately, no United States carriers were lost during the attack on Pearl Harbor. The USS *Yorktown*, USS *Wasp*, and USS *Ranger* were in the Atlantic, and the USS *Saratoga* was in San Diego. The USS *Lexington* was about 425 miles south of Midway, and the USS *Enterprise* was 200 miles west of the Pearl Harbor.

The Japanese Imperial Navy captured island after island in the South Pacific as it advanced toward Australia. The U.S. Navy's air arm finally stopped that advance in early May 1942, which set the scene for the turning point of the war in the Pacific.

At the **Battle of Coral Sea**, the two fleets never saw each other—the battle was fought entirely with aircraft launched from carriers. The USS *Lexington* and USS *Yorktown*, jointly under the command of Admiral F. J. Fletcher, launched 93 attack planes against the Japanese carriers *Shoho*, *Shokaku*, and *Zuikaku*. Within 5 minutes, the *Shoho* was hit with 10 heavy bombs and 15 torpedoes. The USS *Lexington's* radio crackled with the voice of Lieutenant Commander Dixon of the air group, "Scratch one flattop. Dixon to carrier, scratch one flattop!" The other two enemy carriers were so badly damaged that their services to the Japanese fleet were lost for weeks. The United States suffered the loss of an oiler, an escort, and the USS *Lexington*. Even though American losses were heavy in tonnage and men, Australia had been saved from invasion.

***Student Notes:***

The turning point of the war in the Pacific came the next month at the **Battle of Midway**. The Japanese had concentrated on the central Pacific with the intention of occupying Midway Island. The four-carrier Japanese task force was met by a U.S. carrier force. The U.S. force included the carriers USS *Yorktown*, USS *Hornet*, and USS *Enterprise*, plus Navy, Marine, and Army air units from Midway.

Dive bombers proved to be the downfall of the Japanese carrier force. When the battle ended, the Japanese had lost four carriers, one heavy cruiser, and 258 aircraft. The United States had lost 132 aircraft, the destroyer USS *Hammann* (DD 412), and the aircraft carrier USS *Yorktown* (CV 5). In April 1943, another USS *Yorktown* was commissioned; and it continued in the proud tradition established by its predecessor.

In November 1942. the Navy fought the **Battle of Guadalcanal**. After 3 days of bitter fighting, the Japanese naval forces retreated, and U.S. Marines were able to secure the island. With the fall of Guadalcanal, the southern Solomons came under Allied control and Australia was in less danger of attack.

On June 19, 1944, U.S. Task Force 58 (fig. 5-11) caught the combined Japanese fleet steaming out of Tawi in the southern Philippines. The **Battle of the Philippine Sea** ended with the Japanese carrier forces short of ships, planes, gas, and pilots. Unable to replace these, the Imperial Navy was never able to recover from losses, although many desperate battles were to follow.

**Figure 5-11.—Part of Task Force 58 at anchor in the Marshall Islands, April 1944.**

The final blow to the Japanese Navy came October 23, 1944. In a last-chance effort to salvage the Philippines, the Japanese sent a naval force to the **Leyte Gulf** to attack the U.S. Fleet. Their plan backfired and the operation was a complete failure: It was the deciding catastrophe for their Navy. The loss of the Philippines severed their empire, and the homeland was cut off from its main source of supply from the south. With the losses at **Okinawa** and **Iwo Jima**, the war in the Pacific was approaching its final days.

### European Arena

On the Atlantic side of World War II, the U.S. Navy had been fighting off U-boats in the long-running Battle of the Atlantic. The Navy protected convoys bound for Europe. Small escort carriers dubbed “jeeps” were operating with convoys; and their aircraft were successfully attacking German submarines as they surfaced to recharge their batteries. Limited range of land-based airplanes was no longer a significant factor; and distance offered no sanctuary for the U-boat. Eventually, the German submarine menace was contained, and England and Europe got vital supplies and troops.

The Navy’s most notable Atlantic action may have been its part in the June 6, 1944, invasion of Normandy—the largest amphibious operation in history. The greatest armada ever assembled carried out minesweeping, shore-bombardment, amphibious operations, and transported supplies and troops. Those operations let the Allies complete D-Day landings successfully and eventually push on to Germany.

Widespread fighting on the oceans brought about the building of a fleet unlike any in history. This was a swift striking force. It had the advantages of speed, mobility, and surprise, yet it possessed the firepower and protective armor to stand and slug it out with enemy forces. Such a fleet was made up of ships with names synonymous with heroism, such as the USS *Tarawa*, USS *Missouri* (fig. 5-12), USS *Tucson*, USS *Higbee*, and USS *O’Bannon*.

### Other Events during WWII

During the 5-year period ending in late 1944, 9 million tons of vessels had been added to the U.S. Navy. One novel development was the large assortment of landing ships that began appearing in the early stages of the war.

***Student Notes:***

**Figure 5-12.—V-J Day aboard USS *Missouri*. Fleet Admiral Nimitz signs the Japanese surrender document on 2 September 1945.**

Possibly the most versatile of the many new types of ships built during World War II were the destroyer escorts, now called *frigates*. Other types built during that time included attack cargo ships, transports, barracks ships, net tenders, repair ships, radar pickets, minelayers, and mine sweepers. Those ships, as well as many other types of ships too numerous to mention, changed the shape of the U.S. Navy almost overnight.

When the Japanese attacked Pearl Harbor, 111 American submarines were in commission, 60 in the Atlantic Fleet and 51 in the Pacific. After the invasion of North Africa, U.S. efforts were concentrated in the Pacific, leaving submarine operations in the Atlantic to U.S. Allies. The Pacific became the hunting grounds for American submarine forces.

The number of American submarines during the war peaked at 247. During the war, the United States lost 52 of these boats along with 3,505 submariners. The number of vessels sunk by U.S. submarines played a major part in the American victory in World War II. American submarines sank 1,750 Japanese merchant ships and more than 200 combatants. Those vessels represented 55 percent of the total Japanese tonnage sunk in the war. For an island nation such as Japan, those figures represented a fatal impact.

Radar and sonar came into full use during World War II. The English used them initially to combat German U-boats, but they were also incorporated into the submarine as an attack aid. Sonar has become the most important of the submarine's senses. Hydrophones listen for sounds from other ships and the echoes of sound waves transmitted from the submarine itself.

**Women in the Navy**

Twenty-one years after the Yeomanette era, women were needed to fill an acute shortage of personnel caused by rapid expansion of the Navy for World War II. On July 30, 1942, Congress authorized establishment of the Women's Reserve, with an estimated goal of 10,000 enlisted women and 1,000 officers. This new organization had certain congressional limitations. Women could not serve at sea or outside the continental United States and could not exercise military command over men. They could not go beyond lieutenant commander on the promotion ladder. On August 4, 1942, Mildred Helen McAfee was sworn in as Lieutenant Commander, U.S. Naval Reserve, to become Commander of the Women's Reserve.

A boot camp for women volunteers was established at Hunter College in New York City. It was promptly dubbed USS Hunter. Since basic training lasted from 6 to 8 weeks, every other week some 1,680 women seamen had to be housed, fed, and uniformed. (The housing was provided in 17 apartment buildings near the college taken over by the Navy.)

At about the same time, three other schools were commissioned in the Middle West to train enlisted women as Yeomen, Storekeepers, and Radiomen. In July 1943, the Navy Japanese Language School in Boulder, Colorado, opened to women.

Navy women came to work the same hours as Navy men, standing both day and night watches. They stayed in uniform at all times except in the barracks or when engaged in active sports. They were called on to meet the same standards of neatness and good behavior as those required of men in uniform. In short, women were fitted into the Navy as an integral part of the service. They slipped into the same spot in the chain of command as the men they replaced and performed the same duties. This system gave Navy women the same status, responsibilities, and restrictions as men.

The first Reserve classification for women officers was W-V(S), meaning Woman-Volunteer (Specialist).

***Student Notes:***

Professor Elizabeth Reynard (later LT Reynard) came up with the term *Women Appointed for Voluntary Emergency Service* (*WAVES*). That term was later changed to *Women Accepted for Voluntary Emergency Service*. The initials WR and the term *Women's Reserve* were official, and some women preferred these terms to the equally official, but less formal, term *WAVES*.

As the Women's Reserve observed its second anniversary on July 30, 1944, it could look back upon a brief but glowing record of expansion and achievement. During its 2 years of existence, its members had freed enough officers and men to crew a fleet of 10 battleships, 10 aircraft carriers, 28 cruisers, and 50 destroyers.

During World War II, WAVES were directly eligible for 34 different ratings. They performed nearly every conceivable type of duty at 500 naval shore establishments.

## THE POSTWAR YEARS

Unlike the placid years following World War I, the postwar period from 1945 to 1950 was a busy one. The United States emerged from the war with an awareness that it couldn't afford any major cutbacks in military strength. The United States had become a nation committed to trading with and protecting other countries. The only way that responsibility could be discharged was by the maintenance of a strong and ready Navy.

**Navy women**. Since the WAVES had proved their worth during the war, the Navy was reluctant to give up its programs for women. After the war, a number of Navy women were retained in service. However, by the fourth anniversary of the program, only 9,800 remained on active duty.

The Women's Armed Services Integration Act, Public Law 625, was passed by the Senate and the House and signed by the President. It became law June 12, 1948, marking another step forward. That was perhaps the most significant milestone to date in the history of women in the Navy. That act gave women full partnership on the Navy team and abolished the Women's Reserve. For the first time, women became a part of the Regular Navy.

At the same time the Regular Navy opened to women, the Reserves established a program for women volunteers. The new laws authorized the transfer of all members to appropriate components of the permanent Naval Reserve.

**Antarctic exploration**. Following World War II, the U.S. Navy turned its attention once again to the exploration of Antarctica. In 1946, Operation Highjump got underway. Seaplanes flying from the open sea and the airstrip at Little America photographed the interior and coastline of the "white continent."

**Naval aviation**. Naval researchers continued to develop new, specialized ships and new planes capable of providing swift aid to Allies in a world of uneasy peace. All naval aircraft, featuring the most advanced radar and sonar systems, were redistributed into patrol, attack, and fighter squadrons.

Jet aircraft were perfected during the postwar years. In June 1948, a squadron of FH-1 *Phantoms* qualified for carrier operations aboard USS *Saipan* (CVL-48). Carrier flight decks were redesigned to launch and recover jets.

**Submarines and nuclear power**. During this time, the Navy was speeding development of the most revolutionary advancement in the history of submarines—nuclear power. Early in World War II, as part of the Navy's initial research on the atom, proposals were made to develop atomic power for use afloat. However, most of that work was diverted to development of the atomic bomb.

Nuclear power was the long-awaited propulsion source for the submarine. It turned the submersible surface ship into a true submarine, capable of almost indefinite operation. It was no longer bound to the earth's atmosphere.

In September 1947, Captain H. G. Rickover informally requested the first study of the application of a high-pressure, water-cooled reactor for a submarine. Personnel of the Daniels Pile Division at Oak Ridge, Tennessee, undertook that study.

In January 1948, the Department of Defense requested that the Atomic Energy Commission undertake the design, development, and construction of a nuclear reactor that would propel a naval submarine. In December 1948, the Commission contracted the Westinghouse Electric Corporation to develop design, construct, operate, and test a prototype nuclear propulsion plant. The outcome of those efforts was USS *Nautilus*.

***Student Notes:***

## REVIEW 5 QUESTIONS

Q1. What was the significance of the Battle of Coral Sea?

Q2. List the other major naval battles in the Pacific during World War II and describe their significance.

a.

b.

c.

d.

e.

Q3. Describe the role of the U.S. Navy in the Atlantic Ocean during World War II.

Q4. The shape of the Navy changed during World War II because of new ships introduced during this period. List some of the types of ships that were introduced during this period.

Q5. What is the significance of the date 30 Jul 43?

Q6. What is the significance of the Women's Armed Services Integration Act?

## THE NAVY FROM 1950 TO 1990s

**Learning Objective**: When you finish this chapter, you will be able to—

- Recognize the roles and responsibilities of the Navy from 1950 to 1990 to include the Korean Conflict, Vietnam, and the Persian Gulf.

As the second half of the 20th century arrived, the United States had been at peace for 5 years, and the Navy was involved in many scientific pursuits. However, scientific and exploratory pursuits were interrupted by the outbreak of the Korean Conflict.

### THE KOREAN CONFLICT

Supported by the United Nations, the United States agreed to give the Republic of Korea air and naval assistance. Three days after that decision, June 29, 1950, the cruiser USS *Juneau* and the destroyer USS *Dehaven* fired the first shots of the war.

When North Korea attacked south of the 38th parallel, the Navy was called on for close air support to knock out bridges and block enemy supply routes. Navy

***Student Notes:***

jets flew from carriers for the first time in a war situation. Unlike World War II, the enemy didn't have the capability to strike our carriers, so pilots launched their Corsairs and Banshees on the first sustained ground-support missions in history.

The helicopter also came of age during the Korean Conflict. First studied and developed in 1942 when the Navy received four Sikorskys, the choppers were spotters for artillery. In Korea, they flew emergency supply runs and took part in direct combat duties. Later, the helicopter was used as a cargo transport between ships during underway replenishment, search and rescue missions, and ASW exercises. Korea was the testing ground for the helicopter and many other innovations our forces currently use.

On September 15, 1950, under massive shore bombardment by U.S. Navy ships, the amphibious landings at Inchon began. The successful operation cut enemy communications, split enemy forces, and dissolved enemy resistance in that area. The shelling of supply roads far inland by the battleship USS *Missouri* demonstrated a new tactical concept. That concept was the Navy's ability to intervene successfully in a ground operation far ashore.

The Korean Conflict (fig. 5-13 and fig. 5-14) lasted until July 1953. Other events were happening in the Navy while the war was being waged. For example, a program was established giving outstanding enlisted women the opportunity to receive commissions in the Regular Navy.

*Photograph courtesy of Mr. Francis Jeffery.*

**Figure 5-13.—Korean War Memorial.**

*Photograph courtesy of Mr. Francis Jeffery.*

**Figure 5-14.—Korean War Memorial—soldier.**

## KOREA TO VIETNAM

The 1950s was a time of change. By the end of the decade, most operational aircraft in the attack and fighter arsenals of the sea service were jets. More and more angled-deck carriers were authorized, and new deck-edge elevators allowed simultaneous takeoffs and landings.

The USS *Nautilus*, the first nuclear submarine, was first put to sea on January 17, 1955. Under Commander Eugene P. Wilkinson, the USS *Nautilus* transmitted the historic signal, "Underway on nuclear power." On its shakedown cruise in May 1955, the USS *Nautilus* steamed submerged from New London, Connecticut, to San Juan, Puerto Rico. It traveled over 1,300 miles in 84 hours—a distance 10 times greater than the record for continuously submerged travel by any previous submarine.

After more than 2 years of operation and evaluation, the USS *Nautilus* was refueled in April 1957. On its first nuclear core, it steamed a total of 62,562 miles; it made more than half of that cruise while totally submerged. A conventionally powered submarine the size of the USS *Nautilus* would have required over 2 million gallons of fuel oil to duplicate that feat. A train of tank cars over a mile and a half long would have been necessary to transport that amount of fuel.

***Student Notes:***

On August 12, 1958, the USS *Nautilus* completed a history-making transpolar voyage from Pearl Harbor, Hawaii, to Portland, England. After diving under the ice near Point Barrow, Alaska, on August 1, 1958, it became the first submarine to reach the geographic North Pole.

Nuclear submarines produced after the USS *Nautilus* continued to pioneer new areas of submarine operations. The USS *Seawolf*, the Navy's second nuclear-powered submarine, operated as an active unit of the Atlantic Fleet. On October 6, 1958, it completed a record-breaking 60-day run, traveling a distance of 13,761 miles submerged.

While the USS *Nautilus* was still undergoing operational testing, the Navy began development of a ballistic missile of intermediate range. Brought from conception to initial operation in 5 years' time, the Polaris fleet ballistic missile (FBM) weapons system was mated with nuclear propulsion. That development produced a virtually invulnerable missile-firing submarine. Today, the missile-firing submarine constitutes one of the highest priority elements of the United States' deterrent capability; that is, a deterrent to nuclear conflict.

Each Polaris submarine could launch 16 two-stage ballistic missiles powered by solid-fuel rocket motors, containing a self-contained inertial guidance system. The Polaris provided a combined explosive power greater than the total of all the bombs dropped by all aircraft during World War II. Nuclear propulsion enabled these Polaris submarines to remain on patrol for extended periods, hidden beneath the surface of the sea, ready to launch their missiles.

On station, a Polaris submarine maintained complete radio silence, receiving radio messages while submerged, but not transmitting to prevent giving away its location. Each ship had two complete crews, the Blue and the Gold, of about 130 people each. The Polaris operated on a system that reflected a major change in the Navy's traditional ship-manning methods. The crews alternated on approximately 3-month-long deployments, providing maximum on-station time for the submarine. Its endurance was limited only by the limitations of its personnel.

Submarines were followed by the world's first nuclear-powered surface warships. They were the guided-missile cruiser USS *Bainbridge*, launched April 15, 1961; the guided-missile cruiser USS *Long Beach*, commissioned September 9, 1961; and the carrier USS *Enterprise*, commissioned November 25, 1961. On October 3, 1964, those three ships ended Operation Sea Orbit, a 64-day long, around-the-world, unreplenished cruise.

It was during this time that space exploration (fig. 5-15) began. The *Vanguard*, a 3 1/2-pound payload, was developed by the Naval Research Laboratory. On March 17, 1958, it was placed into orbit to test a system designed to launch earth satellites during the international geophysical year (IGY). Now the oldest man-made satellite in orbit, it is expected to remain aloft for 2,000 years.

**Figure 5-15.—Seven original NASA astronauts.**

Naval officers also participated in space exploration. On May 5, 1961, Commander Alan B. Shepard, Jr., made America's first suborbital flight. The 15-minute shot in *Freedom* 7 went 116.5 miles into space.

## VIETNAM

Although the United States was at peace following the Korean Conflict, events were building that would plunge the country into another conflict. Since 1959, the French had been involved in fighting in a country most Americans had never heard of—Vietnam.

***Student Notes:***

*Photograph courtesy* of Mr. F4rancis Jeffery.

**Figure 5-16.—The Wall .**

*Photgraph courtesy of Mr. Francis Jeffery.*

**Figure 5-18.—Vietnam memorial—soldier.**

Americans were introduced to Vietnam in 1965. In that year, the United States entered the Vietnam Police Action. This police action, which caused conflict at home as well as on the battlefield, lasted until January1973. Figures 5-16 through 5-19 commemorate American actions in Vietnam.

The Navy's operations in support of South Vietnam's struggle against communist military aggression consisted mainly of gunfire support and carrier aircraft operations. These operations included coastal interdiction patrols against North Vietnamese ships moving troops and supplies to the south. They also included riverine operations by a swarm of various types of patrol craft in the maze of waterways in South Vietnam's delta area. (By early 1972 all boats and the responsibility for delta operations had been turned over to the South Vietnamese Navy.) Naval construction battalions (Seabees) built several military bases and constructed water and sanitary facilities for local communities. Often, as in World War II, they engaged in fighting as they worked. Navy medical personnel served in the field with Marine Corps and Seabee units, as they did in World War II and in the Korean Conflict. They often performed their duties under fire and often sacrificed themselves to protect their charges from further harm. As in previous wars, U.S. Navy service and amphibious forces transported over 90 percent of the personnel and supplies used in support of that conflict.

*Photograph courtesy of Mr. Francis Jeffery.*

**Figure 5-17.—Vietman memorial.**

*Photograph courtesy of Mr. Francis Jeffery.*

**Figure 5-19.—Women in war—memorial.**

***Student Notes:***

During the Vietnam era, five new attack carriers joined the fleet, including the world's first nuclear-powered carrier, USS *Enterprise* (CVN 65).

Vietnam was a different kind of war, a war in which the Navy's role was ever changing. The Navy used both new and old aircraft—OV-10 *Broncos*, propeller-driven *Skyraiders*, attack planes like A-4 *Skyhawks* and A-7 *Corsairs*, and fighter planes like F-8 *Crusaders*. It used various support aircraft for ASW, early warning, and advance communications links.

## OTHER DEVELOPMENTS

Even during the Vietnam Police Action, the Navy was involved in exploration and development. Former Navy pilot Neil Armstrong became the first man to set foot on the moon on July 20, 1969. On November 14, 1969, the all-Navy *Apollo 12* crew lifted off from the Kennedy Space Center on the second lunar expedition.

The crew consisted of Commanders Charles Conrad and Richard Gordon and Lieutenant Commander Alan Bean. Another all-Navy crew (Captain Charles Conrad, Jr., and Commanders Joseph P. Kerwin and Paul J. Wietz) splashed down on the first Skylab mission on June 22, 1973. The crew set numerous records and accomplished virtually all of its objectives.

**Space**. The Navy stands tall in the first 10 years of manned space exploration. Records show that five of the six men to walk on the surface of the moon during that time had formerly been trained as naval aviators.

**Research**. In the 1960s, Navy scientific undersea research resulted in the USS *Alvin*. The USS A*lvin* was the Navy's first deep diving vehicle. It was successfully tested at 6,000-foot depths on July 20, 1965. The next month, 10 aquanauts, including astronaut Commander M. Scott Carpenter, entered the Sealab II capsule, 205 feet below the surface of the sea off the coast of La Jolla, California. Carpenter remained underwater for 30 days in a successful experiment of submerged living and working conditions. On January 25, 1969, the first nuclear-powered, deep-submergence research and ocean-engineering vehicle, NR-1, was launched. That five-man vessel can operate for weeks at a time at great depths.

**Weapons**. In early 1965 came the announcement of the proposal to develop a new missile for the fleet ballistic missile system—the Poseidon. The growth potential of the ballistic missile submarine launching system has enabled the Poseidon to fit into the same 16-missile tubes that carried the Polaris. Like the Polaris A-3, it is able to reach any spot on earth from its nuclear-powered hiding place. Its increased accuracy, greater payload, and improved ability to penetrate enemy defenses make the Poseidon more effective than the Polaris.

On July 19, 1974, construction of the new Trident undersea nuclear weapons system commenced. The Trident system consists of three principal elements: a nuclear-powered fleet ballistic missile submarine (SSBN), a strategic weapons system (the missile), and an integrated logistics support system. The first Trident submarine was the USS *Ohio* (SSBN-726), a nuclear powered fleet ballistic missile submarine. The USS *Ohio* was delivered to the Navy in 1981. Since then, the Navy has accepted delivery of 10 more Trident submarines.

## THE PERSIAN GULF

As with other wars, conflicts, or areas of military aggression, U.S. naval forces operate in the hostile area of the Persian Gulf. U.S. naval forces have been present in this vital oil-rich region for many years.

The events leading to an increased number of U.S. naval units in the Persian Gulf (fig. 5-20) began in the mid 1980s. Iran and Iraq were at war. Iraq had begun attacking Iranian oil facilities and tankers; in response, Iran began attacks against ships flying flags of countries sympathetic to Iraq. U.S. Navy ships quickly began escort and protection operations for U.S.-flagged tankers.

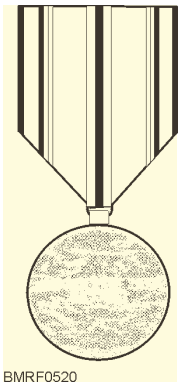



**Figure 5-20.—Persian Gulf award.**

***Student Notes:***

As the war between Iran and Iraq widened, so did the dangers to U.S. Navy ships operating in the Gulf. Iran started laying mines in the Gulf and began using small suicide boats to raid U.S. tankers and naval units. Iraq also possessed weapons that could cause tremendous damage and casualties. These weapons proved costly to the United States. In May 1987, an Iraqi aircraft mistakenly fired two missiles that struck USS *Stark* (FFG-31), killing 37 sailors and wounding many more. In April 1988, Iran's use of mines caused considerable damage to USS *Samuel B. Roberts* (FFG-58). Until that time, the U.S. Navy's presence was largely defensive. When forced to take offensive action, the United States acted quickly. U.S. Navy ships bombarded an Iranian oil platform being used as a command post and sank a mine-laying vessel carrying out operations.

**DESERT SHIELD/DESERT STORM**

On 2 August 1990, the president of Iraq Saddam Hussein, ordered the world's fourth largest army from Iraq to invade the country Kuwait. The United States deployed a major joint force which served as the foundation for a powerful 33-nation military coalition to stem Iraq's brutal aggression. Operation Desert Shield/Desert Storm was born. The United States Navy provided the sea control and maritime superiority that paved the way for the introduction of U.S. and allied air and ground forces. The United States offered strong leadership for the multinational naval force.

Desert Shield/Desert Storm brought together the largest force of Navy warships assembled in a single theater since World War II, adding a powerful punch to Navy forces already on scene the night of Iraq's invasion of Kuwait. Long-established maritime superiority facilitated the largest, fastest strategic sealift in history, with more than 240 ships carrying more than 18.3 billion pounds of equipment and supplies to sustain the forces of Desert Shield/Desert Storm.

Under the Navy's Total Force concept more than 21,000 naval reservists were called to active duty in support of Desert Shield/Desert Storm. Serving in specialties from medicine to mine warfare, reservists worked alongside their active duty counterparts in the Persian Gulf. Others filled critical vacancies on the home front.

Saddam Hussein's rejection of diplomatic efforts to solve the crisis led to the final decision to restore Kuwait's sovereignty by military force. The ensuing air war and the effects of the economic embargo decimated Iraq's military infrastructure, severed communication and supply lines, smashed weapons arsenals, and destroyed morale. Some of the first shots fired were from Navy ships in the Persian Gulf and Red Sea, as they launched salvos of Tomahawk cruise missiles against pre-programmed targets in Iraq.

After an impressive 38-day air campaign, the ground offensive began with allied forces sweeping through Iraqi defenses in blitzkrieg fashion. The allied push into Kuwait and southern Iraq was made easier by the amphibious forces on station in the Persian Gulf. The threat they posed forced tens of thousands of Iraqi troops to maintain positions along the Kuwaiti coastline to defend against attack from the sea. The Iraqi army was crushed after a mere 100 hours. Iraqi troops—tired, hungry and war-weary from 6 months of economic blockade and more than a month of relentless allied bombing—surrendered by the thousands. Less than 7 months after the Iraqi invasion, Kuwait was once again free.

It is likely that Navy ships will continue to represent and protect U.S. interests in the region for the foreseeable future.

**REVIEW 6 QUESTIONS**

Q1. List some of the Navy's roles during the Korean Conflict.

a.

b.

c.

d.

***Student Notes:***

Q2. List some of the Navy's missions during the Vietnam Police Action.

a.

b.

c.

Q3. What are other actions the Navy was involved with during the same timeframe as the Vietnam Police Action?

a.

b.

Q4. What service did the Navy provide during the Iraq – Iran War?

Q5. List the Navy's contributions during Operation Dessert Storm.

a.

b.

c.

## SUMMARY

The United States Navy began more than 200 years ago with two ships, but today we are the finest naval force in history. The history of the Navy is a big story and an exciting one. We've only rippled the surface here, but maybe we've stimulated your curiosity enough that you will want to take a closer look at your Navy's past. If so, visit your ship or station library. You will find many fine books on naval history there.

From Flamborough Head to the Persian Gulf, the U.S. Navy has always been "on station" in time of trouble. The U.S. Navy's mission of preparedness to conduct prompt and sustained combat operations at sea means the U.S. Navy will be present at the first sign of conflict.

U. S. Navy ships continued to change with even greater momentum, ushering in another new era—that of nuclear propulsion, jet power, rockets, and guided missiles. New types of ships have emerged—ships such as guided-missile cruisers, tactical command ships, and helicopter flattops. The era of the 50s, 60s, 70s, 80s, and on into the 90s has seen the emergence of the nuclear Navy.

The heart of today's nuclear fleet is a highly complicated unit known as the nuclear reactor, which offers the following advantages:

- Almost unlimited steaming endurance at high speed. Nuclear ships have increased flexibility; an ability to obtain ammunition, aviation fuel, and other supplies from remote places in a minimum amount of time; and an attack ability in a much greater area.
- Reduced vulnerability. Nuclear ships need not remain exposed as long as nonnuclear vessels during replenishment. They can maneuver to avoid attack.
- Reduced dependence on logistic support. Nuclear ships require fewer mobile support forces.
- Greater attack effectiveness. Nuclear ships can remain in battle areas for a greater length of time and have a greater ability to exploit weather conditions to their advantage.
- Elimination of huge funnels. That provides more room for such items as a big, powerful radar.
- Power available upon command. Nuclear reactors eliminate the need to order "more boilers on the line" a half hour before full power is desired. Heat is produced in the nuclear reactor; in turn, steam and power is produced with little delay. Reduction from full power to one-third or stop is equally responsive.
- Reduced maintenance. The absence of corrosive stack gases cuts down on the wear and tear of the ships and a lot of at-sea and in-port repairs.

The Navy has been advancing in other areas of the surface fleet as well. An example is the new amphibious assault ships (LHAs). The LHAs are the largest and fastest amphibious ships in the Navy inventory and offer the greatest operational versatility in the history of amphibious warfare.

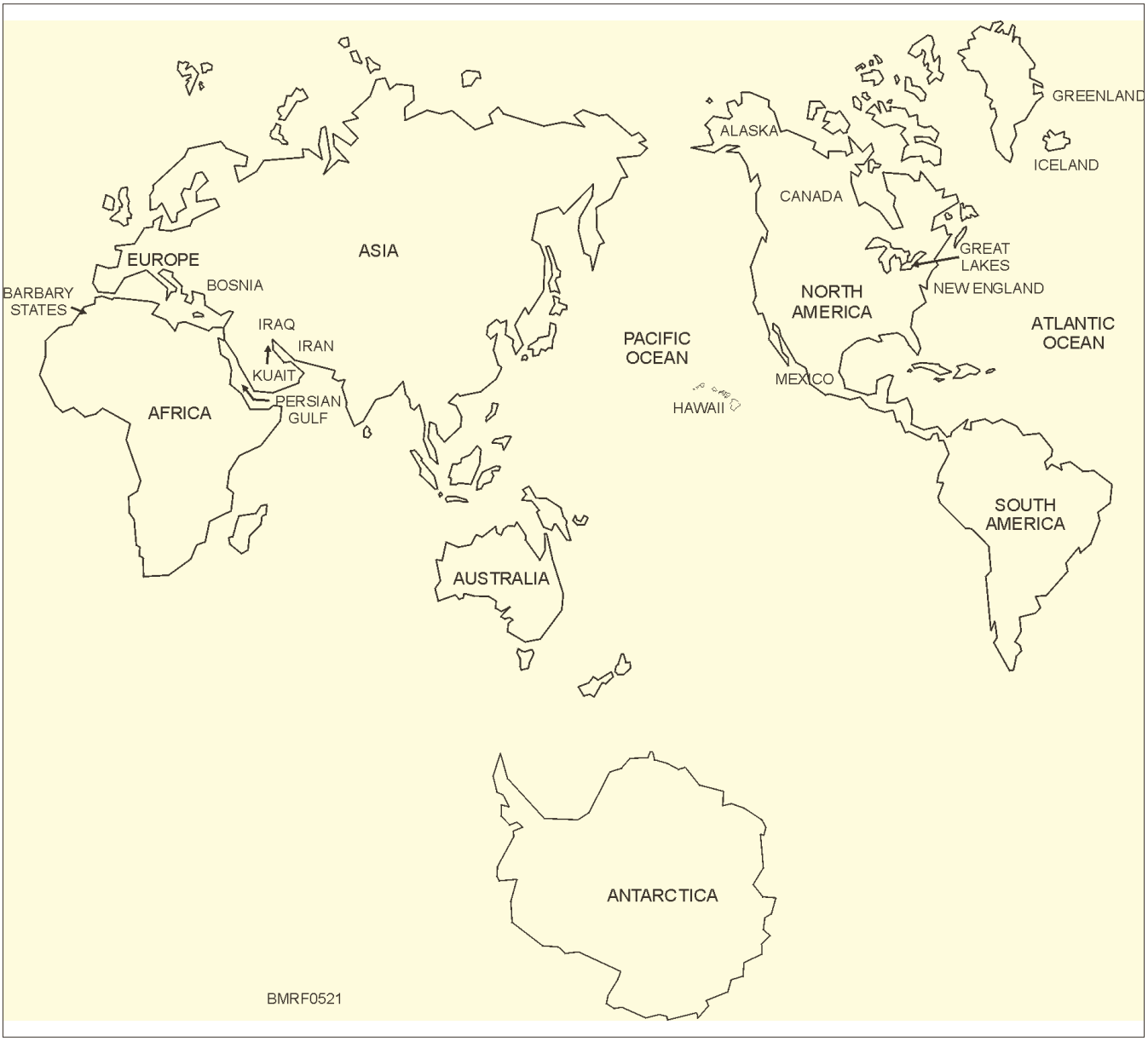
The size of the LHAs alone is impressive. The first of the LHAs, the USS *Tarawa*, is 820 feet long and 106 feet wide. The high point of its mast is 221 feet above the keel, and it has a full displacement of 39,300 tons. It can carry a large landing force with all its equipment and supplies, landing them either by helo or amphibious craft or both.

The primary advantage of these general-purpose assault ships is tactical integrity—getting a balanced force to the same point at the same time.

Spruance-class ships are the Navy's prime ASW destroyers. They are fitted with our most powerful sonar, helicopters, our best ASW weapons, and the Harpoon surface-to-surface missile system.

The most recent additions to the surface fleet are the Ticonderoga-class cruisers and the Arleigh Burke-class destroyers. Both are powered by gas turbines and are capable of high-speed transits. They are also outfitted with the Navy's new Aegis weapons system. That system has the capability to track and engage multiple targets, using a complex system of radars, missiles, guns, torpedoes, and self-defense systems. These capabilities make these cruisers and destroyers the most survivable units of today's surface fleet.

Our ability to quickly deploy large carrier battle groups and surface action groups quickly will assure our allies of our ability to exercise sea control. That ability, coupled with the U.S. submarine forces' strategic deterrence objective, will allow the United States and its allies the ability to deter further hostile action worldwide.

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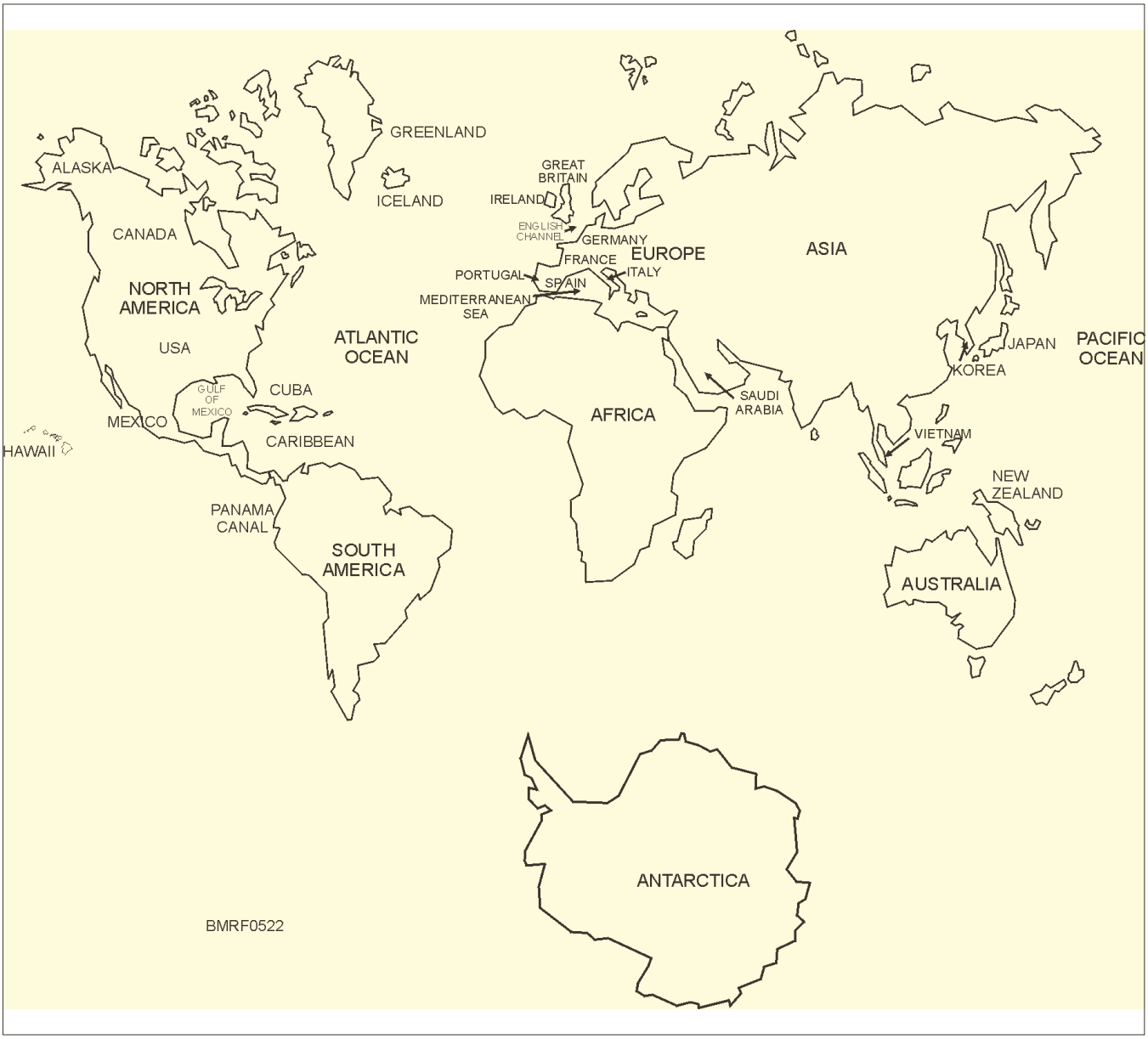



## REVIEW 1 ANSWERS

A1. The United States Navy was formed because **the Second Continental Congress realized that the survival of the colonies as independent from England depended on the formation of naval forces.**

A2. During the late 18th century, battleships were classified as **ships-of-the-line**.

A3. The craft developed in 1775 was **a warfare submarine, named the *Turtle*, and invented by David Bushnell**.

A4. This raid was the **first amphibious operation carried out by the American Navy and Marines**.

A5. The first official recognition of the American Stars and Stripes flag by a foreign nation was given by (a) **France** (b) to the **USS *Ranger***.

## REVIEW 2 ANSWERS

A1. After the Revolutionary War, **the U.S. Navy defended America's small merchant ship fleet from the Barbary pirates**.

A2. Between the Revolutionary War and the War of 1812, the U.S. Navy was involved with the—

a. **Quasi War with France** and

b. **Barbary States War**.

A3. Lord Nelson said that the **operation executed by LT Stephen Decatur and 84 seamen by slipping into the harbor of Tripoli and burning the captured frigate *Philadelphia*** was "one of the most bold and daring acts of the age."

A4. Two actions of the U.S. Navy during the War of 1812 were—

a. **The sea battle between the American frigate USS *Constitution* and the British frigate G*uerriere*** and

b. **The victory of Captain Oliver Hazard Perry over the British squadron on Lake Erie**.

A5. During the Mexican-American War, the Navy **blockaded the port cities on the Gulf** and the "**Mosquito Fleet" provided protective action during the first large-scale amphibious operation in U.S. military history**.

**REVIEW 3 ANSWERS**

A1. During the last part of the 19th century, naval developments included—

a. **Introduction of ironclad ships**

b. **Introduction of riverboats, rams, and gunboats**

c. **Development of submarines**

d. **Construction of steeled-hull protected cruisers, signaling the end of the ironclads**

e. **Development of self-propelled torpedo and long-range torpedo boats**

f. **Development of the internal combustion engine for ships**

A2. After developing the ironclad, the Confederate Navy developed the **submarine**.

A3. During the Civil War **Battle of Mobile bay**, **Admiral Farragut** gave order, "Damn the torpedoes! Full speed ahead."

A4. Alfred T. Mahan influenced naval strategy through his books that stressed the idea that **without control of the seas, a nation couldn't expect victory. He was one of the first instructors at the Naval War College and shared his knowledge on sea power and the importance of understanding naval needs**.

A5. The Spanish-American war began when the ***Maine* was blown up and 250 Sailors were killed.**

A6. **Commodore George Dewey** was instrumental in quickly ending the Spanish-American War.

**REVIEW 4 ANSWERS**

A1. The development of **airplanes** occurred at this time.

A2. The U.S. Navy was deployed to **stop German U-boats from practicing unrestricted warfare and terrorizing the seas**.

A3. During this war, **destroyers were used as the main defense against German U-boats. They also served as an escort for troop ships and supply convoys for the allies**.

A4. During this war, the air forces **supported surface antisubmarine forces**.

A5. During this war, **women enlisted in the Navy as Yeoman (F), releasing enlisted men for active service at sea**.

**REVIEW 5 ANSWERS**

A1. The Battle of Coral Sea was fought by **aircraft, all of which were launched from carriers. This battle saved Australia from being invaded by the Japanese**.

A2. The major naval battles in the Pacific during World War II and their significance is as follows:

a. **Battle of Guadalcanal—The Solomon Islands came under allied control and the danger of Australia coming under Japanese attack was lessened**

***Student Notes:***

b. **Battle of the Philippine Sea—Heavy losses of ships, aircraft, and pilots paralyzed the Japanese Fleet**

c. **Battle of Leyte Gulf—Deciding blow to the Japanese Navy. Losing control of the Philippines meant that the Japanese homeland was cut off from its main source of supplies from the south.**

d. **Battle of Midway—The turning point of the war in the Pacific**.

e. **The Battles of Okinawa and Iwo Jima—Defeat of the Japanese in these battles signaled an approach to the end of the war.**

A3. During World War II, the U.S. Navy **protected convoys bound for Europe from German U-boat attack**.

A4. Some of the types of ships that changed the shape of the Navy changed during World War II include **landing ships, frigates, attack cargo ships, transport ships, barracks ships, net tenders, repair ships, radar pickets minelayers, and mine sweepers.**

A5. On 30 Jul 1943, **Congress authorized the establishment of the Women's Reserve to fill acute shortages of personnel during World War II**.

A6. The Women's Armed Services Integration Act **abolished the Women's Reserve and gave women full partnership in the Navy**.

## REVIEW 6 ANSWERS

A1. Some of the Navy's roles during the Korean Conflict included—

a. **Providing close air support to knock out bridges and block enemy routes with the use of jets from carriers**

b. **Navy helicopters spotted enemy artillery**

c. **Navy ships supported the amphibious landing at Inchon through massive shore bombardment before ground forces landed**

d. **The Navy successfully used its battleships to intervene in ground operations far ashore.**

A2. Some of the Navy's missions during the Vietnam Police Action included—

a. **Surface ship-based gunfire support**

b. **Carrier-based aircraft operations**

c. **Coastal interdiction patrols against the enemy**

A3. Other actions the Navy was involved with during the same timeframe as the Vietnam Police Action include—

a. **The manned space exploration program**

b. **Manned undersea exploration, using deep submergence vehicles and underwater laboratories**

A4. During the Iraq – Iran War, **the Navy escorted and protected oil tankers in transit to and from the Persian Gulf against Iranian attacks**.

A5. The Navy's contributions during Operation Dessert Storm included—

a. **Providing sea control**

b. **Naval gunfire support for sea to ground forces**

c. **Surface and subsurface missile attacks on selected targets in Iraq**

# CHAPTER 6

# NAVAL ORGANIZATION

*Organization is the element of administration which entails the orderly arrangement of materials and personnel by functions in order to attain the objective of the unit. Organization establishes the working relationship among unit personnel; establishes the flow of work; promotes teamwork; and identifies the responsibility, authority and accountability of individuals within the unit.*

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

The primary mission of the Navy is to support U.S. national interests. To do that, the Navy must be prepared to conduct prompt and sustained combat operations at sea. Each Navy unit must be prepared to engage in battle and support other units and forces in battle. Meeting the objectives of this mission requires organization. This chapter introduces you to naval organization, including the Department of Defense, the Department of the Navy, a typical unit organization, and the chain of command.

## DEPARTMENT OF DEFENSE

**Learning Objective**: When you finish this chapter, you will be able to—

- Recognize the organization of the Department of Defense (DoD) to include the Department of the Navy (DoN) and the operating forces.

Originally, two executive departments managed the armed forces—the Department of War and the Department of the Navy. In 1947, the United States created the Department of Defense (DoD) as part of its security program by combining these two departments. The DoD consists of various agencies and three military departments—the Army, Navy, and Air Force. The DoD includes the Joint Chiefs of Staff, which consists of a chairman, the military heads of each department, and the Commandant of the Marine Corps. The DoD maintains and employs the armed forces to carry out the following missions:

1. To support and defend the Constitution of the United States against all enemies, foreign and domestic
2. To ensure, by timely and effective military action, the security of the United States, its possessions, and areas vital to its interests
3. To uphold and advance the national policies and interests of the United States
4. To safeguard the internal security of the United States

Figure 6-1 shows how the armed forces fit into the organization of the DoD to carry out these missions. The DoD is headed by the Secretary of Defense (SECDEF). The military departments that come under the DoD are the Department of the Army, the Department of the Air Force, and the Department of the Navy. Each department has a secretary as the head of department. By law, these secretaries (Army, Navy, Air Force, and SECDEF) are civilian appointees of the President. The Secretary of the Navy (SECNAV) heads the department of which you are a part.

## DEPARTMENT OF THE NAVY

The mission of the Navy is to maintain, train, and equip combat-ready naval forces capable of winning wars, deterring aggression, and maintaining freedom of the seas. The Department of the Navy has two main objectives:

1. The first objective is to organize, train, equip, prepare, and maintain the readiness of Navy and Marine Corps forces to perform military missions. These forces carry out military missions as directed by the President through the Secretary of Defense, to the SECNAV, to the Navy Department.

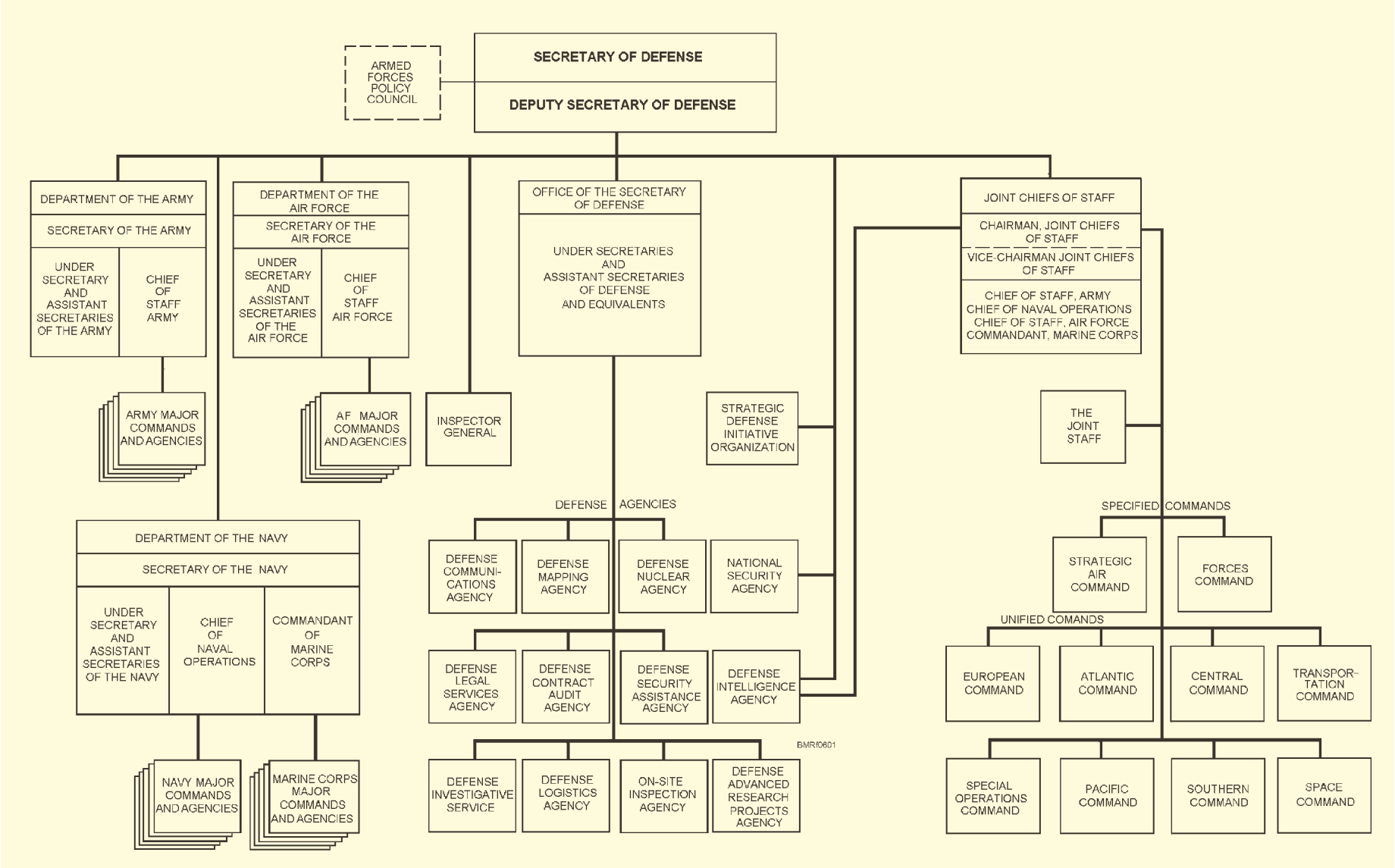



**Figure 6-1.—Organizational chart of the Department of Defense.**

2. The second objective is to support the Navy and Marine Corps forces as well as the forces of other military departments. The Department of the Navy supports these forces as directed by the Secretary of Defense.

Figure 6-2 shows the basic organization of the DoN. The SECNAV is responsible for, and has the authority under Title 10 of the United States Code, to conduct all the affairs of the Department of the Navy. The SECNAV has the following responsibilities:

- Conducts recruiting, organizing, supplying, equipping, training, and mobilizing, and demobilizing
- Oversees the construction, outfitting, and repair of naval ships, equipment and facilities
- Formulates and implements policies and programs that are consistent with the national security policies and objectives established by the President and the Secretary of Defense

The DoN consists of two uniformed Services—the United States Navy and the United States Marine Corps. You can find out more about these organizations by using the Internet. The Internet address is www.navy.mil. There, you can connect to a Navy organization's homepage.

Figure 6-3 shows you an overview of the organization of the DoN. The U.S. Navy was founded on 13 October 1775, and the Department of the Navy was established on 30 April 1798. The Department of the Navy has three principal components—

1. The Navy Department, consisting of executive offices mostly in Washington, D.C.
2. The operating forces, including the Marine Corps
3. The Shore Establishment

In this chapter, you will learn about the operating forces and shore commands. The reserve components are part of DoN. In times of war, the U.S. Coast Guard is also a part of the DoN; during peacetime, the U.S. Coast Guard is a part of the Department of Transportation.

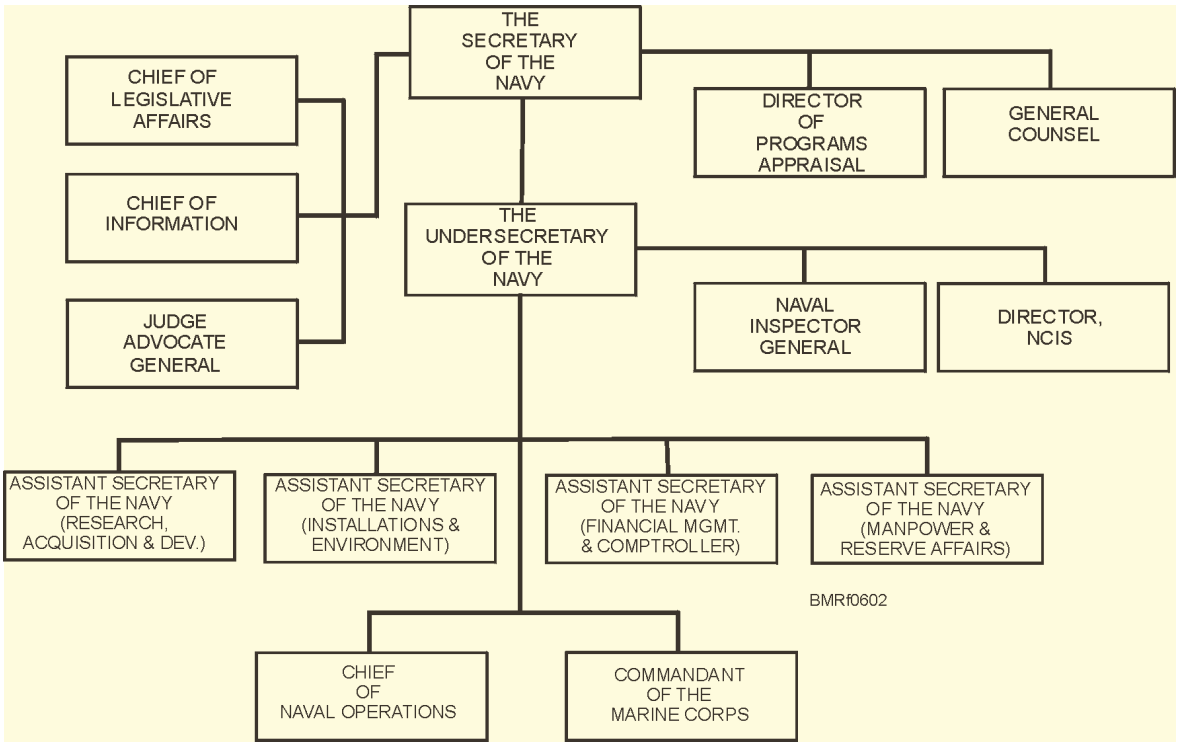
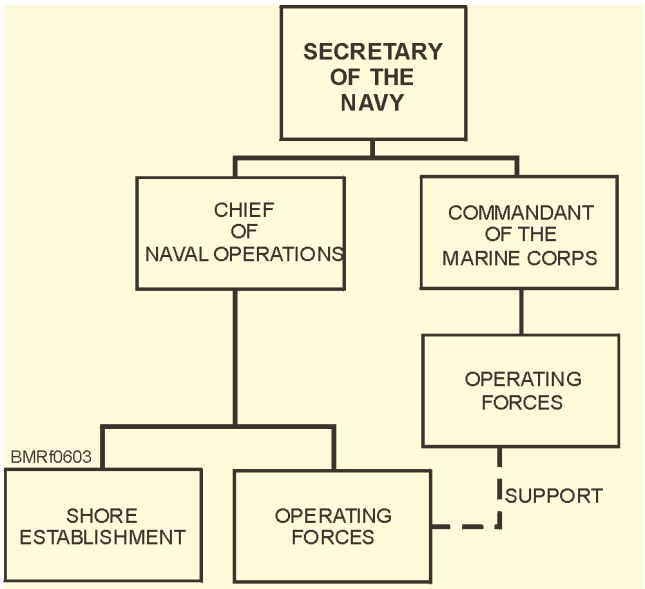



**Figure 6-2.—Organizational chart of the Department of the Navy (DoN).**

## *Student Notes:*




The dashed line marked "Support" indicates the cooperative support of the Navy-Marine Corps team. Each of the operating forces supports the other.

**Figure 6-3.—Overview of the DoN.**

## THE OPERATING FORCES

The operating forces (fig. 6-4) consist primarily of combat and service forces, including several fleets and the Fleet Marine Forces. They include the Coast Guard (when operating as a part of the Navy) and other forces and activities under the command of the Chief of Naval Operations (CNO). You can get more information on the operating forces by going to the web page mentioned above. You'll also learn more about the operating forces when you complete the *Military Requirements for Petty Officer Third Class*, NAVEDTRA 12024.

## THE SHORE ESTABLISHMENT

The shore establishment (fig. 6-5) provides support to the operating forces (known as *the fleet*). The support is in the form of facilities for the repair of machinery and electronics; communications centers; training areas and simulators; ship and aircraft repair; intelligence and meteorological support; storage areas for repair parts,

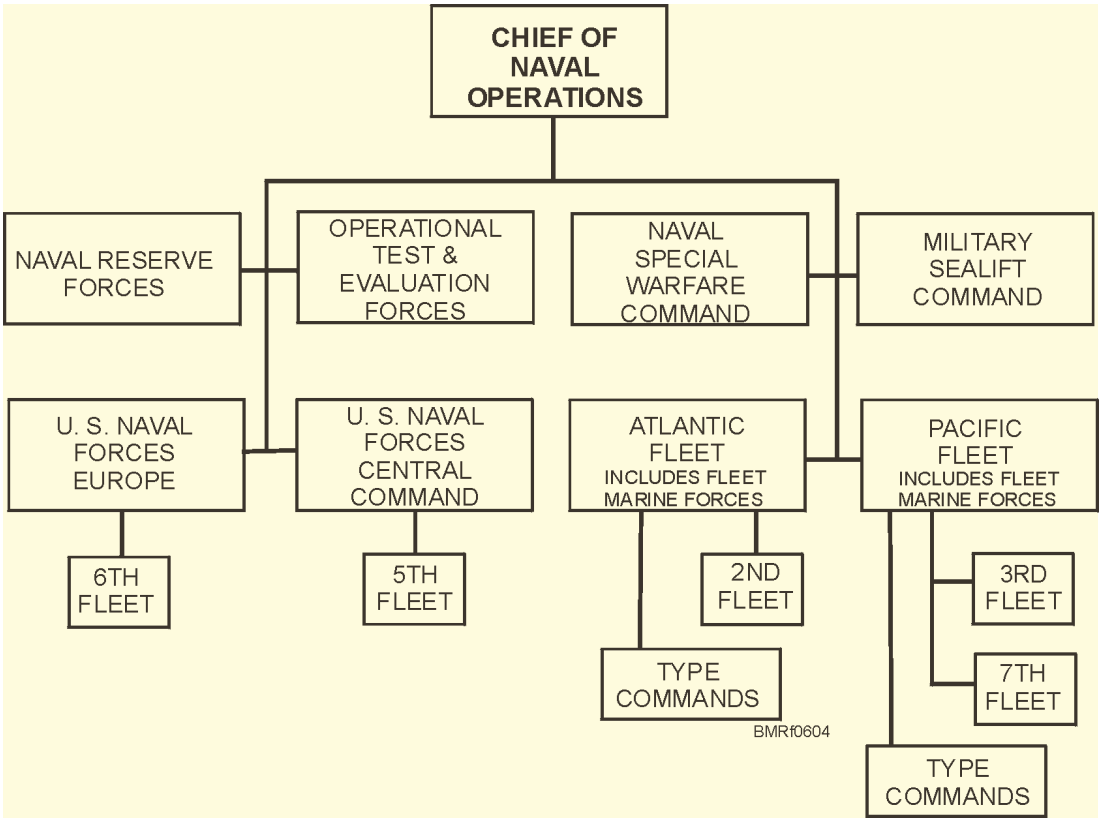



**Figure 6-4.—Operating forces.**

***Student Notes:***

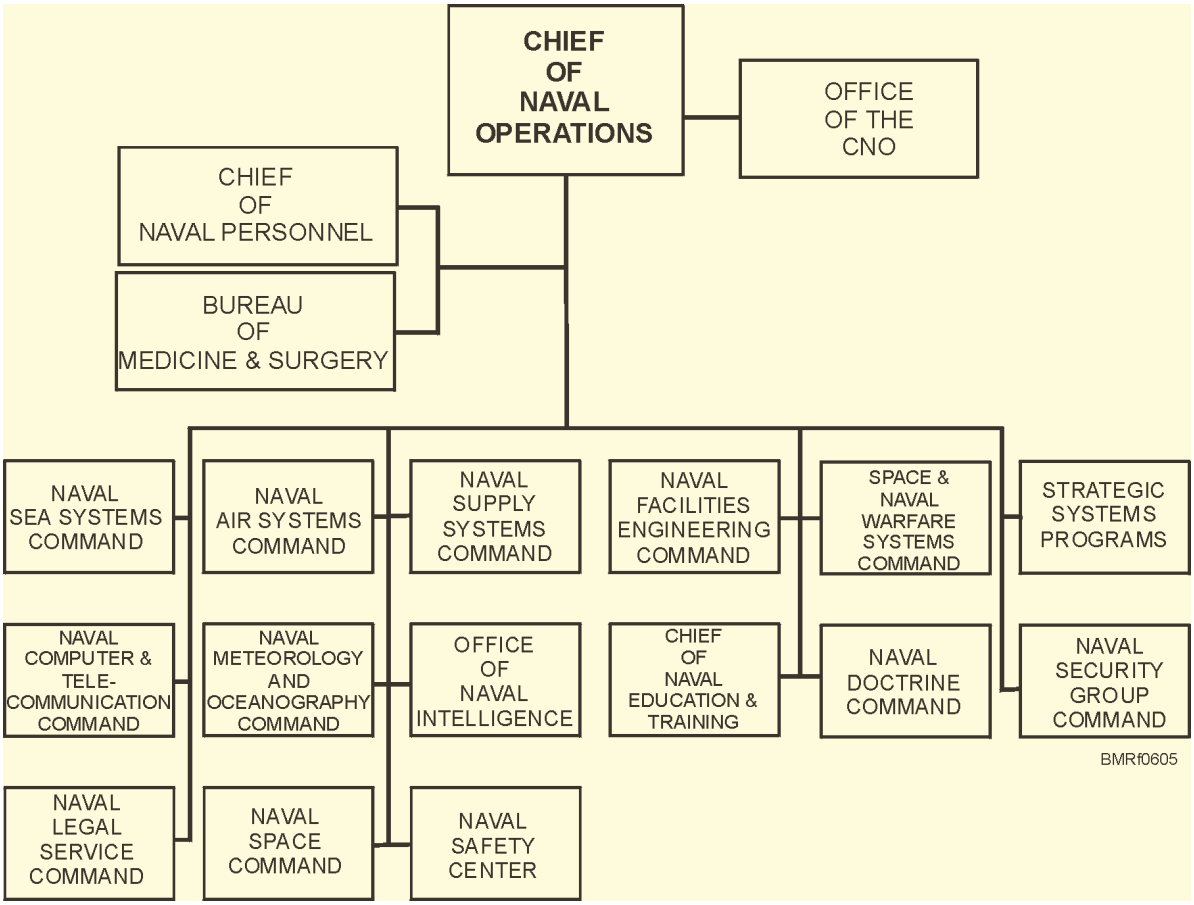



**Figure 6-5.—Shore establishment.**

fuel, and munitions; medical and dental facilities; and air bases. You can learn more about the commands shown here by going to the Internet web page mentioned above. Also, you'll learn more about the Shore Establishment when you complete the *Military Requirements for Petty Officer Third Class*, NAVEDTRA 12024.

### REVIEW 1 QUESTIONS

Q1. List the three military departments of the Department of Defense (DoD).

a.

b.

c.

Q2. Describe the four missions of the DoD.

a.

b.

c.

d.

Q3. What are the two main objectives of the Navy?

a.

b.

***Student Notes:***

Q4. List the three basic components of the Department of the Navy.

a.

b.

c.

Q5. The U.S. Coast Guard operates under different departments. List the department the Coast Guard operates under in the two conditions shown below.

a. Wartime—

b. Peacetime—

## UNIT ORGANIZATION

**Learning Objectives**: When you finish this chapter, you will be able to—

- Recognize the purpose and scope of the *Shipboard Organization and Regulations Manual*.
- Recall the application of the *Standard Organization and Regulations of the U.S. Navy* to unit organization to include ships'/commands' organization and regulations manual.

The purpose of a unit's organization is to help accomplish the mission of that unit. Each unit has its own mission in support of the overall mission of the Navy; however, each unit has the same basic organization. The *Standard Organizational and Regulations of the U.S. Navy*, OPNAVINST 3120.32, is used as a guide for unit organization.

### STANDARD ORGANIZATION AND REGULATIONS OF THE U.S. NAVY

*Standard Organization and Regulations of the U.S. Navy* describes the many aspects of the standard unit organization. Each unit in the Navy has a ship's/command's organization and regulations manual based on the *Standard Organization and Regulations of the U.S. Navy*. Aboard ship, this manual is usually referred to as the *Shipboard Organization and Regulations Manual*.

### SHIP'S/COMMAND'S ORGANIZATION AND REGULATIONS MANUAL

The ship's/command's organization and regulations manual governs the unit's administrative organization (including watches). It governs the coordination of evolutions and emergency procedures and the conduct of personnel in the unit. Its purpose is to provide a ready source of information about the duties, responsibilities, and authority of unit personnel. Ships/commands usually require all newly reporting personnel to read the manual and sign a statement to that effect.

Discussing the organization of every unit in the Navy would be impossible. Therefore, you will learn about a standard shipboard organization and a standard aircraft squadron organization in this chapter.

## REVIEW 2 QUESTIONS

Q1. Aboard ship, you can find the ship's organization and regulations in what publication?

Q2. List some aspects of a ship's organization that are covered by the *Standard Organization and Regulations Manual.*

a.

b.

c.

## SHIPBOARD ORGANIZATION

**Learning Objectives**: When you finish this chapter, you will be able to—

- Recall shipboard organization to include battle organization and administrative organization.

***Student Notes:***

- Identify the duties and responsibilities of the commanding officer, executive officer, department head, and division officer.

The officers and enlisted personnel make up a ship's wartime organization. They keep the ship in a state of readiness to fight a war. During peacetime operations, the ship's organization can be expanded if a wartime operation becomes necessary. The two elements of the ship's organization are the **battle organization** and the **administrative organization**.

## THE BATTLE ORGANIZATION

The battle organization contains a list of the numbers and specialties of the personnel a unit will need to fulfill the wartime missions. The unit's battle organization depends on its armament, equipment, and personnel. As a part of the battle organization, you should know your assignments as posted on the Watch, Quarter, and Station Bill.

## THE ADMINISTRATIVE ORGANIZATION

The administrative organization makes sure that the ship can fight or carry out its mission. Training, maintenance, and routine operations are covered by the administrative organization. The commanding officer (CO) is the head of the organization. He/she is assisted by the executive officer (XO) and other officers.

Look at figure 6-6. Each ship is organized into at least five departments—navigation, engineering, operations, supply, and a fifth department. For most ships, the fifth department is the weapons/deck department. Some ships have a separate deck department in addition to a weapons department, and some have a deck department instead of a weapons/deck department. Specially designated ships have a combat systems department instead of a weapons or weapons/deck department. Additional departments may be assigned according to ship type. Some of these departments are air, medical, dental, and repair.

Each department is under a department head. Departments are usually divided into divisions under a division officer. Each division is subdivided into sections, usually under senior petty officers. The following paragraphs describe the responsibilities of the five standard departments.

### Navigation Department

The navigation department is responsible for the safe navigation and piloting of the ship. It is responsible for the operation, care, and maintenance of navigation equipment, charts, publications, and records.

### Operations Department

The operations department has several divisions to carry out tasks such as collecting and evaluating

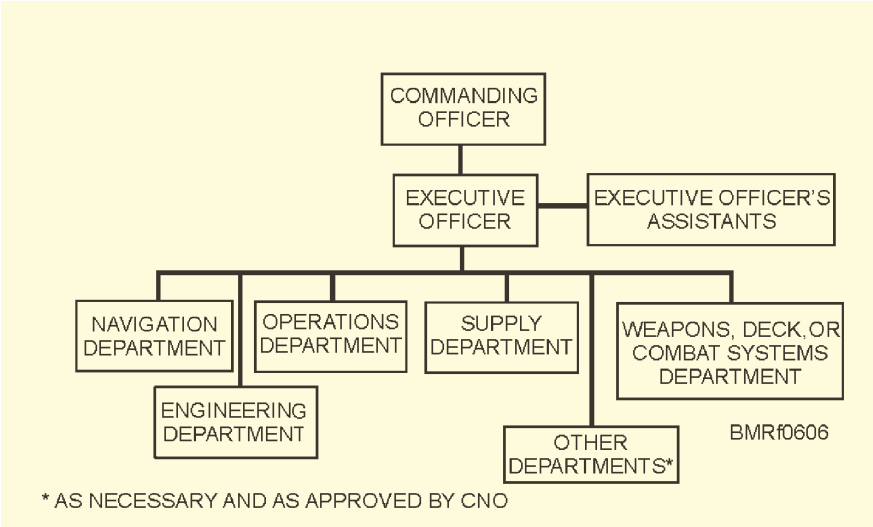



**Figure 6-6.—Typical ship organizational chart.**

***Student Notes:***

combat and operational information and conducting electronic warfare. Other tasks involve gathering and analyzing intelligence information, repairing electronic equipment, controlling aircraft, and forecasting weather. The operations department is usually in charge of all the radar, sonar, and communications equipment on the ship. The combat information center (CIC) is part of the operations department.

**Supply Department**

The supply department has many responsibilities. Some of these are—

- Operating the general mess, including preparing and serving food.
- Operating the ship's store, which provides personal articles for the ship's crew.
- Managing the clothing and small stores issue room, where crew members may buy uniform items.
- Maintaining the pay records of the crew (done by the disbursing office).
- Ordering and receiving general stores, supplies, spare parts, and equipment for the ship. In fact, just about everything that comes aboard the ship, other than people, is ordered by the supply department.

**Engineering Department**

The engineering department, under the engineer officer, is responsible for the operation, care, and maintenance of all propulsion and auxiliary machinery. It is responsible for the control of damage resulting from fire, explosion, collision, and so forth. The engineering department provides power, light, ventilation, heat, refrigeration, compressed air, and freshwater throughout the ship. The engineer officer may have several assistants, such as the main propulsion assistant, the damage control assistant, and the electrical officer.

**Weapons/Deck/Combat Systems Department**

The fifth department of ship's administrative organization varies. Some of the departments are listed below.

1. Surface combatants (ships) using ordnance (gun batteries, torpedoes, missiles, and so forth) have a **weapons department**, headed by a weapons officer.
2. Surface combatants (ships) with complex combat systems and some classes of submarines have **combat systems departments**, headed by combat systems officers.
3. Ships with offensive capabilities unrelated to ordnance have a **deck department**, headed by the first lieutenant.
4. Aircraft carriers and some other ships have a **weapons** or **combat systems department** in addition to a deck department.

In ships that have a weapons department or combat systems department, the **weapons** or **combat systems officer** is responsible for—

- The operation, care, and maintenance of the ship's armament and the weapons fire-control equipment.
- The care, handling, stowage, accountability, and issue of ammunition and pyrotechnics.
- The maintenance of magazines and the external security of the ship.
- If the ship doesn't have an air department the weapons department is responsible for

  —The launch and recovery of assigned aircraft
- If the ship doesn't have a deck department, the weapons department is responsible for

  —The preservation and cleanliness of the external areas of the ship not assigned to other departments.

  —The operation of the paint, sail, and boatswains' lockers and inspection and maintenance of survival equipment.

***Student Notes:***

—All decking seamanship operations and the care and use of deck equipment.

- If the ship has a deck department but no weapons or combat systems department

  —The first lieutenant (head of the deck department) is responsible for deck functions.

- If the ship has a combat systems department but no deck department

  —The operations department is responsible for deck functions.

## COMMANDING OFFICER

The commanding officer (CO) has many and varied duties. The CO has so many duties that one entire chapter in *Navy Regulations*, consisting of nearly 70 articles, applies to commanding officers. In general, the CO is responsible for the safety, well-being, and efficiency of the command.

The commanding officer's responsibilities include the safe navigation of the ship and the condition and appearance of the material and personnel. The CO must also ensure the proper stationing of trained lookouts and the preparation of the ship for battle. The CO may delegate authority in these matters, but such delegation does not relieve the CO of responsibility. The officer of the deck (OOD), for example, has authority to run the ship; but if a collision occurs, the CO is still responsible.

The commanding officer must exert every effort to maintain the command in a state of maximum readiness for war. The commanding officer issues the necessary directions to the executive officer (XO). With the assistance of the various department heads, the XO then prepares and conducts exercises and drills needed to prepare the ship for battle.

During combat, the commanding officer directs the members of the crew in fighting to the best of their ability until action is complete. The CO's battle station is where the CO can best direct the fighting. If the ship should sink, both custom and regulations require the commanding officer to assure the completion of abandon ship procedures. All personnel should be off the ship before the commanding officer leaves.

The CO's power is authoritative and complete. With ultimate responsibility for the ship and everything pertaining to it, the commanding officer must have authority equal to the responsibility. To ensure efficiency, responsibility, and discipline, the commanding officer must have the power to enforce prompt obedience to orders. According to the *Uniform Code of Military Justice (UCMJ*), the commanding officer has the power to impose limited punishment. This power is a part of a CO's command responsibility and may not be delegated.

Since the ship has only one CO but many crew members, a senior enlisted member gives advice on enlisted policies and informs the CO about the health, welfare, and general well-being of the crew. The senior enlisted member acts as a liaison between the officer and enlisted community. The senior enlisted member assigned to assist the CO is a master chief, a senior chief, or a chief petty officer (depending on the senior rate within the command). This person receives assignment as the command master chief (CM/C), command senior chief (CS/C), or command chief (CCh). This senior enlisted member transmits ideas and recommendations directly to the commanding officer.

If the CO is absent, disabled, relieved from duty, or detached without relief, another officer must assume the CO's responsibilities. This person is the next senior line officer that is eligible for command at sea, and who is attached to and aboard the ship. In most cases, this person is the executive officer.

## EXECUTIVE OFFICER

The executive officer (XO) is the aide or "executive" to the commanding officer. The XO is usually the next ranking line officer aboard ship. As such, the XO is the direct representative of the commanding officer in maintaining the general efficiency of the ship. Some of the XO's responsibilities include the following:

- The command's assigned personnel. With the help of department heads, the XO arranges and coordinates all ship's work, drills, exercises, and policing and inspecting the ship.

***Student Notes:***

- Investigate matters affecting the discipline and conduct of the crew and makes recommendations concerning these matters to the commanding officer.
- Approve or disapprove liberty lists and leave requests.
- Inspect the ship and receive readiness reports from the various department heads when the ship is cleared for action; then report to the CO when the ship is ready for action.

If the captain is disabled during battle, the XO normally becomes the acting commanding officer. For this reason, the location of the XO's battle station (determined by the captain) is some distance from the captain's. This prevents disablement of both officers at the same time.

After a battle, the executive officer makes a detailed report to the commanding officer.

If the XO cannot fulfill the duties of the commanding officer, normally, the next senior line officer assigned to the ship assumes the duties of the commanding officer.

Depending on the size of the ship, the executive officer may have one or more assistants. Some of these assistants and their responsibilities are as follows:

**Personnel officer**. The personnel officer assigns personnel to the various departments, berthing arrangements, and to the task of maintaining enlisted service records.

**Training officer**. The training officer secures school quotas, schedules orientation courses for newly reporting personnel, and helps prepare long- and short-range training schedules.

**Educational services officer (ESO)**. The educational services officer (ESO) receipts for, maintains, and distributes educational courses and training aids.

**Drug and alcohol program advisor (DAPA)**. The drug and alcohol program advisor (DAPA) advises the CO and XO on all matters concerning the Navy's Drug and Alcohol Abuse Program. The DAPA provides onboard education, prevention, screening, command counseling, aftercare, probationary supervision, motivational training, and referral services.

**Command master chief (CM/C)**. While serving as one of the XO's assistants, the CM/C has direct access to the CO and is the voice of all enlisted personnel.

In addition to these assistants, the executive officer may also have a legal officer, combat cargo officer, safety officer, and others as required. The master-at-arms force also works directly under the executive officer.

## DEPARTMENT HEAD

As the representative of the commanding officer, the department head is responsible for and reports to the CO about all matters that affect the department. That includes administrative matters, the operational readiness of the department, and the general condition of equipment.

## DIVISION OFFICER

The division is the basic unit of the shipboard organization. The CO assigns division officers to command the divisions of the ship's organization. Division officers are responsible to and, in general, act as assistants to department heads.

The number of divisions in a department varies among ships, with each division having only a few assigned personnel to as many as 200 personnel. The division officer is a major link in your chain of command, particularly in a small ship. At the working level, the division officer carries out command policies and personally sees that division tasks are completed in a timely manner. Some of the division officer's duties include—

- Making frequent inspections of division personnel, spaces, equipment, and supplies
- Maintaining copies of all division orders and bills and displaying them in a conspicuous place
- Training division personnel and preparing them for battle

***Student Notes:***

## REVIEW 3 QUESTIONS

Q1. List the two elements of a ship's organization.

a.

b.

Q2. List the information contained in elements of a ship's organization.

a.

b.

Q3. Briefly describe the responsibility of the five departments listed below.

a. Navigation—

b. Operations—

c. Engineering—

d. Supply—

e. Weapons/Deck/Combat Systems—

Q4. What regulation has an entire chapter covering commanding officer duties?

Q5. Aboard ship, what officer is responsible for the safe navigation of the ship, the condition of the ship, and the appearance of material and personnel?

Q6. A CO must have authority equal to responsibility, including the power to impose limited punishment. Can the CO delegate this particular power?

Q7. What enlisted person transmits ideas and recommendations directly to the CO?

Q8. Describe four duties of the XO.

a.

b.

c.

d.

Q9. List the XO's assistants.

a.

b.

c.

d.

e.

Q10. What are the responsibilities of the department head?

***Student Notes:***

Q11. What is the basic unit of a shipboard organization?

Q12. List three division officer duties.

a.

b.

c.

## AIRCRAFT SQUADRON ORGANIZATION

**Learning Objective**: When you finish this chapter, you will be able to—

- Recall aircraft squadron organization to include squadron departments and branch officer.

The organization of an aircraft squadron differs in some ways from that of a ship. *Standard Organization and Regulations of the U.S. Navy* specifies the basic organization required of an aircraft squadron. Figure 6-7 shows a standard organizational chart of an aircraft squadron.

Look at figure 6-7 again. As you can see, an aircraft squadron has different departments than a ship. This is one of the differences between the organization of an aircraft squadron and a ship. The departments have different names and responsibilities. However, the responsibilities of the commanding officer, executive officer, department heads, and division officers are the same in the organization of an aircraft squadron and a ship.

### AIRCRAFT SQUADRON DEPARTMENTS

All aircraft squadrons have an administrative department and a safety department. Most squadrons also have an operations department and a maintenance department. Some squadrons have one or more departments in addition to the four already mentioned. Based on its mission, the squadron may have a training, a photographic, or an intelligence department.

#### Administrative Department

The administrative (ADMIN) department is responsible for all the administrative duties within the squadron. This department takes care of official correspondence, personnel records, and directives. Most of the jobs done by the XO's assistants in a shipboard organization are done by ADMIN in an aircraft squadron. The first lieutenant and command career counselor work as members of the ADMIN

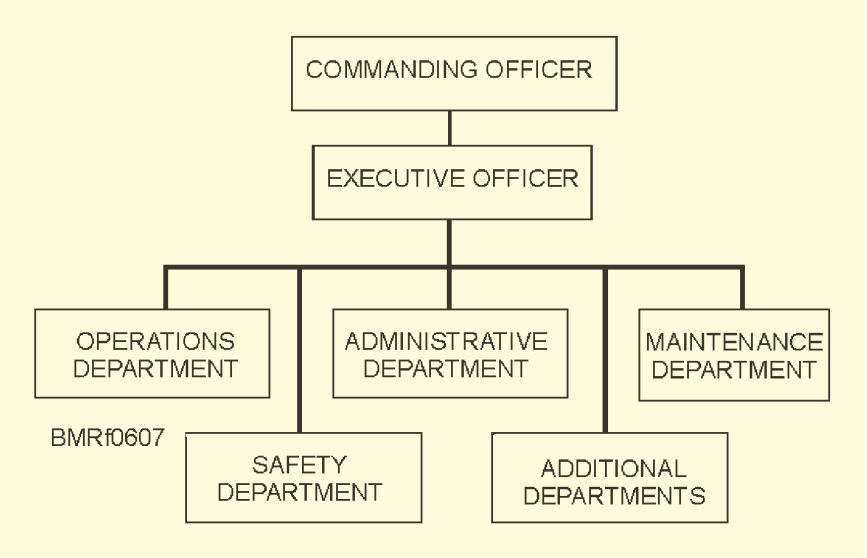



**Figure 6-7.—Type aircraft squadron organization chart.**

***Student Notes:***

department. Other parts of the administrative department include the following:

- Personnel office
- Educational services office
- Public affairs office
- Legal office

**Safety Department**

The safety department is responsible for all squadron safety program matters. This department is usually divided into the following:

- Ground safety.
- Aviation safety.
- Naval Air Training and Operating Procedures Standardization (NATOPS) divisions. (The NATOPS division makes sure standardized procedures are followed in the operation of the squadron's aircraft.)

**Operations Department**

The operations department is responsible for the operational readiness and tactical efficiency of the squadron. The operations department usually consists of the logs and records, schedules, training, communications, and navigation divisions.

**Maintenance Department**

The maintenance department is responsible for the overall maintenance of the squadron's aircraft. The maintenance department is usually divided into the following divisions:

- Maintenance/material control
- Quality assurance
- Maintenance administration
- Aircraft, avionics/armament, and airframes divisions

**BRANCH OFFICER**

A division on a ship is divided into watches or sections or both. In an aircraft squadron, the divisions are divided into branches. Each branch is headed by a branch officer. In aircraft squadrons, the branch officer is the officer with whom you will have the most direct contact.

The branch officer is directly responsible to the division officer. The branch officer has the same responsibilities for the branch that the division officer has for the division.

- Making frequent inspections of branch personnel, spaces, equipment, and supplies.
- Making sure branch tasks are completed in a timely manner.

**REVIEW 4 QUESTIONS**

Q1. List the four departments usually found in an aircraft squadron.

a.

b.

c.

d.

Q2. The safety department is responsible for the squadron safety program. What are the main divisions in this department?

a.

b.

c.

Q3. What is the responsibility of the operations department?

***Student Notes:***

Q4. List the four divisions of the maintenance department.

a.

b.

c.

d.

Q5. The branch officer is responsible to what officer?

## CHAIN OF COMMAND

**Learning Objectives**: When you finish this chapter, you will be able to—

- Identify the purpose of the chain of command to include responsibilities, direction, communications, and solving work-related problems.
- Recognize a typical chain of command.

The chain of command is the relationship of juniors and seniors within an organization. The organizational charts you have seen in this chapter represent chains of command.

An effective chain of command is essential for the Navy to carry out its assigned mission. Good leadership is also essential for the Navy's mission. Good leadership supports an effective chain of command and vice versa; neither works well without the other.

The chain of command serves several purposes in the accomplishment of the Navy's mission. It defines responsibilities and identifies accountability. Properly used, it provides direction and smooth communications and ensures efficiency.

### RESPONSIBILITY

Responsibility requires that an individual be accountable for the performance of assigned tasks within an organization. By defining responsibilities, the chain of command lets its personnel know what their responsibilities are and what they are expected to do.

The Navy expects its personnel to set good examples for their shipmates by doing their jobs quickly, correctly, and neatly. The Navy expects its members to instill a sense of pride in others to improve the efficiency of the command.

### ACCOUNTABILITY

Every person in a chain of command is accountable to someone for professional performance and personal actions. Accountability is the ability of personnel to report, explain, or justify every action taken. They do this through two types of accountability—job accountability and military accountability.

1. *Job accountability* means you must answer to seniors in the chain of command for the way in which you carry out an assigned task.
2. *Military accountability* means you must answer to senior military personnel for your personal behavior and military appearance.

### DIRECTION

The chain of command provides direction in the assignment of duties. All members of the chain of command know their specific duties. Seniors assign these duties, and juniors should carry them out to the best of their ability.

### COMMUNICATION

The chain of command provides for smooth, rapid, and effective communication. Each person in the chain of command needs to clearly understand his/her status within that chain. Seniors should pass information down the chain of command about matters that may affect juniors. Juniors should pass information up the chain of command about problems that exist. In this way, communication flows in both directions.

***Student Notes:***

## WORK-RELATED PROBLEMS

Work-related problems are situations that affect a person's job performance. A work-related problem might be a situation in which a person feels mistreated by a senior. It could also be a situation in which a person needs leave or liberty because of an illness in the family.

The chain of command is responsible to each Navy member for solving work-related problems. When a person's immediate senior is unable to resolve a problem, the next senior in the chain of command tries to solve the problem. If the senior at that level of command is unable to resolve the problem, it then goes to the next level in the chain of command. The problem continues to be referred to each level in the chain of command until it is resolved. **You must always use the chain of command when seeking solutions to work-related problems.**

## TYPICAL CHAIN OF COMMAND

Figure 6-8 shows a typical shipboard, straight-line chain of command from the nonrated level to the commanding officer. An aircraft squadron's chain of command includes a branch officer.

For watch-standing assignments, the chain of command includes a section leader (not shown). The section leader may be from your division but often is a petty officer from another division. The section leader makes watch assignments for all personnel assigned to the section. Inform the section leader of situations, such as leave or special liberty, that affect your availability for watch assignments.

In most cases, the chain of command shown in figure 6-8 is complete. However, the chain of command does not stop with the commanding officer. **Remember, all people in the military are responsible to their seniors**!

The chain of command extends from nonrated personnel all the way to the President of the United States. Figure 6-8 shows the shipboard chain of command from the nonrated person to the commanding officer. Figure 6-9 shows a typical chain of command from the President to the commanding officer of a ship. To learn your chain of command, ask someone in the administrative (Admin) office to show you the command's organizational chart.

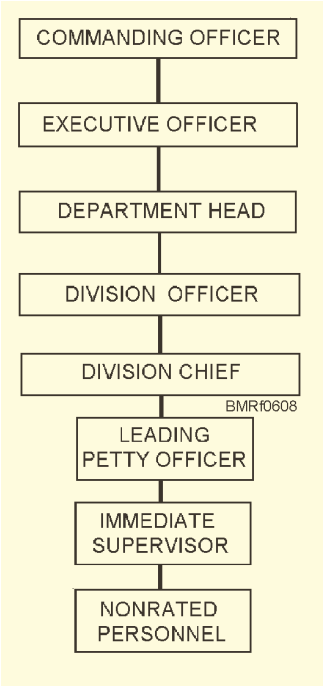



**Figure 6-8.—Typical shipboard chain of command.**

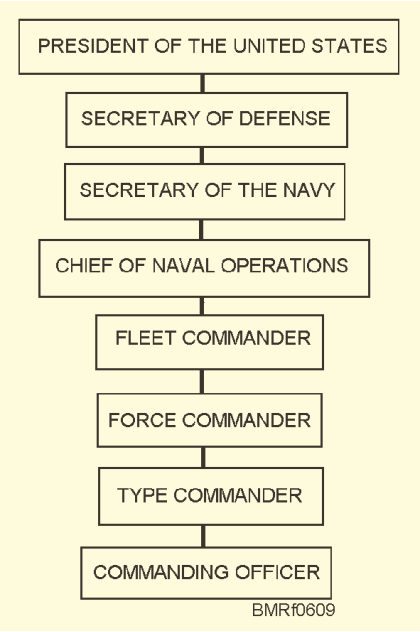



**Figure 6-9.—Typical chain of command from the CO of a ship to the President.**

***Student Notes:***

## REVIEW 5 QUESTIONS

Q1. The chain of command defines the relationship of juniors and seniors in an organization. List the five areas that affect the chain of command.

a.

b.

c.

d.

e.

Q2. In your organization, you can find out about the chain of command by asking someone in what office?

## SUMMARY

Where do I go? What do I do? Who is in charge? With the Navy's organizational structure, all personnel, from the CNO to the newest crew member, know what their job is, where they work, and who their supervisor is. Think about being at sea; its midnight and the general alarm sounds. Are the gun mounts manned by personnel trained to handle them or just by the people that showed up first? What about the repair lockers, the engine rooms, or the bridge?

Without an organization that ensures properly trained personnel manning each billet, our ships could not be in a continual high state of readiness.

What about a problem in the work space? Who do we tell about it? Do we tell the department head or the captain?

Our chain of command works in both directions, up and down. The upper level keeps us informed of the types of operations being conducted and what types of hazards we face. The people in the lower levels must keep the upper levels informed of all difficulties experienced in the performance of assigned duties. Every level in the chain of command is an integral part of a team. Members at each level must do their part to make sure their command functions effectively.

Flight deck operations are a good example of the effects of proper organization. Ships could never carry out these operations without superior organization. Every person knowing where to report, what job to do, and who to tell when things go wrong—that's organization.

***Student Notes:***

## REVIEW 1 ANSWERS

A1. The three military departments of the Department of Defense (DoD) are the—

a. **Navy,**

b. **Army,** and

c. **Air Force**.

A2. The four missions of the DoD are—

a. **To support and defend the Constitution of the United States against all enemies, foreign and domestic**

b. **To ensure the security of the United States, its possessions, and areas vital to its interests**

c. **To uphold and advance the national policies and interests of the United States**

d. **To safeguard the internal security of the United States**

A3. The two main objectives of the Navy are to—

a. **Organize, train, equip, prepare, and maintain the readiness of the Navy and Marine corps forces to perform military missions**

b. **To support the Navy and Marine Corps forces as well as the forces of other military departments**

A4. The three basic components of the Department of the Navy are—

a. **Navy Department**

b. **Operating forces**

c. **Shore Establishment**

A5. The U.S. Coast Guard operates under the following two departments:

a. Wartime—**Department of the Navy**

b. Peacetime—**Department of Transportation**

## REVIEW 2 ANSWERS

A1. Aboard ship, the ship's organization and regulations can be found in a publication known as the ***Shipboard Organization and Regulations Manual***, which is based on the ***Standard Organization and Regulations of the U.S. Navy***.

A2. Some aspects of a ship's organization covered by the *Shipboard Organization and Regulations Manual* include—

a. **Unit's admin organization, including watches**

b. **Coordination of evolutions and emergency procedures**

c. **Conduct of personnel**

## REVIEW 3 ANSWERS

A1. The two elements of a ship's organization are the—

a. **Battle organization**

b. **Administration organization**

A2. The information contained in the—

a. Battle organization includes the **numbers and specialties the unit needs to fulfill its wartime missions**

b. Administration organization **makes sure the ship can fight or carry out its mission; training, maintenance, and routine operations are covered**

A3. The responsibilities of the departments are—

a. Navigation—**Safe navigation and piloting of the ship**

b. Operations—**In charge of all radar, sonar, and communications equipment on the ship. Operations collects and evaluates combat and operational information and conducts electronic warfare**

c. Engineering—**Operation, care, and maintenance of all propulsion and auxiliary machinery**

d. Supply—**Operates the general mess and ship's store; manages clothing and small stores issue room; maintains pay records; and orders and receives general stores, supplies, spare parts, and ship's equipment**

e. Weapons/Deck/Combat Systems—**Responsibilities depend on type of ship**.

1) Weapons department or combat systems department—**Operation, care, and maintenance of ships armament and weapons fire-control equipment**

2) Deck department—**Responsible for deck functions**

A4. The ***Navy Regs*** has an entire chapter covering commanding officer duties.

A5. Aboard ship, the **commanding officer** is responsible for the safe navigation of the ship, the condition of the ship, and the appearance of material and personnel.

A6. A CO has authority equal to responsibility, including the power to impose limited punishment. **This power can't be delegated**.

A7. The **senior enlisted person** transmits ideas and recommendations directly to the CO.

A8. Duties of the XO include—

a. **Arranging and coordinating ship/s work, drills, exercises, and policing and inspecting the ship**

b. **Investigating matters affecting crew discipline and conduct. Making recommendations to CO on these matters**

c. **Approving/disapproving liberty lists and leave requests**

d. **Inspecting the ship and receiving readiness reports from department heads; reporting to the CO when the ship is ready for action**

A9. Assistants to the XO include—

a. **Personnel officer**

b. **Training officer**

c. **Educational services officer (ESO)**

d. **Drug and alcohol program advisor (DAPA)**

e. **Command master chief (CM/C)**

A10. The department head is responsible for and reports to the CO on **matters that affect his/her department including administrative matters, operational readiness, and general condition of the equipment.**

A11. The **division** is the basic unit of a shipboard organization.

A12. Division officer duties include—

a. **Inspecting division personnel, spaces, equipment, and supplies**

b. **Maintaining copies of division orders and bills and displaying them in conspicuous places**

c. **Training division personnel and preparing them for battle**

## REVIEW 4 ANSWERS

A1. The four departments usually found in aircraft squadrons include—

a. **Administration**

b. **Safety**

c. **Operations**

d. **Maintenance**

A2. The safety department is usually divided into

a. **Ground safety**

b. **Aviation safety**

c. **Naval Air Training and Operating Procedures Standardization (NATOPS)**

A3. The operations department is responsible for the **operational readiness and tactical efficiency of the squadron**.

A4. The four divisions of an aircraft maintenance department are the—

a. **Maintenance/material control**

b. **Quality assurance**

c. **Maintenance administration**

d. **Aircraft, avionics/armament, and airframes divisions**

A5. The branch officer is responsible to the **division officer**.

## REVIEW 5 ANSWERS

A1. The five areas that affect the chain of command are—

a. **Responsibility**

b. **Accountability**

c. **Direction**

d. **Communication**

e. **Work-related problems**

A2. In your organization, you can find out about the chain of command by **asking someone in the administration office.**

# CHAPTER 7

# BASIC SEAMANSHIP

*To ensure safety at sea, the best that science can devise and that naval organization can provide must be regarded only as an aid, and never as a substitute for good seamanship, self-reliance, and sense of ultimate responsibility which are the first requisites in a seaman…*

—C.W. Nimitz
Letter to U.S. Pacific Fleet
13 February 1945

At this stage in your Navy career, you're learning thousands of things entirely new to you. You're probably finding it hard to assign relative importance to them. The importance of these skills and knowledge will become more obvious the longer you're in the Navy. This is true because the most important things will be emphasized in your day-to-day living. If you're not assigned to the deck force, you may think that seamanship is not important. Well, you're wrong!

Seamanship ties every member of the Navy together. The uniform worn by Navy members, from seaman to admiral, implies that the wearer has a certain degree of proficiency in the art of seamanship. The fact that you may later become an Electronics Technician doesn't change the fact that you're first a seaman and then a technician. Be as proud of your ability as a seaman as you are of your ability to perform your other duties.

Even though you don't work on deck everyday, there will be times, particularly on small ships, when you will be required to assist the deck force. You may have to carry stores, assist in replenishment-at-sea operations, assist in mooring to or untying a ship from the pier, and so forth. When working as part of the deck force, you'll be expected to have a general idea of what's going on, how and why a task is being accomplished, and be able to carry out orders intelligently. Therefore, take every opportunity to observe and learn as much as you can about seamanship. This chapter provides only basic seamanship information.

In this chapter, seamanship is divided into the following basic sections—deck, boat, and marlinespike seamanship.

- Deck seamanship concerns the general work that goes on about the ship's deck and the equipment used. Anchoring, mooring, rigging and handling heavy weights and cargo, underway replenishment, towing, and a host of other skills are considered deck seamanship.
- Boat seamanship, as the name implies, concerns the handling of boats.
- Marlinespike seamanship concerns the use and care of line and consists of forming knots, making splices, and fashioning useful and decorative articles from small stuff and twine.

## DECK SEAMANSHIP

**Learning Objective**: When you finish this chapter, you will be able to—

- Identify deck equipment and recognize their purpose.

Deck equipment consists of all equipment used in the application of deck seamanship, which is work normally performed by the deck force. You need to know shipboard equipment and terminology because you may be called on to assist the deck force in various seamanship evolutions. To help you, some of the more familiar items of deck equipment are discussed in this section.

### GROUND TACKLE

Ground tackle is the equipment used in anchoring and mooring with anchors. It includes anchors, anchor cables and chains, and associated equipment, such as chain stoppers, bending shackles, outboard swivel shots, and detachable links. Figure 7-1 shows a typical ground tackle arrangement on a forecastle.

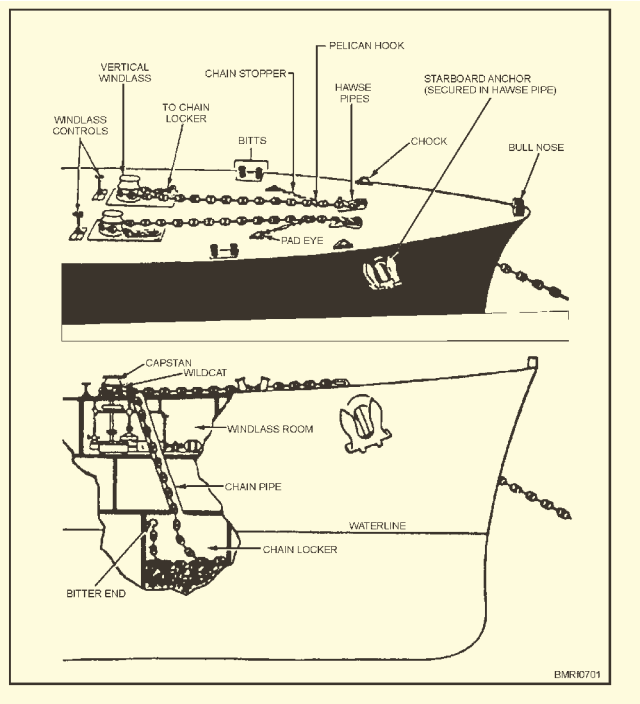



**Figure 7-1.—Typical ground tackle and chain stowage.**

## ANCHORS

Anchors can be defined by their stowage locations aboard ship or by their type of construction. Bower anchors are carried on the bow and are secured (housed) in the hawsepipes. Stern anchors are carried on the stern. On landing ships and craft, stern anchors are secured to the stern and are used to help pull away from beaches.

The most common types of anchors used aboard ship are the stockless and the lightweight (or stock-in-crown) anchors. The two anchors shown in figure 7-2 are of Navy design. The stockless types are used chiefly as bow anchors (bowers) on most Navy ships. Originally, the lightweight types were used only on small boats and as stern anchors of landing ships and craft. However, recently they are carried as bowers for several types of vessels.

## ANCHOR CHAIN

Modern Navy anchor chain consists of studded links of high strength steel. (Studs are crosspieces of metal forged or welded in the center of the links to prevent the chain from kinking.) Chains are made up of 15-fathom (90-foot) sections called *standard shots*. The number of shots per chain depends on the size of the ship. Shots are secured together by detachable links that can be readily disassembled whenever it is desirable to break the chain.

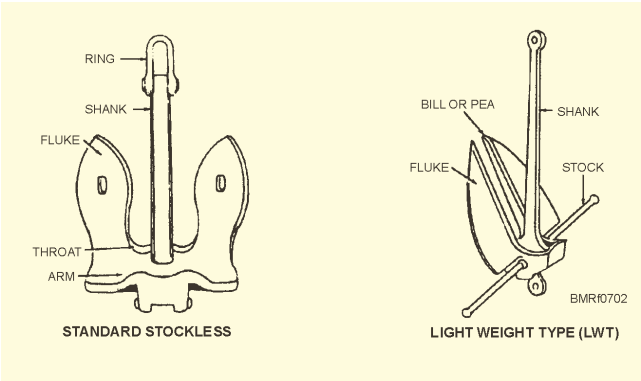



**Figure 7-2.—Anchors.**

## STOWING CHAIN

As the chain comes aboard, it passes along the deck on metal flash plates, over the wildcat, and down into the chain locker. Each chain goes into a bin called a chain locker, as shown in figure 7-1. Its *bitter end* is secured to a ring bolt on the bulkhead of the chain locker.

## ANCHOR WINDLASSES

The Navy uses two types of anchor windlasses for lifting the ship's anchor—the vertical shaft type and the horizontal shaft type (fig. 7-3). The vertical shaft type is used on most combatant ships. The horizontal shaft type is used on amphibious and auxiliary ships. Both types are equipped with wildcats, which engage the links of the anchor chain. The wildcat may be disengaged when it is desired to use the capstan (vertical type) or the gypsy heads (horizontal type) for handling lines or wire.

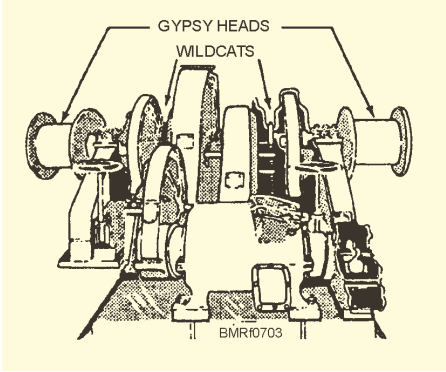



**Figure 7-3.—Horizontal shaft anchor windlass.**

***Student Notes:***

## ACCOMMODATION LADDER

Frequently, the accommodation ladder is mistakenly called the gangway. However, gangway actually means *the opening in a bulwark or life rail that gives access to a brow or an accommodation ladder.* An accommodation ladder (fig. 7-4) consists essentially of an upper and a lower platform connected by a ladder. The lower end is supported, raised, and lowered by a block and tackle (called *falls*) and is usually suspended from a davit.

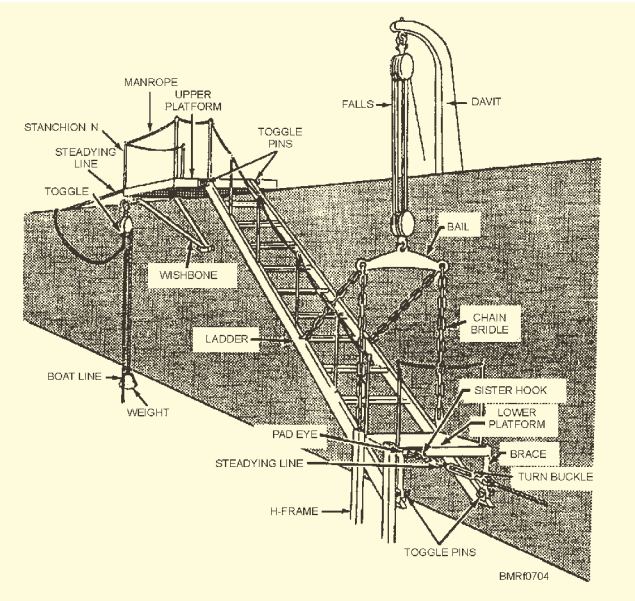



**Figure 7-4.—A rigged accommodation ladder.**

*Brow* is the Navy term for gangplank. Brows are ramps used between ships and between a ship and pier. They may be simply two or three wooden planks fastened together, or they may be elaborate affairs with handrails and wheels at one or both ends to prevent a ship's motion from unduly affecting the positioning of the brow.

## MOORING LINES

A ship is moored when it's made fast to a buoy, when it's between two buoys, when it's between two anchors, or when it's secured by lines alongside a pier or another ship.

The lines used in mooring a ship alongside a pier are shown in figure 7-5. Well in advance of mooring, the lines should be faked down, fore and aft, each near the chock through which it passes in preparation for passing the line. You will learn about the procedure for faking a line and a description of deck fittings later in this chapter.

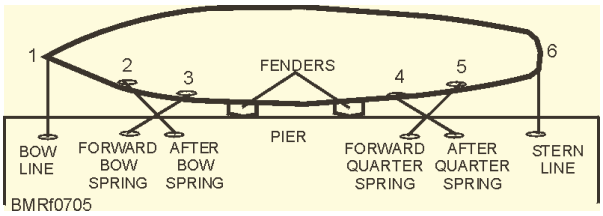



**Figure 7-5.—Ship's mooring lines.**

*Rat guards* are hinged conical metal shields secured around mooring lines. They are used to prevent rats from coming aboard ship.

The bowline and forward spring lines prevent the ship from drifting astern. The stern line and after spring lines prevent the ship from drifting forward. Look at figure 7-5. Here, lines 1, 3, and 5 are called *forward lines*; lines 2, 4, and 6 are called *after lines*. When secured, these lines tend to breast the ship in. The forward and after spring lines are used to prevent the ship from drifting forward or aft.

**NOTE**

The various types of line and wire rope are discussed in the "Marlinespike Seamanship" section of this chapter.

**Teamwork is essential in carrying out the mooring operation.** Lines must not be kinked or fouled. Keep control of the lines and avoid dipping them into the water. **Remember, observe all safety precautions!**

If the ship is to remain moored for a long period, lines are doubled up and bound together with marline hitches, and rat guards are placed on each line. Look at figure 7-6. To provide protection to the side of the ship while it is alongside a pier, *camels* (large wooden logs or rectangular structures) (views B and C) are often placed between the pier and the ship. *Fenders* (large cylindrical objects of rubber or fibrous material) (views A and D) are swung over the side of the ship to give bumper support against damage whenever a ship lies alongside another ship or a pier.

***Student Notes:***

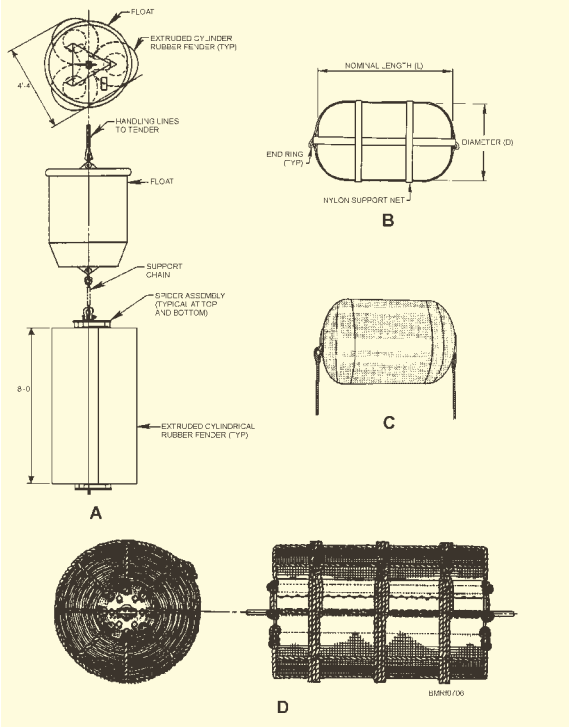



**Figure 7-6.—Protection for the side of a ship.**

## DECK FITTINGS

Deck fittings are used aboard ships and boats mainly for the securing of mooring lines. All fittings shown in figure 7-7 are found aboard ship except the bollard, which is a pier fitting. The pad eye shown in the figure is not used for mooring but for towing other vessels. Different variations of the pad eye are used for securing heavy objects and equipment.

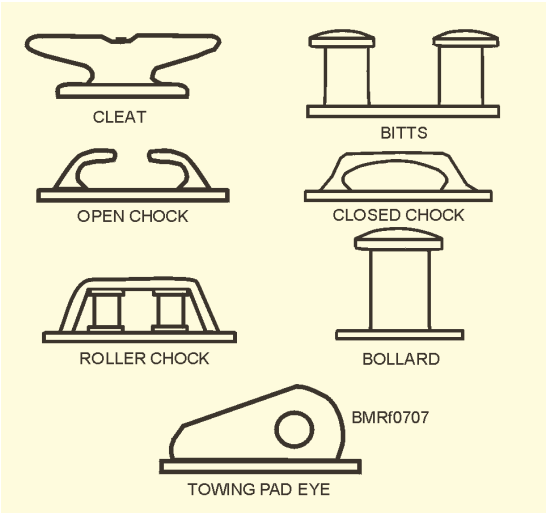



**Figure 7-7.—Deck fittings.**

## DAVITS

Boats carried aboard ships usually are handled by powerful cranes and booms. These cranes and booms hook onto slings attached to hoisting points built into the strong parts of the boat's structure. Boats stowed at davits are lowered and hoisted by the davit machinery. Basically, a set of davits is nothing more than a special crane that is designed specifically for handling boats in a safe and timely manner.

## BOAT BOOMS

Ships that are at anchor or moored to a buoy rig out their boat booms for the purpose of mooring their boats well clear of the side. This method of securing is known as *hauling out to the boom*. Forward booms are called *lower booms*; after booms are called *quarter booms*.

The boat boom shown in figure 7-8 is a spar that is secured to a gooseneck by a pin on the side of the ship. This arrangement allows free motion fore and aft. The outboard end of the boom hangs from a wire vang and tackle combination called the *topping lift*. Fore-and-aft motion is controlled by lines called *forward* and *after guys*.

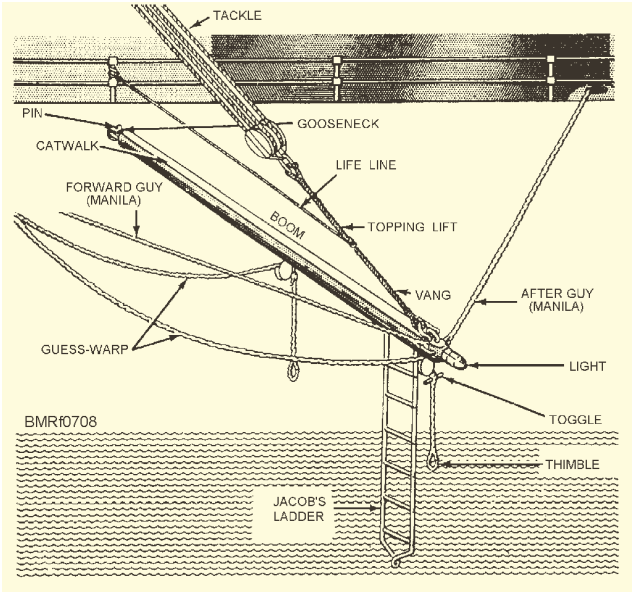



**Figure 7-8.—Parts of a boat boom.**

A strong line called a *guess-warp* runs from well forward on the ship out through a block or blocks on the boom and ends in a metal thimble through which boats can reeve (pass) their bowlines. A small piece of wood

***Student Notes:***

called a *toggle* is seized between strands of the guess-warp above the thimble to keep it from running up out of reach when a boat lets go. One or more *Jacob's ladders* (a rope ladder) from the boom permit boat crews to come aboard.

## REVIEW 1 QUESTIONS

Q1. List six types of ground tackle used aboard ships.

a.

b.

c.

d.

e.

f.

Q2. Where are bower anchors located?

Q3. List the standard parts of the mooring line used to secure a normal sized ship at a pier.

a.

b.

c.

d.

e.

f.

Q4. Aboard ship, deck fittings are used for—

Q5. While anchored, what deck equipment is used to moor the ship's boat?

## BOAT SEAMANSHIP

**Learning Objectives**: When you finish this chapter, you will be able to—

- Identify various types of boats, service craft, and combatant craft to include boat terms and nomenclature.
- Identify safety practices for boat passengers.

Boat seamanship is much more than a knowledge of the kinds of boats in operation in the Navy. Boat crews are responsible for the safe operation and upkeep of their craft and must receive training in a number of areas. Some of the techniques to be mastered require much practice and experience before a boat crew can become accomplished in their assigned duties. If you are assigned to duties as a member of a boat crew, you should study the *Seaman* and *Boatswain's Mate 3 & 2* training manuals and complete the required personnel qualification standards (PQS).

Boats used by the Navy are of three general groups—support craft, combatant craft, and boats in general. Each group may be determined by its assigned mission and by its type, design, and construction. Chapter 8 has detailed information about these craft.

### BOATS

The term *boat* refers to a noncommissioned waterborne vessel that is not designated as a service craft. A boat is capable of limited independent operation. Officer/personnel boats, motor whaleboats, and utility boats fit into this group. Boats carried aboard ship that can be hoisted from and lowered into the water are known as *ship's boats*.

### SERVICE CRAFT

The term *service craft* (figs. 7-9 and 7-10) is applied to waterborne craft that are designed for special use. Harbor tugs, ferryboats, various nonself-propelled barges, and floating dry docks are designated service craft.

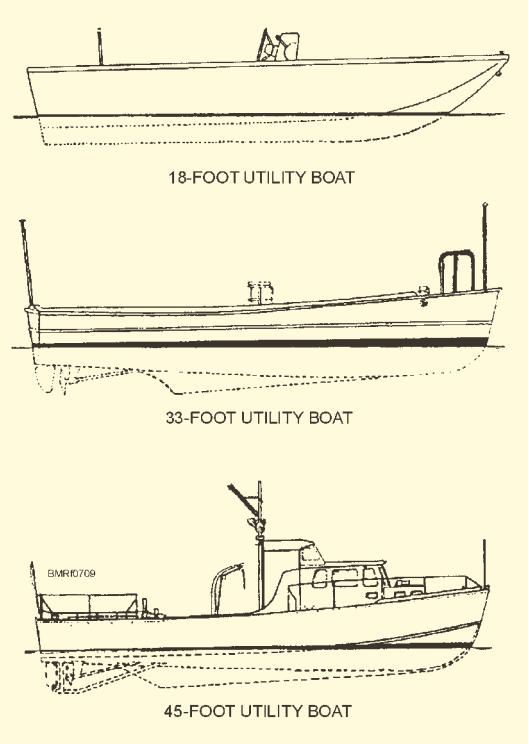



**Figure 7-9.—Boats and service craft of the U.S. Navy.**

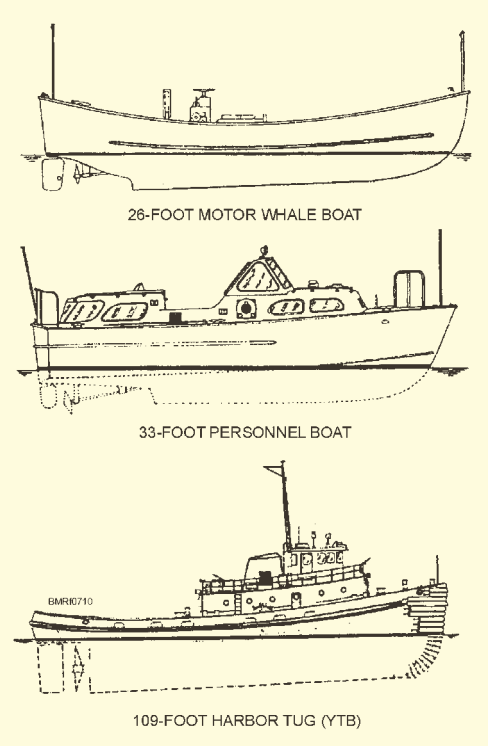



**Figure 7-10.—Boats and service craft of the U.S. Navy (Continued).**

## COMBATANT CRAFT

Combatant craft are craft or boats specifically designed for combat roles. Figures 7-11 and 7-12 show a variety of patrol, riverine, amphibious warfare, and special combatant craft.

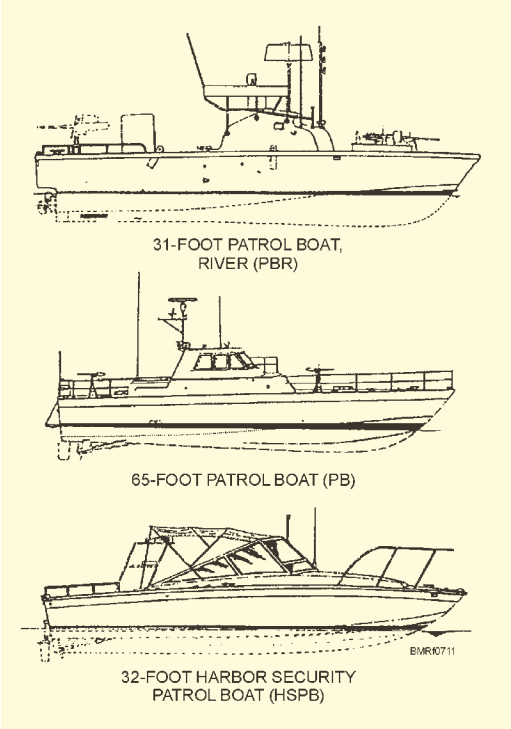



**Figure 7-11.—Combatant craft of the U.S. Navy.**

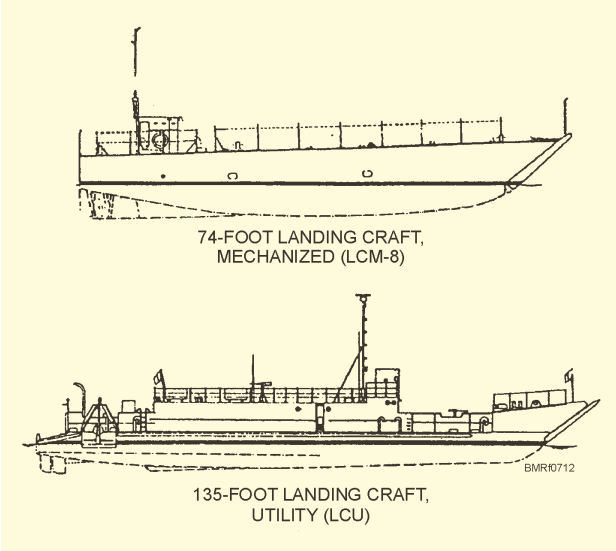



**Figure 7-12.—Combatant craft of the U.S. Navy (Continued).**

***Student Notes:***

## BOAT SAFETY

Because the majority of Navy personnel are concerned with small boats only in the role of passengers, this section is written from the standpoint of passengers, rather than crew members. Every Sailor should be familiar with the following boat safety precautions:

- Obey all orders from the coxswain and boat officer.
- Embark in a quiet, orderly manner and move as far forward as possible. Once embarked, stay in place. Keep all parts of your body in the boat; do not perch on the gunwales.
- Don't engage in horseplay.
- Never needlessly distract the attention of crew members from their duties.
- Don't sit on life jackets—to do so mats the filler and reduces buoyancy.
- When told to do so, don your life jacket immediately.
- Don't smoke in a boat.
- During heavy weather, boat loads must be reduced.
- If told not to embark or requested to disembark, do so without argument
- If a boat swamps or capsizes, don't panic. Fear is transmitted easily from person to person, and a terrified individual drowns easily. Never strike out alone.
- Never strike out alone. Stay with the boat or huddle with other passengers because a large group can be found much more easily than individual swimmers.

## BOAT TERMS AND NOMENCLATURE

Boat crew members often develop the habit of calling objects and the activities around them by their proper names. In times of emergency, your understanding and correct response to such terms could save valuable time.

*Abaft.* Any part of the boat aft of amidships.

*After end (aft).* The after end (aft) of a boat is the stern.

*Amidships.* Amidships is a point about halfway between the bow and stern and the sides of the boat.

*Athwartships.* When something is said to be *athwartships*, it's across the boat from side to side.

*Forward end (fore).* The forward end (fore) of the boat is the *bow.*

*Inboard.* Inboard usually describes the area inside the boat or an object nearer the centerline of the boat.

*Outboard.* Outboard describes the area furthermost from the boat's centerline or beyond the side of a boat.

*Starboard.* When facing forward of the boat, your right-hand side is the starboard.

*Port.* When you are facing forward of the boat, your left-hand side is the port.

Figure 7-13 shows a 26-foot personnel boat with features that are similar to most Navy boats.

By studying the nomenclature shown in figure 7-13, you will become familiar with much of the deck and hull equipment used on Navy boats. The glossary in appendix I of this training material will help you identify some of the terms.

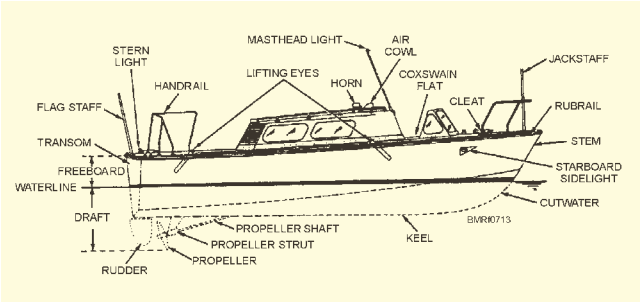



**Figure 7-13.—Boat nomenclature.**

***Student Notes:***

## REVIEW 2 QUESTIONS

Q1. List two types of combatant craft .

a.

b.

Q2. As a boat passenger, you should obey the orders of what person(s)?

Q3. If a boat capsizes while you're a passenger, you shouldn't panic for what reason?

Q4. What does the term *athwartships* mean?

## MARLINESPIKE SEAMANSHIP

**Learning Objectives**: When you finish this chapter, you will be able to—

- Identify the purpose of various types of line and rope.
- Recognize the procedures used to tie knots, bends and hitches, and to make splices.
- Identify the procedures for securing at sea.

Marlinespike seamanship is the art of handling and working all kinds of fiber and wire rope. *Rope* is a general term and can include both fiber and wire rope. In the Navy, Sailors generally refer to fiber rope as *line*, and wire rope is referred to as *rope*, *wire rope*, or *wire*. A better definition of a line is as follows: *A line is a length of rope, either fiber or wire, that is in use or has been cut for a specific purpose, such as a lifeline, heaving line, or lead line*. A few such lines have the word *rope* in their names, such as wheel rope, foot rope, and bell rope.

In sailing ships, the fiber ropes that gave athwartship support for the masts were so numerous that they actually shrouded the tops of the masts from the view of an observer on deck, hence, the name *shroud*. Stays, the fore and aft supports, were not so numerous, but there were several on each ship. Running rigging, tackles used to hoist and trim (adjust) the sails and handle cargo and other heavy weights, spanned the areas between sails, yards and decks, and yards and bulwarks. Lines secured the guns to the ship's sides and prevented them from rolling or recoiling across the gun decks. Gun tackles were used to haul the guns back into battery (firing position) after the guns were fired. Even the anchor cable was made of line. Obviously, line played a vital role in those ships.

In today's Navy, line isn't used as much as on sailing ships; however, it's still an important and expensive item. Therefore, every Sailor needs to learn the proper use and care of all kinds of line and wire rope. Today's Navy uses line made of fiber (natural and artificial); wire rope made of steel, phosphor bronze, and other metal; and a combination of wire and fiber (spring-lay).

Lines made from a variety of natural fibers have seen service in the Navy, but most have been replaced by lines made of synthetic fibers. The two most commonly used lines made of natural fibers are marline (tarred hemp fibers) and manila (abaca plant fibers). Manila line was formerly authorized for use only where great strength was required, such as mooring lines, towing lines, personnel transfers at sea and boatfalls. Fiber ropes made of tarred hemp are used in seizing, worming, serving ropes, and lashing. For most applications, nylon line (synthetic fiber) has replaced manila. Nylon line is about 2 1/2 times as strong as manila of the same size, has a greater strength and elasticity, and has a higher resistance to weather.

Wire rope usually is substituted for line where the line is subjected to a great deal of wear, weathering, or heat, and where greater strength is required. Spring lay is used for mooring lines, particularly at the bow and stern.

### FIBER LINE

Any rope that is not wire is fiber rope. Except in a few instances where it has special uses, **fiber rope is never called anything but line aboard ship**.

***Student Notes:***

Lines are classified by both their construction and their material. Nearly all line used in the Navy is three-strand line.

**Line** is made by twisting fibers into threads (or yarns), threads into strands, and strands into rope. Taking the process further, ropes twisted together form a cable—an item seldom seen nowadays. Most of our lines are three-strand and right-laid; that is, as you look along a line, the twist is to the right. During construction of natural fiber line, a lubricant is added that also serves as a preservative.

**Large line** is measured by circumference. Line 1 3/4 inches and under in circumference, called *small stuff*, is identified by the number of threads in the line. A line with twenty-four thread is 1 1/2 inches in circumference. Inasmuch as the numbers of threads per strand are equal, thread numbers in a three-strand line are divisible by 3—24, 21, 18, and so on, down to the smallest—6 thread (3/4 inch). Line from 1 3/4 inches to about 4 inches is manufactured in 1/4-inch graduations. The length of all line and wire rope is usually measured in feet.

The chart shown below lists tips on the care of natural fiber line. You should be thoroughly familiar with them and observe them at all times.

| NEVER | ALWAYS |
|---|---|
| Stow wet or damp line in an unventilated compartment or cover it so that it cannot dry. Mildew will form and weaken the fibers. | Dry line before stowing it. |
| Subject line to intense heat nor unnecessarily allow it to lie in the hot sun. The lubricant (natural oils) will dry out, thus shortening the useful life of the line. | Protect line from weather when possible. |
| Subject a line to loads exceeding its safe working load. To do so may not break the line, but individual fibers will break, reducing the strength. | Use chafing gear (canvas, short lengths of old firehose, and so on) where line (or wire) runs over sharp edges or rough surfaces. |
| Allow line to bear on sharp edges or run over rough surfaces. The line will be cut or worn, reducing the strength and useful life. | Slack off taut lines when it rains. Wet line shrinks, and if the line is taut, the resulting strain may be enough to break some of the fibers. |
| Scrub line. The lubricant will be washed away, and caustics in strong soap may harm the fibers. | Coil right-laid line to the right (clockwise). |
| Put a strain on a line with a kink in it. | Inspect a line before using it. Overworked or overstrained line will have a bristly surface. Mildew can be seen, and it has peculiar, unpleasant odor. Untwist the line so that the inner parts of the strands can be seen. If they have a dull, grayish look, the line is unsafe. |
| Try to lubricate line. The lubricant you add may do more harm than good. | Give line the care it deserves—someday your safety may depend on it. |

***Student Notes:***

## NYLON LINE

Most of the tips for the care of natural fiber line should be observed with nylon line. Nylon, however, is not subject to mildew. It should be scrubbed if it becomes slippery because of oil or grease.

A stretch of one third of its length is normal for nylon line under safe working loads. Nylon stretches about 50 percent before it will break. Because of its elasticity, nylon line breaks with a decided snapback; therefore, stand well clear when it is under a heavy strain.

**CAUTION**

Snapback is extremely dangerous and has caused severe injuries and death. The utmost caution must be observed when working with or around all synthetic lines.

## WIRE ROPE

The basic unit of wire rope construction is the individual wire, which is made of steel or other metal and comes in various sizes. These wires are laid together to form strands. The number of wires in a strand varies according to the purpose of the rope. A number of strands are laid together to form the wire rope itself.

Wire rope is designated by the number of strands per rope and the number of wires per strand. For example, a 6 by 19 rope will have 6 strands with 19 wires per strand. It may have the same outside diameter as a 6 by 37 wire rope, which will have 6 strands with 37 wires of much smaller size per strand. The more wires per strand, the more flexible the rope. Rope with fewer and larger wires per strand is more resistant to external abrasion.

The strands of the wire rope are laid up around a central core, which may be only a single wire, a single strand of wire, or hemp. A hemp core contributes flexibility, cushions the strands as the wire rope contracts under strain, and holds a portion of lubricant for continuous lubrication. A wire core is stronger than hemp and can be used where conditions, such as high temperatures, would damage a hemp core.

## WHIPPINGS

Whippings are bindings on the ends of rope that keep the rope from unlaying. On line, whippings are made with cord, such as sail twine or with marline. The ends of all line must be whipped because of the frequent need for passing the ends through rings and pad eyes and for reeving them through blocks. Unlaid and frayed ends of line are unsightly and unseamanlike and waste many feet of line. Knots or backsplices in the end of a line are not allowed, nor are friction tape or wire whippings. Knots and backsplices will jam in a block; friction tape will not hold for long; and wire may tear a line-handler's hands.

The most secure whipping is made with the aid of a sail needle and palm. However, an excellent whipping can be made without a needle if the procedure shown in figure 7-14 is followed. First, lay one end of the whipping along the line, bind it down with a couple of turns, and snug up the edges. Then lay the other end on in an opposite direction with the body portion of the whipping, continuing with several more turns from the bight of the whipping. The whipping length should be about equal to the diameter of the line being whipped. Snug up the edges and cut off the twine close to the line. This type of whipping is a temporary one. If the line is to be used frequently, a permanent whipping should be used.

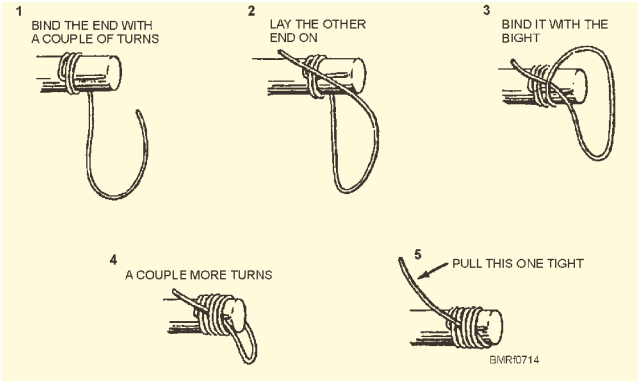



**Figure 7-14.—Plain whipping a line.**

***Student Notes:***

## KNOTS, BENDS, AND HITCHES

Except among seamen, the word *knot* is ordinarily used as an all-inclusive term, covering the more specific use of knots plus bends and hitches. Even seamen find it hard to clearly define the terms *knot*, *bend*, and *hitch* because their functions overlap like the bowline knot and many other instances. In general, however, the terms may be defined as follows:

*Knots.* Knots are used to form eyes or to secure a cord or line around an object, such as a package. In other words, the line is bent to itself.

*Hitches.* Hitches are used to bend a line to or around an object, such as a ring, spar, or stanchion.

*Bends.* Bends are used to secure two lines together.

All Navy personnel should know the square knot, bowline, single- and double-becket bends, round turn and two half hitches, and clove hitch. Navy personnel should know when these knots, bends, and hitches are used. Before reading further, look at figure 7-15, which shows a few terms that make it easier for you to understand the following procedures.

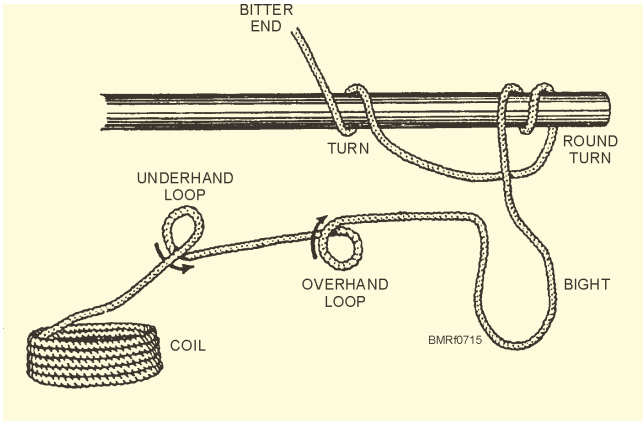



**Figure 7-15.—Elements of knots, bends, and hitches.**

### Square Knot

The square knot, also known as the *reef knot* from its use in reefing sails, is quickly and easily made and has a great many uses. It will not slip, but it can jam under heavy strain. It can be loosened, however, by pulling on first one and then the other end. Figure 7-16 shows steps in making a square knot.

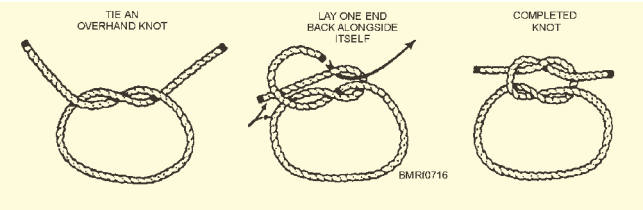



**Figure 7-16.—Square knot.**

### Bowline

The bowline, with its many variations, has a lot of uses. Its chief use is to form an eye; but it can also be used to secure a line to a pad eye, to secure another ring around a stanchion or other object, or to bend two lines together.

To tie a bowline, you should—

1. Grasp the bitter end of the line in the right hand and the standing part in the left hand (opposite, if left-handed). Assuming you are using small stuff, the length of line between your hands should be about 2 feet.
2. Throw an overhand loop counterclockwise near your left hand (clockwise near your right hand, if you are left-handed).
3. Grasp the loop formed and hold it. Pass the bitter end up through the bottom of the loop, as shown in figure 7-17, view A.
4. Pull the bitter end up through the loop, and pass it around behind the standing part of the line (fig. 7-17, view B).
5. Pass the bitter end down through the loop beside the line that was pulled up through the loop (fig. 7-17, view C).
6. To tighten the knot, grasp the standing part in one hand and the two lines passed through the loop with the other hand, and pull.

***Student Notes:***

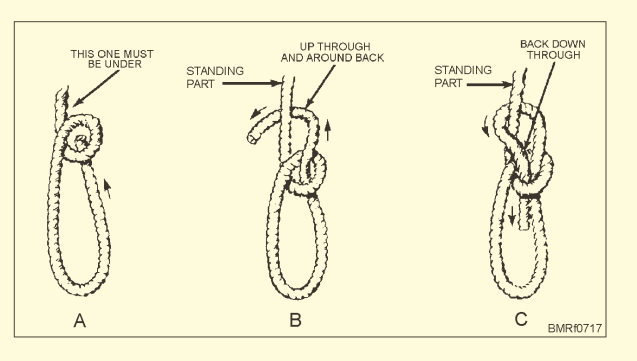



**Figure 7-17.—Tying a bowline.**

## Becket Bend

The chief value of the becket bend is its use in binding together two lines of different sizes. If there is a great difference in sizes or the strain on the line is to be great, always use a double becket bend.

To fashion a single becket bend, you should—

1. Make a bight in one line and run the bitter end of the other line up through it, as shown in figure 7-18, view A.
2. Pass the end around behind both parts of the bight and back under itself (fig. 7-18, view B).

Figure 7-18, view C, shows how you make a double becket bend by simply taking another turn around the bight. (These bends are also known as *sheet bends*.)

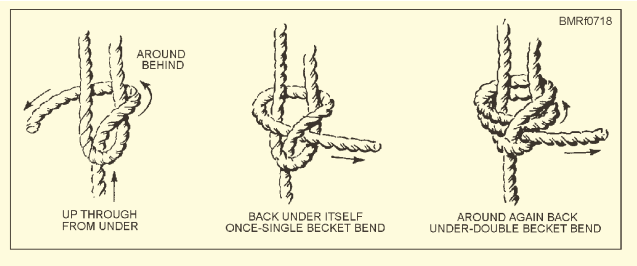



**Figure 7-18.—Single- and double-becket bends.**

## Clove Hitch

The clove hitch can be quickly and easily tied in several ways, and it will hold as long as there is a strain on it. Once the strain is taken off, however, the hitch must be checked and tightened to prevent the bitter end from pulling out when the strain is reapplied. To make this checking and tightening unnecessary, you lash a clove hitch with a half hitch around the standing part.

To tie this hitch (fig. 7-19), you should—

1. Take a turn with the bitter end.
2. Pass the end across the standing part.
3. Take another turn. (Notice that both turns go around in the same direction.)
4. Pass the end under itself, and the hitch is complete.

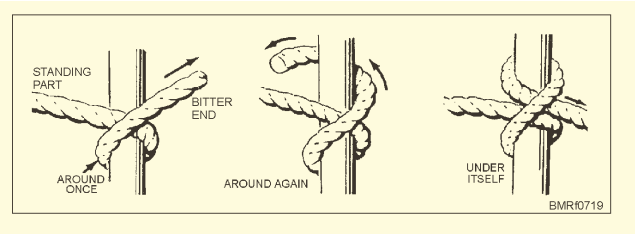



**Figure 7-19.—Tying a clove hitch.**

Another way to make this hitch is to form two underhand loops. Lay the second loop on top of the first. This method is the usual way to form the hitch when it can be slipped over the end of the object to which the line is to be secured.

## Round Turn and Two Half Hitches

The chief advantage of the round turn and two half hitches over other hitches is that it won't slip along the object to which it is secured. It's made by taking a round turn and making two half hitches (fig. 7-20). (The two half hitches actually consist of a clove hitch taken around the line itself.)

***Student Notes:***

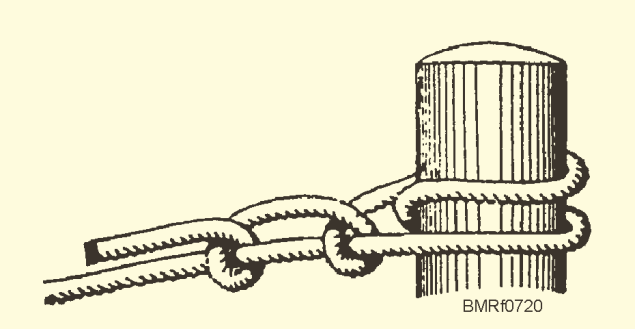



**Figure 7-20.—Round turn and two half hitches.**

### Making Up a Line

Once line is removed from the manufacturer's coil, or spool, it may be made up (for ready use) by coiling down, faking down, or flemishing. Figure 7-21 shows the methods of coiling, faking, and flemishing lines.

"Coiling down a line" means laying it up in circles, roughly one on top of the other. Faking down a line is laying it up in the same manner as for coiling down, except that it is laid out in long, flat bights, one alongside the other, instead of in round coils. The main advantage of working with line that is faked down is that it runs off more easily. To flemish down a line, start with the bitter end, and lay on deck successive circles of line in the manner of a clock spring with the bitter end in the center. Right-laid line is laid down clockwise; left-laid line is laid down counterclockwise.

## SPLICES

Splices are used to permanently join two lines or to form an eye or loop in the end of a line. When time permits, splices should be used instead of knots because splices are much stronger.

### Eye Splice

To make an eye splice, unlay (untwist) the strands in the end of your line about 8 to 10 turns of lay. Whip the end of each strand to prevent the strands from unlaying while you splice.

**NOTE**

When splicing synthetic line, such as nylon, it is sometimes easier to use tape on the strand ends. Large line, such as mooring lines, should be seized or bound together at the point where unlaying stops.

To form the eye, bend the line back until the eye is the desired size. This is the point where your splicing begins.

Follow the steps shown in figure 7-22 by tucking each whipped strand under one strand of the line. Pull the slack out of each tuck and check the size of the eye. (If a thimble is to be used, insert it at this point.) Follow the "over one strand, under the next" procedure until you complete at least three tucks for natural fiber line or four tucks for synthetic line. (**NOTE:** The splice can be smoothed by rolling it on deck under your foot.)

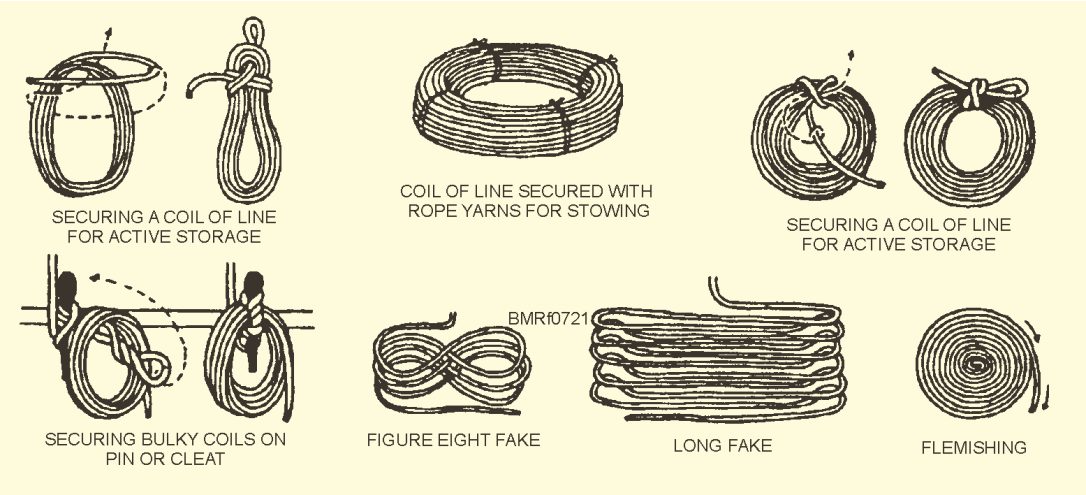



**Figure 7-21.—Coils, fakes, and flemishes.**

***Student Notes:***

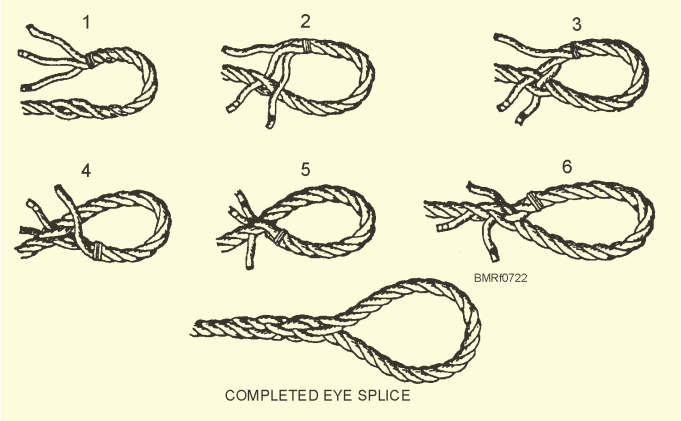



**Figure 7-22.—Steps for making an eye splice.**

Upon completion of the splice, the excess length of each strand must be cut off. When natural fiber line is used for the splice, the strands can simply be cut off near the line. With synthetic line, a short length of each strand should be left intact. The ends of the threads of each strand are then melted together over an open flame to prevent the strands from frazzling.

When you melt the ends of the strands, don't allow any of the melted synthetic line to drip on you, your clothing, another person, or anything that might present a fire hazard. Also, observe all safety precautions pertaining to the use of open flames aboard your ship or station.

### Short Splice

A short splice is used where two lines are to be permanently joined, provided a slight enlargement of the diameter is not important. When properly made, the short splice is much stronger than any knot.

After unlaying and whipping the strands as described for the eye splice, seize each line where the unlaying stops. Now butt the two lines together so that they are interlaced, and follow the steps shown in figure 7-23.

With large lines, you must put on a temporary seizing where they join to keep them from suddenly coming apart. It's better to do that with small lines, too, until you get the hang of holding them together while you tuck.

Once your seizing is on, tuck over and under the same way you finish off an eye splice. Three tucks (natural fiber) or four tucks (synthetic fiber) on each side of the seizing are ample. Remove the seizing, cut off the ends of the strands, and melt them (if appropriate) as previously described.

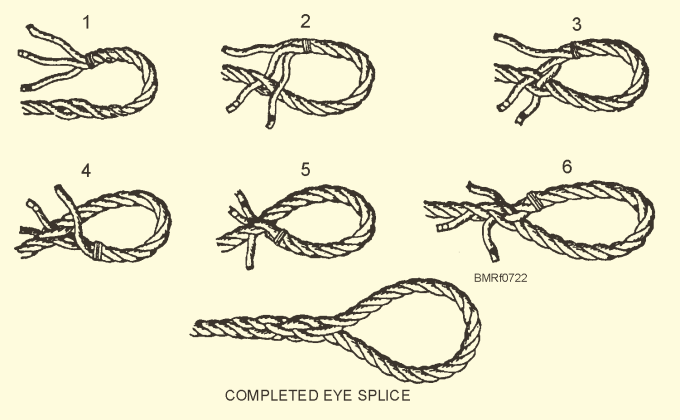



**Figure 7-22.—Steps for making an eye splice.**

***Student Notes:***

## SECURING FOR SEA

You are required to learn these knots, bends, and hitches so that you can use them when and where necessary. Rest assured that a person who goes to sea will find frequent use for them in securing equipment to prevent damage from rough waters. How the equipment is secured depends on the gear and the places of stowage. By observing the few tips that follow and by using a little common sense, you should be able to do a good job of securing your equipment for sea.

- Use line strong enough to hold the gear.
- Make certain the line is in good condition. Make fast the belay objects from at least two points that, preferably, are near the object.
- Lash tightly all objects against something solid (such as the bulkhead).
- Make the lashings taut so that the object will not "work" with the pitch and roll of the ship. Frequently check all lashings, and tighten as necessary.
- Use chafing gears on sharp corners and rough surfaces.
- Never make fast your lashings to electric cables or small slightly secured pipes, lagged pipes, door and hatch dogs or hinges, electric motors, lifeline stanchions, or anything not solidly secured.
- Never block access to vents, fireplugs, switches, valves, doors, or hatches.

**Never underestimate the force of the sea**! Secure everything properly the first time and be safe.

### REVIEW 3 QUESTIONS

Q1. List the three advantages of using nylon line over natural fiber line.

a.

b.

c.

Q2. When a natural fiber line will bear on sharp edges or run over rough surfaces, what action should you take to protect the line from damage?

Q3. Under what condition should you use a wire rope?

Q4. You are right-handed. When tying a bowline, the overhand loop should be in what direction?

Q5. You are going to join two separate lines together using a becket bend. What is the first step you should take?

### SUMMARY

Becoming an accomplished seaman takes time, hard work, and patience. At some time in your career, you could be a member of a detail where handling lines will be required, or you may work with deck equipment and lines on a daily basis. Knowing how to use deck equipment and handle lines safely is essential.

Lines are used in the Navy for many reasons—from mooring aircraft carriers to securing bookshelves at sea. Without the wide variety of lines available to us, our way of doing our jobs would be extremely difficult.

Each piece of deck equipment or fitting has been designed for a specific purpose. A set of bits on a destroyer is used primarily for mooring, where a set of bits on a tug is used almost exclusively for towing. Becoming familiar with deck equipment and its use, and knowing how to makeup and use lines is not only a sign of good seamanship but could, in case of emergencies, make the difference between saving or losing the ship or your shipmates.

Each person in the Navy is first and foremost a seaman and then a technician in his or her specific rate. Become proficient in seamanship. It may help you in your daily duties and most certainly assist you in times of difficulty.

***Student Notes:***

## REVIEW 1 ANSWERS

A1. Ground tackle used on board ship includes—

a. **Anchors**

b. **Anchor cable and chains**

c. **Chain stoppers**

d. **Bending shackles**

e. **Outboard swivel shots**

f. **Detachable links**

A2. Bower anchors are **carried on the bow of a ship and secured in the hawspipe**.

A3. The standard mooring lines used to secure a normal size ship at a pier include the—

a. **Bowline**

b. **Forward bow spring**

c. **After bow spring**

d. **Forward quarter spring**

e. **After quarter spring**

f. **Stern line**

A4. Aboard ship, deck fittings are used **in securing mooring lines, in towing operations, and in securing heavy objects and equipment**.

A5. **Boat booms** are used to moor the ship's boat while anchored.

## REVIEW 2 ANSWERS

A1. Combatant craft include—

a. **Mechanized landing craft (LCM)**

b. **Utility landing craft (LCU)**

A2. As a passenger, you should **obey all orders from the boat officer and the coxswain**.

A3. If a boat you're a passenger in capsizes, you shouldn't panic because **fear is easily transmitted from one person to another**.

A4. The term *athwartships* refers **to the position of something that is across the boat from side to side at a right angle.**

## REVIEW 3 ANSWERS

A1. Three advantages of using nylon line over natural fiber line include—

a. **Nylon line is 2 1/2 times stronger than natural fiber**.

b. **Nylon has greater strength and elasticity**.

c. **Nylon has greater resistance to weather**.

A2. To protect a natural fiber line from sharp edges and rough surfaces, you should **use a chafing gear between the contact point of the line and the damaging surface**.

A3. You should use a wire rope **when a great deal of wear and tear and weathering and heat is met, and greater strength is needed**.

A4. The overhand loop should be turned in a **counterclockwise direction**.

A5. The first step you should take when joining two separate lines together using a beck bend is to **make a bight on one line and run the bitter end of the other line up through the bight**.

***Student Notes:***

# CHAPTER 8

# SHIP/AIRCRAFT CHARACTERISTICS

*This ship is built to fight. You'd better know how.*

—Admiral Arleigh Burke

*The air fleet of an enemy will never get within striking distance of our coast as long as our aircraft carriers are able to carry the preponderance of air power to the sea.*

—Rear Admiral W. A. Moffett

The U.S. Navy has thousands of vessels and aircraft in its inventory. They range from small harbor patrol boats to huge super carriers and from helicopters to giant transport planes. You won't be expected to know the characteristics of each one, but you should be able to recognize the type of ship or aircraft you see. You should also be able to identify its mission and armament and have an idea about its size. In this chapter, you'll learn about the major classes and the major types of ships and aircraft the Navy operates and what their characteristics and missions are. You will also learn some of the more common terms used to identify structural features and the terminology used to express direction and locations aboard ship.

Before you learn about the types and classes of ships, you need some background information about ships in general. To take advantage of scientific advances, the fleet is making changes. Cruise missiles, close-in defense systems, and multirole radar units are replacing conventional electronic and weapons systems. The Navy's new submarines and aircraft carriers are nuclear-powered. Therefore, steaming endurance is limited only by the replenishment of necessary supplies and food.

Many ships have been modernized to perform a wide variety of missions and to accomplish old missions more efficiently. During overhaul, older ships are outfitted with new radar, fire control, and communications systems. The hulls are strengthened and power plants reworked to extend the lives of these ships. However, it's not economically sound to convert all ships to nuclear power.

## SHIP TERMS

**Learning Objectives**: When you finish this chapter, you will be able to—

- Identify terms used aboard ship.
- Recall the names used for superstructures and components of ship's hulls to include decks and doors and hatches.
- Identify structural terms.

In civilian life you used terms such as *upstairs, downstairs, windows, floors, ceilings, walls,* and *hallways*. In the Navy, you must learn to use Navy language. To use civilian terminology aboard ships marks you as a *landlubber*—a scornful term used to describe those who know nothing of the sea.

### GENERAL TERMS

**Lengthwise** direction on a ship is *fore* and *aft*; **crosswise** is *athwartships*. The front of the ship is the *bow*; the rearmost is the *stern*. To move forward toward the bow is to go *forward*; to move toward the stern is to go *aft*. Anything that is more toward the bow than another object is *forward* of it, and anything that is more toward the stern is *abaft* (behind) the other object.

A ship is divided in half lengthwise by a *centerline*. When you face forward along the centerline, everything to your right is to *starboard*; everything to your left is to *port*. Fixtures and equipment take the name of the side on which they are located, such as the *starboard gangway* and the *port anchor*.

When you go toward the centerline, you go *inboard*. An object nearer the centerline is inboard of another object and that object is *outboard* of the first. The section around the midpoint area is called *amidships* (also called the *waist*). The extreme width of a ship, usually in the midship area, is its *beam*.

You never go downstairs in a ship; you always go *below*. To go up is to go *topside*. However, if you climb the mast, stacks, rigging, or any other area above the highest solid structure, you go *aloft*. The *bridge* is topside and usually forward. It contains control and visual communication stations. Human beings live *in* a ship or *on board* a ship. Inanimate objects, stores, and equipment are *aboard* a ship. Similarly, you *board* a ship or *go on board*. Stores, ammunition, and so on are *taken aboard* and *struck below.*

An object hanging against the side, bow, or stern is *over* the side, bow, or stern. An object in the water but not touching the ship is *outboard* of or *off* the ship (off the starboard side, off the port bow, and so on). An object in front of a ship is *ahead* of it. An object to the rear is *astern*, never in back. Cooking is done in the *galley*, not in the kitchen.

The fore-and-aft inclination of a ship is the ship's *trim*—down by the head or down by the stern. To trim a submarine is to adjust water in the *variable ballast tanks*, or *trim tanks*. A ship is said to *list* if it has a permanent or semipermanent inclination to one side or the other. This is a less than optimum condition.

## STRUCTURAL TERMS

In this section, you will learn some of the terms related to ship construction. These terms won't tell you "how to" build a ship; however, by learning the terms, you will understand the major structural characteristics of the hull, decks, and superstructure of a ship.

### Hull

Figure 8-1 shows the hull structure of a cruiser. You should refer to this figure as you read this section. The *hull* is the supporting body of a ship. Think of the *hull* as an envelope. Inside the hull are *strengthening members* that prevent the envelope from collapsing. The hull also contains partitions that form machinery, berthing, messing, and other spaces.

The *keel* is the backbone of the ship. The keel of most steel ships does not extend below the ship's bottom; hence, it is known as a *flat keel*. Its usual shape is that of an I-beam. All other parts used in constructing the hull are attached, either directly or indirectly, to the keel.

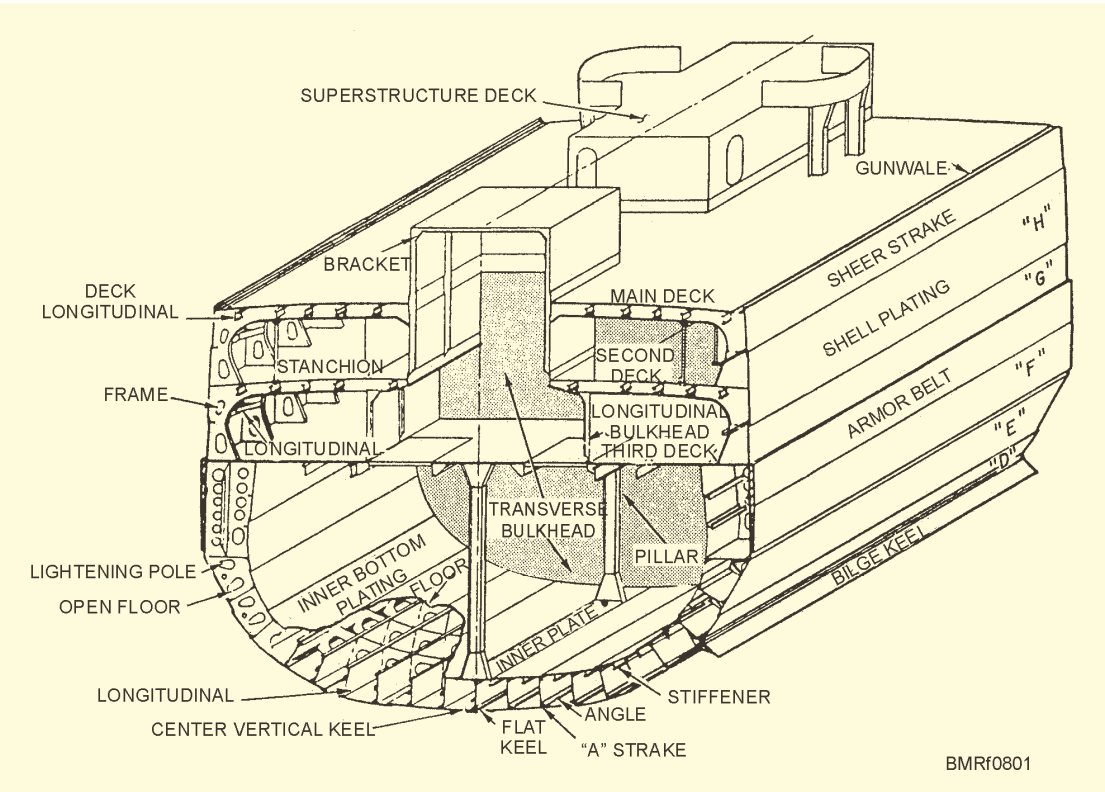



**Figure 8-1.—Hull structure of a cruiser.**

***Student Notes:***

The athwartships structure consists of *transverse frames* and *decks*. The decks run outboard from the keel to the turn of the bilge (where the bottom turns upward). Here, they are attached to the transverse frames, which then extend upward to the main deck.

Frames running parallel with the keel are called *longitudinals*. From the turn of the bilge up the sides they are also called *stringers*. The network of floors and longitudinals resembles a honeycomb (known as *cellular construction*), which greatly strengthens the bottom of the ship. When plating covers the honeycomb, double bottoms are formed. The space between the inner and outer bottoms (known as *tanks*) is used for liquid stowage. Planks laid upon the tank tops are called *ceilings*. The forward end of the keel, which is extended upward, is called the *stem*. The after end of the keel has a similar extension called the *sternpost*. The part of the stem above water is the *prow*; the forward edge of the stem is the *cutwater*.

The interior of a ship is divided into compartments by vertical walls, called *bulkheads*. Bulkheads run both transversely and longitudinally. Most bulkheads are merely partitions; but spaced at appropriate intervals, they are transverse watertight bulkheads. These bulkheads extend from the keel to the main deck and from side to side to provide extra stiffening and to partition the hull into independent watertight sections. Large ships have a series of longitudinal side bulkheads and tanks that provide protection against torpedoes. Usually, the outer tanks are filled with oil or water, and the inner tanks (called *voids*) are empty. The innermost bulkhead is called the *holding bulkhead*. If a torpedo were to hit the ship, the outer tanks, although ruptured, would absorb enough energy from the explosion that the holding bulkhead would remain intact, thus preventing flooding of vital spaces.

The plates that form the ship's hull are called *strakes*. Strakes are fastened to the framework in longitudinal rows. The keel forms the center strake. Strakes are lettered, beginning with the A strake on either side of the keel and extending up to the main deck. Some of the strakes also have names. The A strake is called the *starboard strake*; the strake along the turn of the bilge is the *bilge strake*; the uppermost strake is the *sheer strake*. A protecting keel running along the bottom near the turn of the bilge is called a *bilge keel*. Its purpose is to reduce rolling of the ship. (A ship *rolls* from side to side; it *pitches* when it goes up and down fore and aft; it *yaws* when the bow swings to port and starboard because of wave action.)

The upper edges of the sides, where the sheer strakes join the main deck, are called the *gunwales* (rhymes with funnels). The foremost part of the ship, where the gunwales join the stem, is known as the *eyes* of the ship. The port and starboard quarters are located where the gunwales curve inward to the sternpost.

The water level along the hull of a ship afloat is the *waterline*. The vertical distance from the bottom of the keel to the waterline is the ship's *draft*. *Freeboard* is the distance from the waterline to the main deck. Figures 8-2 and 8-3 show various parts of the hull and deck.

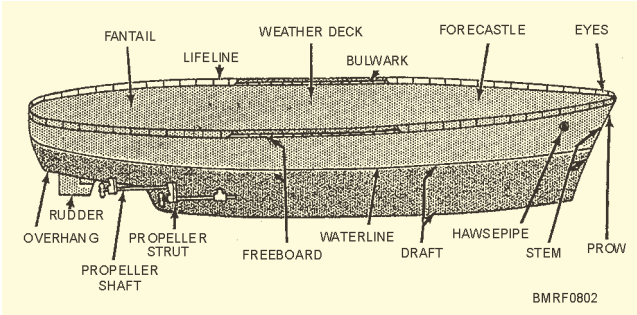



**Figure 8-2.—The hull.**

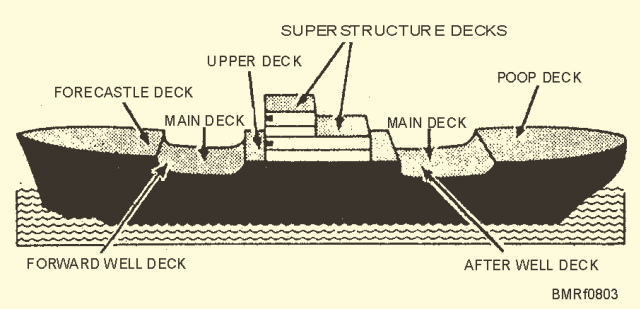



**Figure 8-3.—The weather deck.**

## Decks

The floors of a ship are called *decks*. They divide the ship into layers and provide additional hull strength and protection for internal spaces. The undersurface of each deck forms the *overhead* (never the ceiling) of the compartment below. *Compartments* are the rooms of a ship. Some compartments are referred to as rooms, such as the wardroom, stateroom, and engine room.

***Student Notes:***

Generally speaking, you do not use the word *room*. For instance, you never refer to the space where you sleep as the bedroom or where you eat as the dining room. These spaces are called the *berthing compartment* or *space* and the *messdeck*.

A steel deck is made of steel plating (strakes) running fore and aft. The outboard strake in the deck plating is composed of stringer plates that are welded or riveted to the side plates of the ship adding additional strength to the ship's sides. Decks are supported by athwartships deck beams and by fore-and-aft deck girders. Further deck support is provided throughout the ship by vertical steel pillars called *stanchions*. Stanchions are mounted one above the other or one above a strength bulkhead. (The short posts used as lifeline supports also are called *stanchions*.) Look at figure 8-2. Decks are usually slightly bowed from the gunwale to the centerline to provide for water drainage and to strengthen the deck. The arch so formed is called *camber.*

A deck or part of a deck exposed to the weather is called a *weather deck* (fig. 8-3). *Bulwarks* are a sort of solid fence along the gunwale of the main (weather) deck. The bulwarks are fitted with *freeing ports* (scuppers) to permit water to run off during heavy weather.

A deck that extends from side to side and stem to stern is a *complete deck*. On an aircraft carrier, the uppermost complete deck is the *flight deck* from which aircraft take off and land. In all ships but aircraft carriers, the uppermost complete deck is the *main deck*. On an aircraft carrier, the *hangar deck* is the main deck. The hangar deck is the deck on which aircraft are stowed and serviced when not on the flight deck.

The first complete deck below the main deck is the *second deck*; the next, the *third deck*; the next, the *fourth deck*; and so on. *Half decks* or *'tween decks* take the number of the deck above and have the fraction 1/2 added to them.

A *strength deck* is just what the name implies. It is a complete deck (usually the main deck) designed to carry not only deck loads on it but also to withstand the hull stresses. A damage control deck (on most ships the second or third deck) is the lowest deck having access through the main transverse bulkheads, from forward to aft. This deck usually contains damage control main repair equipment in addition to the facilities for the control of flooding, sprinkling, and pumping if the ship is damaged.

The following are definitions that relate to decks in modern ships (the location of each deck is also given):

*Companionways* (ladders). Companionways, or ladders, lead from one deck level to another. They may or may not be covered by hatches.

*Flats*. Flats are plating or gratings installed only to provide working or walking surfaces above bilges.

*Forecastle* (pronounced folk' sel) *deck*. The forecastle deck is the deck above the main deck at the bow. Ships that don't have raised forecastles are called *flush-deckers*. In them, the part of the deck from the stem to just abaft the anchor windlass is the forecastle.

*Gallery deck*. The gallery deck is the first half deck or partial deck below the flight deck.

*Half deck*. The half deck is any partial deck between complete decks.

*Levels*. A level is a general term used to designate deck heights above the main deck. The first level above the main deck is the 01 (pronounced oh-one) level, the second the 02 level, and so on. Different decks at a particular level, however, carry different names. For example, both a poop deck and a boat deck (usually) are on the 01 level.

*Platforms*. Platforms are partial decks below the lowest complete deck. They are usually broken to admit machinery and are called *platform decks* or just *platforms*. They are numbered downward, as first platform, second platform, and so on.

*Poop deck*. The poop deck is a partial deck above the main deck located all the way aft. A flush-decker does not have a poop deck, so the stern area of the main deck on a flush-decker is called the main deck aft, or the *fantail*.

*Quarterdeck*. The quarterdeck is not an actual deck, but an area designated by the CO for the conduct of official functions. It is the station of the officer of the deck in port, and its location depends on how the ship is moored or which side of the ship is tied up to the pier.

***Student Notes:***

*Superstructure deck*. The superstructure deck is a partial deck above the main, upper, or forecastle deck that might not extend to the sides of the ship; or if it does, it does not have side plating carried up to it.

*Upper deck*. The upper deck is a partial deck extending from side to side above the main deck amidships. It is part of the superstructure, which is the part of a ship's structure above the deck. The superstructure does not include masts, yards, stacks, and related parts. The side plating extends upward to the upper deck.

*Well deck*. The well deck is the forward part of the main deck between upper deck and forecastle and aft between the upper deck and the poop deck.

### Doors and Hatches

Access through bulkheads is provided by *doors* and through decks by *hatches*. *Watertight* (*WT*) *doors*, as the term implies, form a watertight seal when properly closed. All doors leading to weather decks are of the watertight variety, as are those in structural (watertight) bulkheads. (See fig. 8-4.) The doors are held closed by fittings called *dogs*, which bear up tight on wedges. A rubber gasket around the edge of the door presses against a knife-edge around the doorframe forming a watertight seal when all dogs are properly seated (*dogged down*). Some doors have individually operated dogs, as shown in figure 8-5. Other doors are quick acting types, for which a handwheel or lever operates all the dogs at once, as shown in figure 8-6. Some WT doors have openings, called *passing scuttles*, through which ammunition is passed. These scuttles (small tubelike openings) are flashproof as well as watertight.

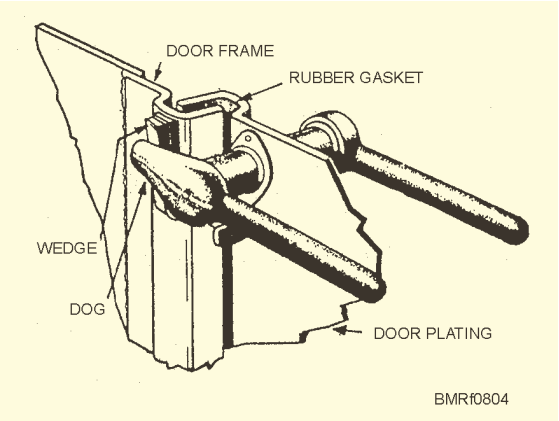



**Figure 8-4.—Dogs and gasket for watertight door.**

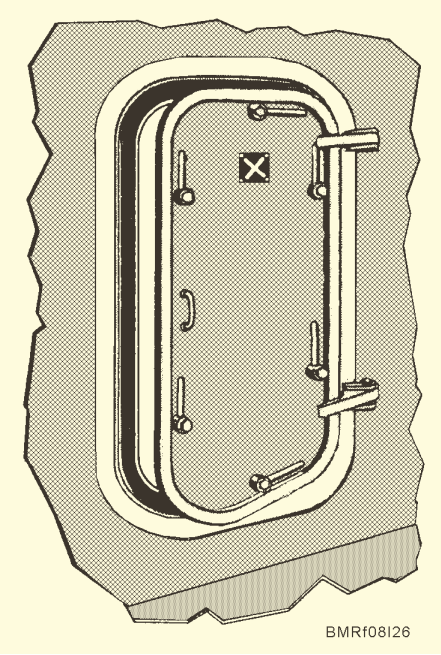



**Figure 8-5.—Watertight door with individually operated dogs.**

Nonwatertight (NWT) doors are used in NWT bulkheads and are of various types. Some slide, some fold, and others are similar to the regular house door (but made of metal). Some NWT doors have dogs, but fewer than those used on WT doors.

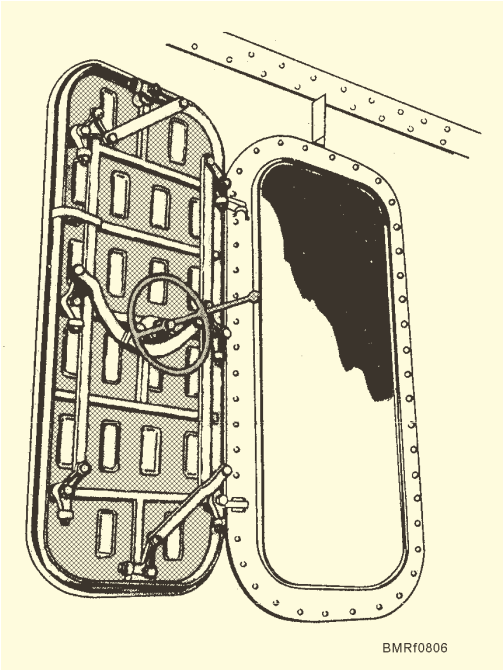



**Figure 8-6.—Quick-acting watertight door.**

## *Student Notes:*

*Hatches* are horizontal openings for access through decks. A hatch is set with its top surface either flush with the deck or on a *coaming* (frame) raised above the deck. Hatches don't operate with quick-acting devices. They must be secured with individually operated dogs or drop bolts.

Figure 8-7 shows a typical hatch with an *escape scuttle*, which is a round opening with a quick-acting closure. An escape scuttle may also be found in the deck (or overhead) of a compartment that otherwise has only one means of access.

*Manholes* of the hinged type are miniature hatches provided in decks for occasional access to water, fuel tanks, and voids. Bolted manholes are sections of steel plate that are gasketed and bolted over deck access openings. Manholes are also found in bulkheads but are not as common as deck manholes.

A cargo hatch and hold are shown in figure 8-8. The hatch is a large opening in the deck that permits loading and unloading of equipment and materials. It is covered by hatch boards or a mechanical/hydraulic hatch cover. A cargo hatch is protected from the weather by a canvas tarpaulin (tarp for short). The tarp is pulled over the hatch boards and down the sides of the coaming around the hatch and then battened down. To batten down is to secure the tarp by wedging battens (slats of wood or steel) that hold it against the side of the coaming.

**Superstructure**

The solid part of a ship above the main deck is called the *superstructure* (fig. 8-9). The masts, stacks, and related gear above the superstructure are referred to as the ship's *top hamper* (fig. 8-10). Masts are of three general designs—pole, tripod, and cage. On a single-masted ship, the mast is called simply the *mast*. A two-masted ship has a *foremast* and *mainmast*. A three-masted ship has a *foremast*, *mainmast*, and *mizzenmast*, in that order from forward. *Stacks* (never chimneys or funnels) are the large pipes that carry off smoke and gases from the boilers. The wider lower section of a stack is an *uptake*.

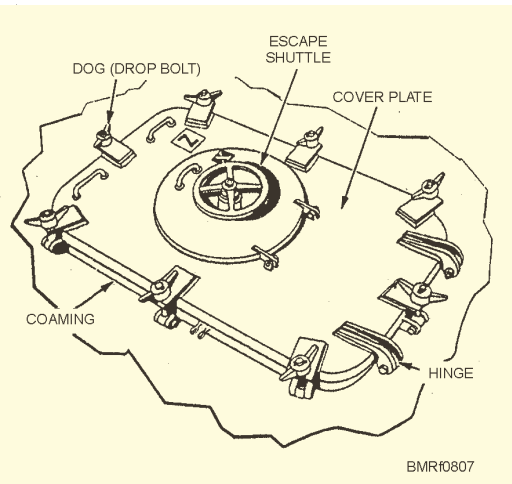



**Figure 8-7.—Bolted hatch with escape scuttle.**

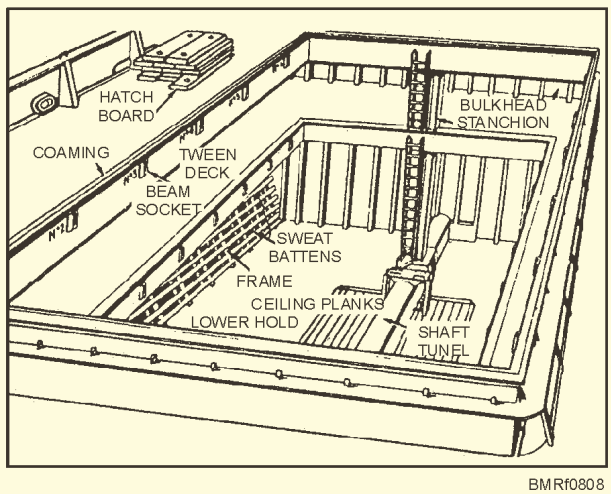



**Figure 8-8.—Cargo hatch and hold.**

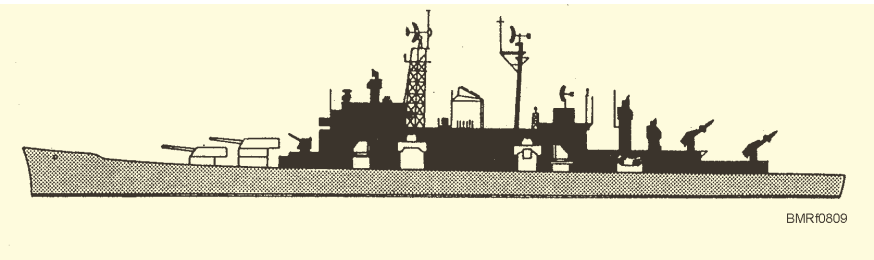



**Figure 8-9.—Superstructure.**

## *Student Notes:*

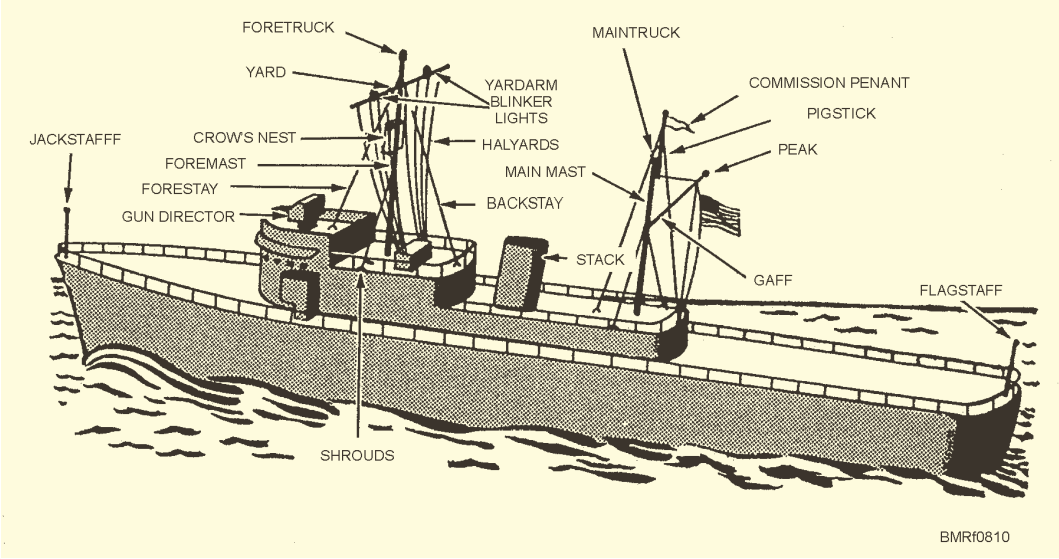



**Figure 8-10.—Top hamper.**

Masts are used to support radio and radar antennas, signal halyards (lines used for hoisting signal flags signal lights, and booms). Stays and shrouds, together with other wires used for similar purposes on stacks, masts, and so on, are known as the ship's *standing rigging*. Lines or wires used for hoisting, lowering, or controlling booms, boats, and so on, are known as *running rigging*.

Look at figure 8-10. The top of a mast is called the *truck*. A small sheave (a pulley, pronounced *shiv*) at the truck is used to run halyard lines for hoisting. The top of the foremast is the *foretruck*, and the top of the main- mast is the *main truck*. Commissioned ships of the U.S. Navy fly a commission pennant secured to a pigstick and hoisted to the truck. Ships that have radar antennas at the top of their masts fly the commission pennant from a sheave fixed in the highest convenient location.

Most foremasts have a light spar, called a *yard*, and mounted horizontally athwartships on their upper part. The port and starboard halves of a yard are the port and starboard *yardarms*. The yardarms carry a number of sheaves for signal halyards. Also, yardarms usually carry a set (two) of blinker lights, used (by means of a telegraph key) for signaling. The *gaff* is a light spar suspended at an angle abaft the upper part of the mainmast. The upper end of the gaff is the *peak*. The national ensign is flown at the peak while a ship is under way. When a ship is anchored or moored, the national ensign flies from the *flagstaff* at the stern, and the union jack flies from the *jackstaff* at the bow.

The *bridge*, from which the ship is controlled while under way, is located in the superstructure. The bridge contains the primary equipment used by the bridge watch personnel to control (*conn)* the movement of the ship: *helm* (steering control), *lee helm* (speed control), and *radar repeaters*. Ships also have a secondary conning station from which control can be maintained if the bridge is put out of commission. Some larger classes of ships have, in addition to the navigation bridge (conn), a *flag bridge* for the use of the squadron commander or admiral and staff.

The *signal bridge* (where Signalmen operate the signal lights, flags, and pennants) is normally located atop the bridge. On aircraft carriers, the signal bridge is abaft and usually one deck above the navigation bridge. Outboard, open ends of a bridge are called *bridge wings*. Located near the bridge is the *chart house*, where charts (maps) are stowed and worked on by the Quartermaster. Also nearby (on some ships) is the *combat information center* (CIC) manned by operations and combat systems department personnel.

***Student Notes:***

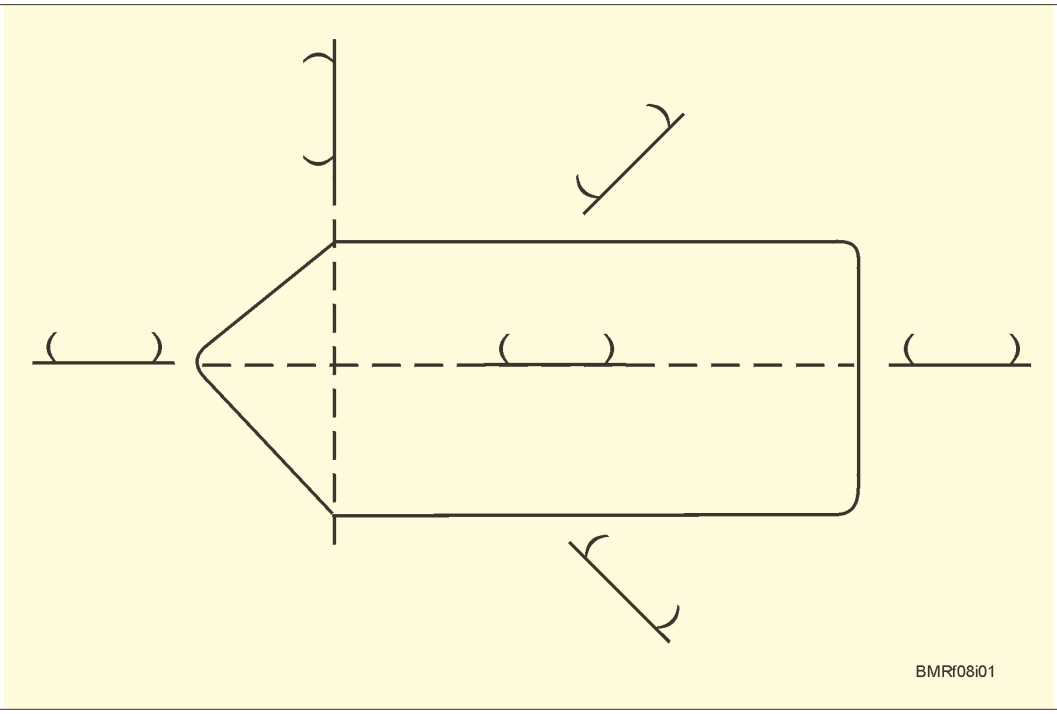
*Main control* is the station where the engineer officer controls the engineering functions of a ship. Main control is normally located below the main deck inboiler or mhinery spaces.

Each type of ship uses its superstructure spaces differently; hence, only generalities can be made to describe them. Some of the spaces that may be found in the superstructures, in addition to the bridges, include administration and personnel offices, officers staterooms (berthing spaces), CPO quarters, a helicopter hangar, and radar and other electronic equipment rooms.

## REVIEW 1 QUESTIONS

Q1. Label the following ship's parts.

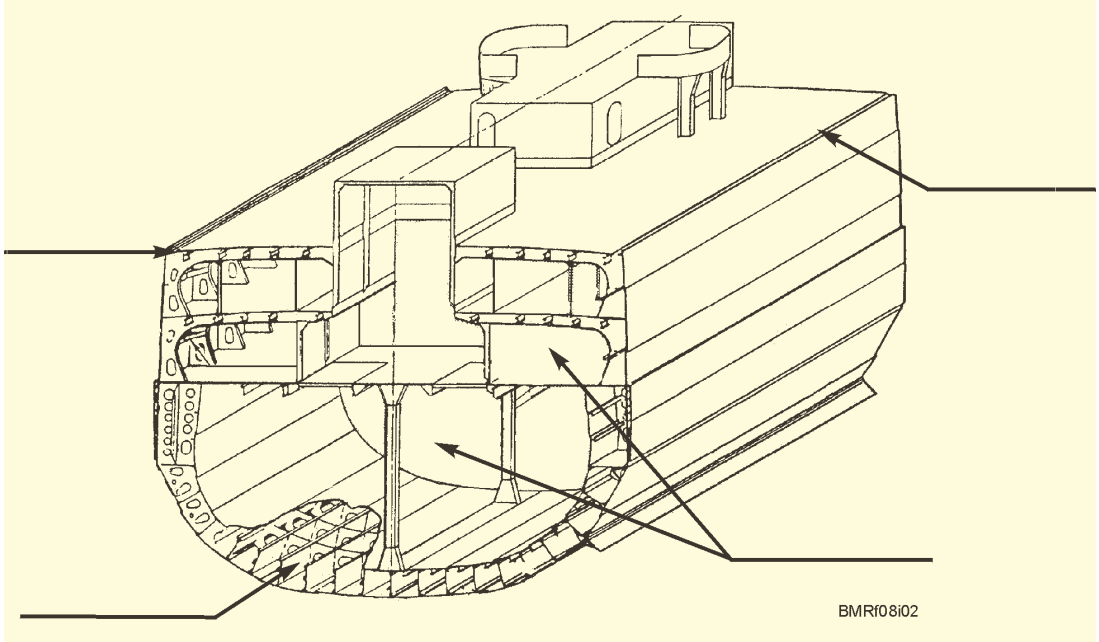
a. Bow
b. Beam
c. Stern
d. Centerline
e. Port
f. Starboard




***Student Notes:***

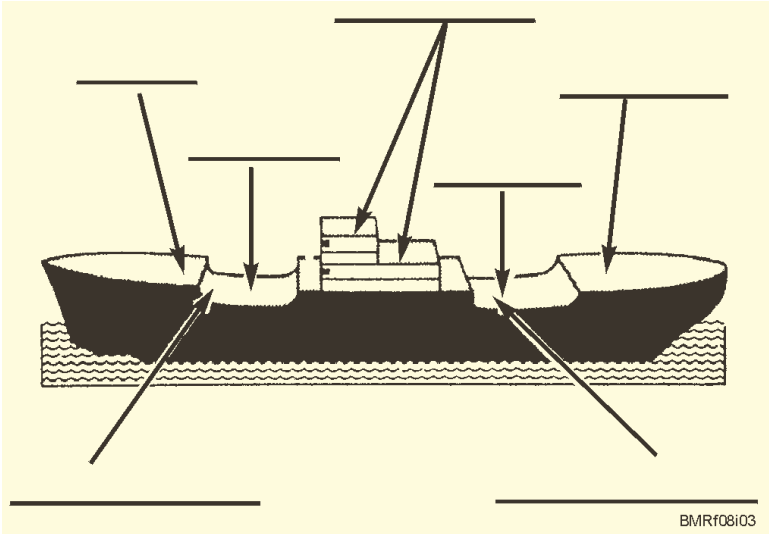
Q2. Lable the following areas of a ship.

a. Bulkheads
b. Gunwale
d. Longitudinals
e. Stanchion



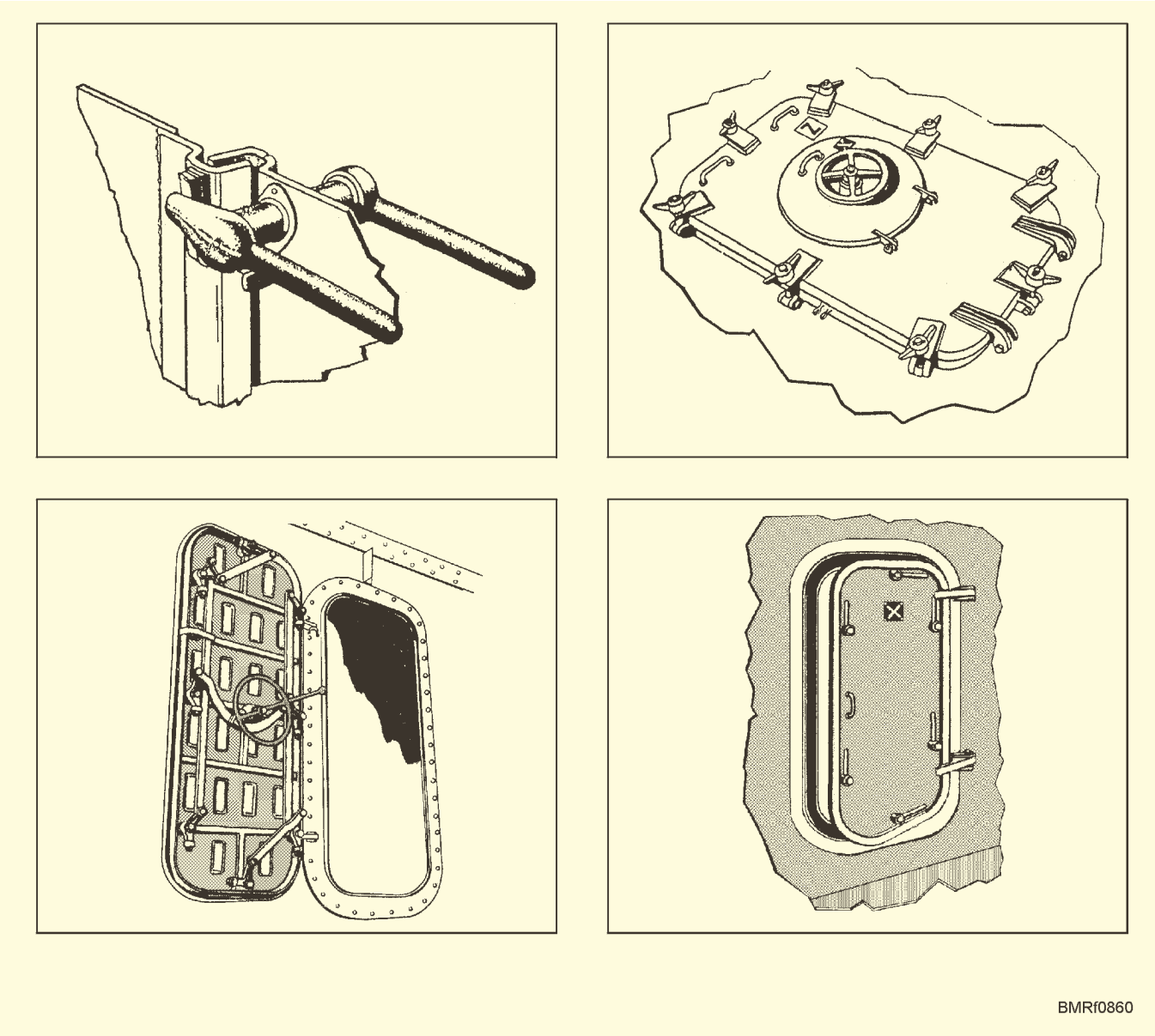

Q3. Label the following areas of a ship.

a. Forecastle
b. Poop deck
c. Main deck
d. Well decks
e. Superstructure decks
f. Upper deck




***Student Notes:***

Q4. Label the following doors/hatches.




***Student Notes:***

## COMPARTMENT DESIGNATION/DECK NUMBERING SYSTEM

**Learning Objectives:** When you finish this chapter, you will be able to—

- Recall compartment designations.
- Recall deck lettering and numbering systems.

Every space in a ship (except minor spaces, such as pea coat lockers, linen lockers, and cleaning gear lockers) is assigned an identifying letter and number symbol. This symbol is marked on a label plate secured to the door, hatch, or bulkhead of the compartment. Compartments on the port side end in an even number and those on the starboard side end in an odd number (fig. 8-11). A zero precedes the deck number for all levels above the main deck. Figure 8-12 shows the system of numbering decks.

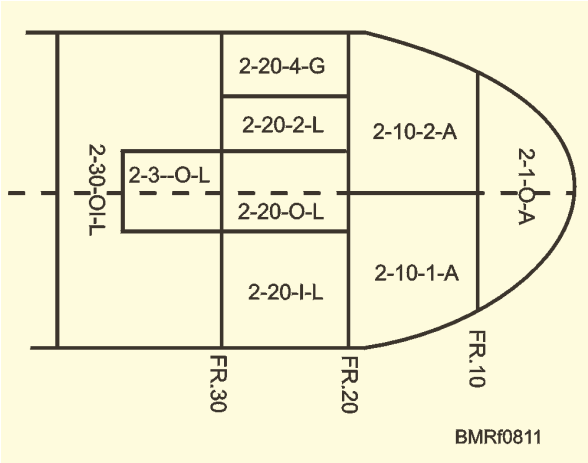



**Figure 8-11.—Compartment designations.**

Ship's compartment designations consist of a deck number, a frame number, the relationship of the compartment to the centerline, and a letter showing the use of the space. Where a compartment extends through two or more decks, the number of the lower deck is used. The frame number indicates the foremost bulkhead of the compartment. If the forward boundary is between frames, the frame number farthest forward within the compartment is used.

Compartments located on the centerline carry the number 0. Compartments to starboard are given odd numbers, and compartments to port are given even numbers. Where two or more compartments have the same deck and frame number, they have consecutively higher odd or even numbers, as applicable, numbering from the centerline outboard. For example, the first compartment to starboard is 1, the second is 3, and so on. To port of the centerline, they are numbered 2, 4, and so on. When the centerline passes through more than one compartment with the same frame number, the compartment having the forward bulkhead through which the centerline passes carries the number 0. Compartments above the main deck are numbered 01, 02, 03, as applicable, shown in figure 8-12.

The last part of the compartment number is the letter that identifies the primary use of the compartment. On dry and liquid cargo ships, a double letter is used for cargo holds to differentiate them from spaces containing the same commodity for use by the ship (for example, fuel oil). Compartment usage in the present system is shown in table 8-1.

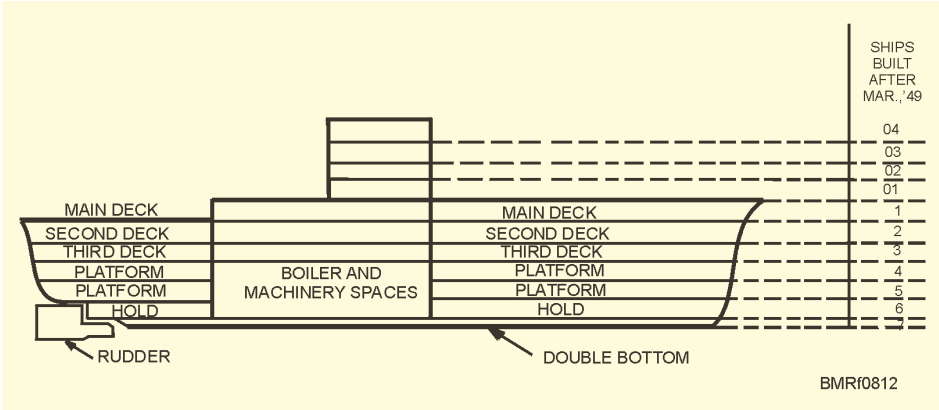



**Figure 8-12.—Deck numbering system.**

## *Student Notes:*

**Table 8-1.—Compartment Letters for Ships**

| Letter | Type of Compartment | Examples |
|---|---|---|
| **A** | Stowage spaces | Store and issue rooms; refrigerated compartments |
| **AA** | Cargo holds | Cargo holds and cargo refrigerated compartments |
| **C** | Control centers for ship and fire-control operations (normally manned) | CIC; plotting rooms; communications centers; pilothouse; electronic equipment operating spaces; IC rooms |
| **E** | Engineering control centers (normally manned) | Main machinery spaces; evaporator rooms; steering gear rooms; pump rooms; auxiliary machinery spaces; emergency generator rooms |
| **F** | Oil stowage compartments (for ship use) | Fuel- , diesel- , and lubricating-oil compartments |
| **FF** | Oil stowage compartments (cargo) | Compartments carrying various types of oil as cargo |
| **G** | Gasoline stowage compartments (ship use) | Gasoline tanks, cofferdams, trunks, and pump rooms |
| **GG** | Gasoline stowage compartments (cargo) | Spaces for carrying gasoline as cargo |
| **J** | JP-5 fuel (ship use) | Jet fuel stowage spaces |
| **JJ** | JP-5 fuel (cargo) | Spaces for carrying JP-5 fuel as cargo |
| **K** | Chemicals and dangerous materials (other than oil and gasoline) | Chemicals, semisafe materials, and dangerous materials carried as cargo or for ship's use |
| **L** | Living spaces | Berthing and messing spaces; staterooms; washrooms; heads; brig; sick bay; and passageways |
| **M** | Ammunition spaces | Magazines; handling rooms; turrets; gun mounts; shell rooms; ready service rooms |
| **Q** | Miscellaneous spaces not covered by other letters | Laundry; galley; pantries; wiring trunks; unmanned engineering; electrical and electronic spaces; shops; offices |
| **T** | Vertical access trunks | Escape trunks |
| **V** | Voids | Cofferdam spaces (other than gasoline); void wing compartments |
| **W** | Water stowage spaces | Drainage tanks; freshwater tanks; reserve feedwater tanks |

***Student Notes:***

The following is an example of compartment designation for a ship:

**Number 2-175-7-A**

Second deck……2

Frame Number……175

Fourth compartment to starboard
from the centerline……7

Compartment usage (stowage)……A

Access closures are numbered in the same manner as compartments, except that the letter designating usage is omitted.

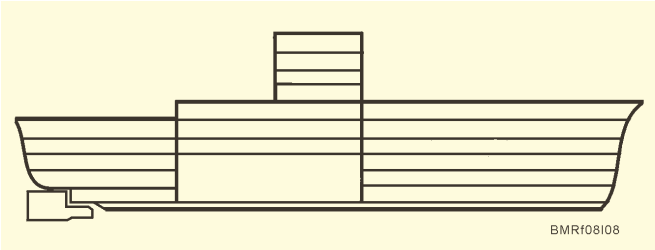
**REVIEW 2 QUESTIONS**

Q1. Identify the following compartment designation number:

01-56-2-Q

Q2. Label the following areas on the ship.

a. 04
b. Main deck
c. Third deck
d. Platform
e. Machinery space




## SHIP IDENTIFICATION

**Learning Objectives**: When you finish this chapter, you will be able to—

- Identify major types of ships to include their size, armament, armor, speed, class, and category.
- Identify types of warships to include aircraft carriers, surface combatants, submarines, and other types of combatants.
- Identify auxiliary types of ships to include replenishment-at-sea ships, material support ships, and fleet support ships.
- Identify the purpose and use of combatant craft.
- Identify the purpose and use of support craft.

Name and designation identify each Navy ship. In the name USS *Kitty Hawk* (CV-63), for example, USS means United States ship; CV is the designation—it indicates this type of ship is a multipurpose aircraft carrier. The ship's identifying or hull number is a general indication of the number of ships of the same type that have been built. (There are gaps in the sequence of numbers of most types because of the cancellation of shipbuilding orders, particularly at the end of World War II.) A ship's hull number never changes unless its designation also changes and not always then.

**NOTE**

Official designations for various types of ships are contained in appendix III, titled Ship's Classification.

### TERMS USED IN SHIP IDENTIFICATION

The terms you will learn in this chapter will help you identify ships. Some of the terms you will learn are ship's size, armament, speed, class, and categories.

***Student Notes:***

*Ship size*. The size of a ship usually is given in terms of its displacement in long tons. Displacement means the weight of the volume of water that the ship displaces when afloat; in other words, the weight of a ship by itself. The Navy uses standard displacement, which is the weight of a ship when ready for sea. All weights given in this chapter are standard displacements, except where otherwise noted. Cargo ships usually are measured in light displacement (no cargo aboard) because of the wide difference in the weights of cargo carried.

*Ship armament*. Armament describes the offensive weapons a ship carries—guns, rockets, guided missiles, and planes.

*Ship armor*. Armor means protective armor—special steel installed along the sides of the ship, on a deck, and on some gun mounts and turrets.

*Ship speed*. The speed of a ship is stated in knots. A knot is 1 nautical mile per hour (mph) or about 1 1/8 statute miles per hour. When a ship goes 20 nautical miles an hour, its speed is said to be 20 knots (but never 20 knots per hour). A land (or statute) mile is 5,280 feet. A nautical mile is about 6,080 feet, or roughly 2,000 yards. A ship traveling at 20 knots is, therefore, traveling at the rate of about 23 mph.

*Ship class*. Ships are said to be of a particular class. Do not confuse this characteristic with type, which is shown by a ship's designation. The *Forrestal*, for example, was the first of several aircraft carriers of the same general advanced type and configuration to be completed. The next three carriers completed after the *Forrestal* are of the Forrestal class; however, later CVs or CVNs (nuclear-powered carriers) of other types are different classes (such as the Kitty Hawk class, Nimitz class, and so forth).

*Ship categories*. Ships of the U.S. Navy are divided into four categories that include combatant ships, auxiliary ships, combatant craft, and support craft.

**REVIEW 3 QUESTIONS**

Q1. How is the size of a ship usually given?

Q2. What is meant by a ship's armor?

Q3. What term is used to indicate the speed of a ship?

## SHIPS CATEGORIES

Ships of the U.S. Navy are divided into four categories:

- Combatant ships
- Auxiliary ships
- Combatant craft
- Support craft.

### Combatant Ships

Depending on size and type, combatant ships may have missions other than simply "slugging it out" with an enemy ship. Combatant ships are of two types—warships and other combatants.

**WARSHIPS**.—Most warships are built primarily to attack an enemy with gunfire, missiles, or other weapons. There are exceptions, however, that you will see as we go along. The following types of ships are included in the warship category:

- Aircraft carriers
- Battleships
- Cruisers
- Destroyers
- Frigates
- Submarines

***Student Notes:***

**Aircraft Carriers**.—There are three types of aircraft carriers—

1. Multipurpose aircraft carriers (CVs)
2. Multipurpose aircraft carriers (nuclear propulsion) (CVNs)
3. Training carriers

The job of the CV or CVN is to carry, launch, retrieve, and handle combat aircraft quickly and effectively. The aircraft carrier can approach the enemy at high speed, launch planes for the attack, and recover them. The attack carrier is an excellent long-range offensive weapon and is the center of the modern naval task force or task group. Figure 8-13 shows the USS Nimitz, and figure 8-14 shows aircraft flying over the USS Enterprise.

The displacement and aircraft capacity of the older CVs is less than the newer nuclear-powered CVNs. The older Forrestal class CVs displace about 79,000 tons and embark about 75 aircraft. The larger Nimitz class displaces about 96,000 tons and embarks about 85 aircraft. There is also a big difference in ships company and air wing complement (personnel assigned). The Forrestal class has about 5,400 personnel assigned, while the Nimitz class has about 5,700. Most carriers have the following equipment/capabilities:

- Angled flight decks
- Steam catapults
- Ability to launch and recover planes simultaneously
- Large hangar deck for plane stowage
- Deck-edge elevators to move aircraft rapidly between the hangars and flight decks
- Extensive repair shops and storerooms
- Fast-fueling equipment

**Figure 8-13.—USS *Nimitz* (CVN 68).**

***Student Notes:***

*Photograph courtesy of LT Brian Douglas*

**Figure 8-14.—Various aircraft from Carrier Wing Three fly over the USS *Enterprise* (CVN 65).**

The emphasis is on speed (all carriers can do over 30 knots), endurance, and sea-keeping ability (ability to stay at sea for long periods under all conditions), plane-carrying capacity, and maintenance capability.

**Battleships**.—The battleships have been decommissioned. However, they could be reactivated. Battleships participated in few surface engagements in World War II, but with their large number of antiaircraft guns, they proved to be excellent support ships in carrier task forces. Another major role was that of providing gunfire support of amphibious landings in both the Pacific and European theaters. Only their large-caliber guns could knock out heavily reinforced gun emplacements. They also provided gunfire support in the Korean conflict.

Several battleships (BBs) were modernized to include additional armament such as Tomahawk and Harpoon missile systems or the Phalanx close-in weapons system (CIWS). Battleships were given state names. However, since there is little likelihood of our building any more battleships, state names are being given to cruisers like the USS *South Carolina* (CGN 37) and to submarines (SSBNs) like the USS *Ohio* (SSBN 726) and USS *Michigan* (SSBN 727).

**Cruisers**.—Cruisers are medium-sized, general-utility ships. They have a large cruising range and are capable of high speeds (over 30 knots). They serve as protective screens against surface and air attacks and also provide gunfire support for land operations. The two basic types of cruisers are the guided-missile cruiser (CG) and guided-missile cruiser (nuclear propulsion) (CGN). Cruisers displace about 10,000 tons. The CGs include cruisers with missiles, but some of these also have guns that are 5"/54 caliber. CGNs are the same as the CGs except that their main engines are nuclear-powered. Figures 8-15 and 8-16 show two cruisers.

***Student Notes:***

*Photograph courtesy of PH3 Jason D. Malcom*

**Figure 8-15.—USS *Philippine Sea* (CG 58) comes alongside USS *Enterprise during an under way replenishment.***

*Photograph courtesy of PH3 Christopher Mobley*

**Figure 8-16.—USS *Port Royal* (CG-73).**

The *Ticonderoga* (CG 47) class cruisers are built on the *Spruance* (DD 963) hull. Modern U.S. Navy guided-missile cruisers perform primarily a battle force role. These ships (fig. 8-16) are multimission surface combatants capable of supporting carrier battle groups, amphibious forces, operating independently, and as flagships of surface action groups. Because of their extensive combat capability, these ships have been designated as battle force capable.

**Destroyers**.—Destroyers (DDs) and guided-missiles destroyers (DDGs) are multipurpose ships that are useful in almost any kind of naval operation. They are fast ships with a variety of armaments, but little or no armor. For protection, they depend on their speed and mobility. Their displacement varies from 2,425 tons to 7,800 tons.

The principal mission of destroyers is to operate offensively and defensively against submarines and surface ships and to take defensive action against air attacks. They also provide gunfire support for amphibious assaults and perform patrol, search, and rescue missions.

The destroyers armament consists of 5-inch guns and a variety of antisubmarine weapons, such as torpedoes, ASROCs, and surface-to-air missiles.

Traditionally, destroyers have been named after Secretaries of the Navy and officers and enlisted personnel of the Navy and Marine Corps.

Destroyers make up the Navy's largest group of similar types of ships. Only a few are mentioned so you will have some idea of the several types and classes.

**Spruance class destroyers**. The Spruance (fig. 8-17) class destroyers displace 7,800 tons fully loaded. Each of these ships has two 5"/54-caliber guns, one Seasparrow missile launcher, one ASROC launcher, and two Mk 32 triple-torpedo tubes. They also have full helicopter facilities to accommodate the SH-2H or SH-60B helicopter, and the larger Sea King SH-3 helicopter. The Spruance class destroyers are the first large U.S. warships to use gas-turbine propulsion. This propulsion system was selected because of its smaller space requirements, rapid replacement capability, and cold start capability. (The engines can go from "cold iron" to full power in 12 minutes.)

**Kidd class guided-missile destroyers**. The Kidd class guided-missile destroyers are designed around the Spruance hull and engineering plant. Armament includes two Mk 26 Tartar/ASROC launchers; two Quad Harpoon canisters; two Mk 45, 5"/54-caliber gun mounts; and two Vulcan/Phalanx CIWSs. There are facilities for two SH-2 LAMPS or one LAMPS III. Displacement of these ships is 8,500 tons and propulsion is gas turbine.

**Arleigh Burke class destroyers**. The DDGs of the Arleigh Burke class (fig. 8-18 and fig. 8-19) are the most

*Photograph courtesy of PH1 James Slaughenhaupt*

**Figure 8-17.—Spruance class destroyer, USS *Moosebrugger* (DD 980).**

## *Student Notes:*

**Figure 8-18.—Guided-missile destroyer USS *The Sullivans* (DDG 68).**

**Figure 8-19.—USS *Hopper* (DDG 70).**

powerful and survivable class of destroyers ever put to sea. They possess the following capabilities:

- AEGIS weapons system with the AN/SPY-1D multi-function radar, capable of detecting and tracking over one hundred targets simultaneously, while conducting multiple engagements
- The vertical launching system, capable of storing and rapidly firing 90 missiles
- The SQQ-89 antisubmarine warfare system with its SQR-19 towed array sonar and the SQS-53C digital hull-mounted sonar
- The Harpoon antiship cruise missile system
- The Tomahawk antiship and land attack cruise missile system, capable of hitting targets hundreds of miles away
- Improved versions of the 5-inch gun and the Phalanx close-in weapons system.

The Arleigh Burke class represents a return to all-steel construction and incorporates electromagnetic pulse hardening, enhanced firefighting features, and a collective protection system to provide protection against nuclear, chemical, or biological contamination. This vital equipment is distributed through the ship, giving the ship improved blast and fragmentation protection, which lets them to survive a hit and continue to fight.

**Frigates**.—The classification "frigate" designates ships used for open-ocean escort and patrol. Frigates resemble destroyers in appearance, but they are slower, have only a single screw, and carry less armament. Frigates are slowly being replaced by DDGs. The Oliver Hazard Perry class is the only class of guided-missile frigates still commissioned. The USS *Ingraham* (FFG 61) (fig. 8-20) carries the following armament:

- A single 76-mm, .62-caliber
- Dual-purpose gun
- A 20-mm Vulcan/Phalanx rapid-fire gun
- A single launcher for Harpoon missiles
- Two SH-60 LAMPS III helicopters
- Two Mk 46 triple-torpedo tubes

**Submarines**.—The Navy deploys two classes of submarines attack submarines (SSNs) and ballistic missile submarines (SSBNs). The mission of nuclear attack submarines (SSNs) is to locate and destroy enemy ships and submarines. They also act as scouts, deliver supplies and personnel to locations in enemy territory, and perform rescue missions.

Fleet ballistic missile submarines (SSBNs) deliver ballistic missile attacks against assigned targets from either a submerged or surfaced condition. Most of the SSBNs are being converted to carry Trident missiles, which have greater range and multiple warheads.

A new class of submarine, the Ohio class (fig. 8-21), has been developed for the Trident missile. The Ohio class is the largest undersea craft developed by the Navy. It displaces 16,600 to 18,700 tons. The size of the Trident submarine is dictated by the larger size missile required for ranges of 4,000 to 6,000 miles and by the larger reactor plant required to drive the ship. The submarine has 24 tubes for the Trident missile and 4 torpedo tubes located in the bow.

A nuclear-powered attack submarine, like that of the Sturgeon class, displaces 3,800 to 4,700 tons, can do more than 20 knots, and has four torpedo tubes. The newer Seawolf class fast-attack submarine displaces about 9,137 tons, has four torpedo tubes, and can attain speeds of over 35 knots (fig. 8-22). The Seawolf performs a variety of crucial assignments, from underneath the Arctic icepack to all regions anywhere in the world. Its missions include surveillance, intelligence collection, special warfare, covert cruise-missile strike, mine warfare, and anti-submarine and anti-surface ship warfare. The Seawolf's stealth characteristics make it the world's quietest submarine.

Early submarines were named after marine life. The first SSBNs, however, were given names of persons well known in American history, like USS *George Washington*, USS *Patrick Henry*, and USS *Lafayette*. The new fast-attack submarines (SSNs) are named after American cities, like the USS *Los Angeles*, USS *Albuquerque*, and USS *Memphis*. The Tridents (SSBNs) are being named after American states, like the USS *Ohio* and USS *Michigan*.

***Student Notes:***

**Figure 8-20.—USS *Ingraham* (FFG 61).**

*Photograph courtesy of PH3 Erik Kenny*

**Figure 8-21.—USS *Maryland* (SSBN 773).**

**Figure 8-22.—USS *Seawolf* (SSN 21).**

**OTHER COMBATANTS**.—Other ships classified as combatants are amphibious warfare ships and mine warfare ships.

**Amphibious warfare ships**.—An amphibious assault operation is the fastest means of landing large numbers of personnel, equipment, and supplies on enemy-held territory. The lessons learned during World War II, Korea, and Vietnam have resulted in the U.S. Navy having the largest and most capable amphibious force in the world. With the introduction of new classes of ships and new types of landing craft and helicopters, the U.S. Navy can conduct an amphibious operation almost anywhere in the world.

**Amphibious assault ships**. Tarawa-class amphibious assault ships (LHAs) are able to embark, deploy, and land a marine battalion landing team by helicopter, landing craft, amphibious vehicle, or by a combination of these methods. The Tarawa-class ships have 9 *Sea Stallions* and 12 *Sea Knight* helicopters plus 6 *Harrier* attack planes. It also carries 2 RAM launchers, two 5”/54 caliber Mk-45 lightweight guns, two *Phalanx* 20mm CTWS mounts and six 25mm Mk 38 machine guns. The USS *Belleau Wood* (LHA 3) (fig 8-23) and the USS *Peleliu* (LHA 45) (fig. 8-24) are examples of amphibious assault ships.

The Wasp-class LHDs are designed to embark, transport, and land 2,000 troops and their equipment using transport helicopters in conjunction with a beach assault. The Wasp-class ships are the largest amphibious ships in the world (fig. 8-25). Their vertical envelopment is more effective than older methods of amphibious landings. One feature of this class of ships is the ability to commit the landing force in an assault without being limited to favorable beaches. These ships allow establishment of beachheads in enemy territory more quickly than older methods. When not in used for amphibious assaults, LHDs have the capability to assist in antisubmarine warfare.

**Amphibious transport dock.** Amphibious transport docks (LPDs) are versatile ships. They perform the mission of amphibious transports, amphibious cargo ships, and older LSDs. The Navy’s newest class of ships are scheduled to replace the Navy’s amphibious fleet. The LPD (fig. 8-26) is a highly reliable, warfare-capable ship, as well as the most survivable amphibious ship ever put to sea. The LPD incorporates the latest quality of life standards for the embarked Marines and Sailors—they accommodate women as part of the crew and embarked troops.

***Student Notes:***

*Photograph courtesy of PHC Justin A. Kahkosoko*

**Figure 8-23.—USS *Belleau Wood* (LHA-3) refuels USS *Vincennes* (CG 49) during an under way replenishment.**

*Photograph courtesy of PHC Larry Nixon*

**Figure 8-24.—Landing craft, utility (LCU-1663) back loads equipment and personnel to USS *Peleliu* (LHA 45).**

*Photograph courtesy of JO2(SW/AW) Tyler A. Swartz*

**Figure 8-25.—USS *Bonhomme Richard* (LHD 6).**

*Photograph courtesy of PH2 Felix Garza*

**Figure 8-26.—USS *Duluth* (LPD 6).**

*Photograph courtesy of PH2 Todd R. Cromer.*

**Figure 8-27.—USS *Comstock* (LSD 45).**

**Dock landing ships.** Dock landing ships (LSDs) (fig. 8-27) were designed to transport and launch a variety of amphibious craft and vehicles with embarked crews and troops. All landing craft operate from a well deck that is over 300 feet long and 50 feet wide. The types of amphibious craft vary from the newer LCAC (landing craft air cushion) (fig. 8-28) to the conventional LCU (landing craft utility) or LCM (landing craft mechanized). The number of amphibious craft embarked will vary, depending on the type of craft and class of ship.

The newer class of LSD is capable of transporting and operating four LCACs while the older classes may embark only three. A newer variant of the LSD will be designed to handle only two LCACs but will have a

***Student Notes:***

*Photograph courtesy of SGT Don L. Mayes*

**Figure 8-28.—Landing craft air cushion (LCAC).**

larger cargo capacity. These ships also have a helicopter platform over the well deck that allows them to conduct limited helicopter operations.

**Tank landing ships**. Tank landing ships (LSTs) (fig. 8-29) were developed during World War II. The Navy required a ship capable of transporting troops, tanks, ammunition, and all sorts of supplies. The LSTs of today's fleet are fitted with bow doors and a bow ramp that give access to the tank deck. Another ramp and turntable in the tank deck enable vehicles to turn around and reach the main deck under their own power. They also have a stern gate that permits off-loading of amphibious vehicles directly into the water. In addition to transporting and landing equipment in amphibious assaults, these ships can transport and launch a pontoon causeway section in support of amphibious operations. With booms and winches mounted on the main deck forward, this class of ship is capable of numerous missions. They carry one 20mm *Phalanx* and two 25mm Mk3 machine guns.

**Amphibious command ships**. Amphibious command ships (LCCs) (fig. 8-30) provide amphibious command and control for major amphibious operations.

**Figure 8-29.—USS *LA Moure County* (LST 1194).**

*Photograph courtesy of PH2 John Sokolowski*

**Figure 8-30.—USS *Mount Whitney* (LCC-20).**

With the latest command and control facilities available, these ships have become fleet flagships. They are capable of supporting a naval amphibious task force, a landing force, and an air force simultaneously.

**Mine Warfare Ships**.—Mine countermeasures ships (MCM) are ships designed to clear mines from vital waterways. In the early 1980s, the U.S. Navy began development of a new mine countermeasures (MCM) force, which included two new classes of ships and minesweeping helicopters. The Iran-Iraq war and Operation Desert Shield/Desert Storm showed the importance of a state-of-the-art mine countermeasures force when the *Avenger* (MCM 1) and *Guardian* (MCM 5) ships conducted MCM operations.

Avenger class ships are designed as mine hunter-killers capable of finding, classifying, and destroying moored and bottom mines. These ships use sonar and video systems, cable cutters, and a mine-detonating device that can be released and detonated by remote control. They are also capable of conventional sweeping measures. The ships are of fiberglass sheathed, wooden hull construction. They are the first large mine countermeasures ships built in the United States in nearly 27 years. (See fig. 8-31.)

**Figure 8-31.—USS *Chief*.**

## *Student Notes:*

*Osprey* (MHC 51) class ships are also designed as mine hunter-killers. The MHC 51 has a 15-day endurance and depends on a support ship or shore-based facilities for resupply. Ships under this class are named after birds.

**REVIEW 4 QUESTIONS**

Q1. List the four categories of ships.

a.

b.

c.

d.

Q2. List the six classes of warships.

a.

b.

c.

d.

e.

f.

Q3. What are battleships names after?

Q4. Name the two basic classes of cruisers.

a.

b.

Q5. For protection, the destroyer depends on their

_____ and _____.

Q6. What class of ship was developed for the purpose of open ocean escort and patrol?

Q7. Name the two classes of submarines.

a.

b.

Q8. What class of ship is used to land large numbers of personnel, equipment, and supplies on enemy held territory?

**Auxiliary Ships**

Today's fleet is highly mobile and can respond to an area of conflict quickly. However, its ships cannot remain on station indefinitely. There must be a means of resupply and repair. The auxiliary ships of today's fleet are the lifeline to the combatant force. These ships keep the fleet operating by furnishing vital supplies and repair facilities. They can deliver such items as fuel, food, ammunition, and repair parts.

The types of ships in the auxiliary force range from fast combat support ships (AOEs) to rescue and salvage ships (ARSs). The type of service an auxiliary provides determines its classification. The initial letter in each designation is the letter *A*. The second and subsequent letter indicates the service it performs. An *AE* indicates an ammunition (explosives) supply ship, while an *AO* is an oiler. These types of ships do not always receive the level of publicity a carrier or cruiser might receive, but they fight and work just as hard in times of emergency. Certain classes of auxiliaries have the capability to function in many roles. An AOE is capable of supplying not only fuel and ammunition but can supply dry stores and refrigerated stores.

***Student Notes:***

**REPLENISHMENT-AT-SEA SHIPS.—** *Replenishment* at *sea* is the term applied to the transfer of fuel, munitions, supplies, and personnel from one vessel to another while ships are under way. During World War II, replenishment at sea (fig. 8-32) was developed to a fine art of seamanship, which is taken as a matter of course today.

Replenishment at sea is accomplished with both the replenishment ship and the ship(s) being replenished steaming side by side on parallel courses at a

**Figure 8-32.—Replenishment at sea enables the fleet to remain at sea and make successive strikes without returning to base for fuel, ammunition, and supplies.**

***Student Notes:***

predetermined speed. In most cases, the replenishment ship maintains its course and speed while the other ship(s) maneuver(s) into position alongside. A separation of about 100 feet is maintained between ships, with the replenishing ship frequently serving ships both to port and starboard. Messenger lines are passed to the receiving ships, which send back telephone and distance measuring lines and then haul over cargo-handling gear or fuel hoses by means of the messengers.

Ships designed for that purpose do most of the replenishment, but major combatant ships are capable of refueling smaller ships. Even the smallest ships can, and do, transfer light freight, mail, and personnel by means of highlines.

In addition to the standard replenishment capabilities, all recently constructed, as well as many of the older auxiliary, ships have helicopter platforms for the transfer of munitions, personnel, cargo, and stores by vertical replenishment. Vertical replenishment permits a receiving ship to remain on station in combat formation, eliminating the necessity of temporarily immobilizing itself by going alongside another ship for replenishment.

**Ammunition Ships**.—Ammunition ships (AEs) (fig. 8-33) operate with replenishment groups to deliver ammunition and missiles to the fleet at sea. Their design incorporates a mechanical handling system for more rapid loading and off-loading of ammunition. The mechanical handling system includes such equipment as dual-cantilevered elevators in the holds; forklift trucks; and low-lift, power-operated transporters on the main deck for handling palletized ammunition from the elevators to the transfer stations. Universal portable metal dunnage provides maximum stowage with ready access to all types of ammunition. A tension highline system is built into the design along with new, improved electro-hydraulic cargo winches for replenishment at sea. These improvements provide for much more rapid and reliable transfers and conservation of deck space. These ships are capable of handling all types of missiles (fig. 8-34).

**Oilers and Tankers**.—Oilers (AOs), carrying Navy fuel oil, jet fuel, and other petroleum products, operate with replenishment groups and deliver their cargo to ships at sea. Oilers, as well as ammunition ships (fig. 8-35), can service ships on both sides simultaneously.

The AO (Jumbo) is a conversion of the AO that includes the installation of a new midsection in the hull. This midsection increases the payload and provides for an improved balance of cargo fuel products to meet the more recent demands placed upon the AO by the increase in fleet requirements for jet aircraft fuel.

*Photograph courtesy of PH3 Jason Branson*

**Figure 8-33.—USS *John C. Stennis* (CVN 74) off-loads ammunition onto ammunition ship USS *Mount Hood* (AE 29).**

## *Student Notes:*

**Figure 8-34.—An AE highlines a missile to a guided-missile ship during replenishment at sea.**

**Fast Combat Support Ships**.—The fast combat support ship (AOE) is the largest and most powerful auxiliary ship in the Navy. Unlike other replenishment ships, the AOE is designed to operate as an integral force rather than as a unit of an underway replenishment group.

The AOE (fig. 8-36) is a multiple-product ship (missiles, fuel, ammunition, and general cargo) that has a cargo-fuel capacity greater than that of our largest fleet oilers plus a hold capacity equal to the largest ammunition ship. In addition, the ship carries a large load of both general supplies, materials, and refrigerated cargo.

Other than speed and capacity, this ship has two major areas of improvement over other replenishment vessels—material handling and replenishment at sea. Materials, other than missiles and special weapons, are moved vertically by elevators or conveyors. Horizontal movement of general cargo and ammunition is mechanized through the use of pallet transporters and forklift trucks. Cargo helicopters are available to

***Student Notes:***

**Figure 8-35.—AOE conducting an evolution.**

**Figure 8-36.—A multiple-product AOE conducting under way replenishment.**

replenish outlying units of the force with dry cargo and ammunition.

The missile and special weapons-handling system is separate from the cargo-handling system. This arrangement permits a continuous flow of missiles from the cargo holds to the missile-transfer system, port or starboard.

The fuel hoses on the AOE are designed to permit an average ship separation of 200 feet during replenishment instead of the normal 100 feet. The greater distance reduces the possibility of collision and makes increased replenishment speeds feasible. There are nine replenishment stations to port and six to starboard.

**FLEET SUPPORT SHIPS**.—While certain types of naval auxiliary ships are designed and equipped specifically for towing, for salvage, or for rescue operations, most of these types may, in an emergency and to a limited extent, perform all these operations. Among ships as versatile and as adaptable as the auxiliaries, there is bound to be an occasional overlapping of functions to meet an unexpected situation.

**Rescue and Salvage Ships**.—The mission of the rescue and salvage ship (ARS) has four parts—debeaching stranded vessels, heavy lift capability from ocean depths, towing other vessels, and manned diving operations. For rescue missions, these ships are equipped with fire monitors forward and amidships, which can deliver either fire-fighting foam or seawater. The salvage holds of these ships are outfitted with portable equipment to provide assistance to other vessels in dewatering, patching, and supplying of electrical power and other essential services required to return a disabled ship to an operating condition.

The Navy employs ARSs (fig. 8-37) to salvage U.S. government-owned ships and, when it is in the best interests of the United States, privately owned vessels. The rugged construction of these steel-hulled ships, combined with speed and endurance, make rescue and salvage ships well suited for rescue/salvage operations of Navy and commercial shipping throughout the world. The versatility of this class of ship adds to the capabilities of the U.S. Navy with regard to assisting those in need on the high seas.

*Photograph courtesy of PH1 Todd P. Cichonowicz*

**Figure 8-37.—USS *Grapple* (ARS-53).**

**Oceangoing Tugs**.—There is one major type of oceangoing tug—the ATF (fleet ocean tug) (fig. 8-38). It has a large cruising range and limited salvage capabilities. ATFs are equipped with firefighting equipment, including fire monitors. (A fire monitor is similar in appearance to a gun and permits water to be discharged through a horizontal arc of 360°.) They also are fitted with automatic towing machines and booms. In addition to hauling and towing, fleet tugs may be called on to patrol certain areas, lay smoke screens, and pull landing craft off beaches. They are often used in search and rescue (SAR) operations. Military Sealift Command (MSC) personnel now operate most fleet tugs.

*Photograph courtesy of Robert J. Sitar*

**Figure 8-38.—USNS *Powhaten* (T-ATF-166).**

***Student Notes:***

### Combatant Craft

Combatant craft include patrol craft, amphibious warfare craft, and mine warfare craft.

**Patrol craft**. Surface patrol craft are intended for use relatively near the coast or in sheltered waters or rivers. These craft may be transported aboard larger units.

**Amphibious warfare craft**. All amphibious craft that have the organic capacity for amphibious assault, principally in coastal waters. They may be transported aboard larger units.

**Mine warfare craft**. All craft with the primary function of mine warfare that operate in coastal waters. They may be transported aboard larger units.

### Support Craft

Among the hardest working ships of the Navy are the support craft. Not primarily fighting ships, they are for the most part unarmed. These are ships that serve a variety of purposes in continental and overseas harbors, sea frontiers, convoys, amphibious forces, and task forces. Many are small, but of incalculable use to the Navy.

With a few exceptions, support craft designations start with the letter *Y*. A few of the class names identify the many duties they perform:

- Auxiliary floating dry dock—large (AFDB) and small (AFDL)
- Floating crane (YD)
- Diving tender (YDT)
- Ferryboat or launch (YFB)
- Fuel oil barge (YO)
- Gasoline barge (YOG)
- Oil storage barge (YOS)
- Floating workshop (YR)
- Tug (YTL, YTM, or YTB)
- Water barge (YW)

### REVIEW 5 QUESTIONS

Q1. What is the term used to describe the transfer of fuel and supplies between ships while underway?

Q2. Ships usually maintain a distance of _____ feet while taking on supplies at sea.

Q3. What type of replenishment allows a receiving ship to stay on station in combat formation?

Q4. What class of ship is the largest and most powerful auxiliary ship?

Q5. The mission of the rescue, salvage, and towing ships is to—

Q6. Support craft designators usually start with what letter?

## NAVAL AIRCRAFT

**Learning Objective:** When you finish this chapter, you will be able to—

- Recognize fixed-wing and rotary-wing aircraft, to include aircraft nomenclature and characteristics.

The history of naval aviation goes back to 1911 when the Navy acquired its first aircraft, a pusher-type biplane with no cockpit. The only covered surfaces were the wings and tail, and flight speed was less than

***Student Notes:***

50 mph. By contrast, today's high-performance planes have speeds in excess of 2,000 mph.

## AIRCRAFT NOMENCLATURE

In this section, you will learn the basic parts of aircraft and how the Navy identifies aircraft.

### Fixed-Wing Aircraft Nomenclature

A fixed-wing aircraft (fig. 8-39) may be divided into three basic parts—fuselage, wings, and empennage (tail).

**FUSELAGE**.—The fuselage is the main body of the aircraft, containing the cockpit and, if there is one, the cabin. On virtually all naval fighter and attack aircraft operational today, the engines and some of the fuel tanks are mounted within the fuselage.

**WINGS**.—Wings are the primary lifting devices of an aircraft, although some lift is derived from the fuselage and tail. Located on the trailing (rear) edge of the wings are flaps that may be used to give extra lift on takeoff or to slow the aircraft in flight or landings; ailerons that control the roll or bank of the aircraft; and trim tabs used to aerodynamically unload the control surfaces to relieve some of the pilot's work. On the leading (front) edge of the wing may be found auxiliary lifting devices, resembling flaps, which are used to increase camber (curvature) of the wing for added lift on takeoff. Most Navy jet aircraft carry their bomb loads on pylons (called *stations*) under the wings and, in some cases, under the fuselage. Some jets have missile stations on the sides of the fuselage. Fuel cells are located in the wings; additional external tanks can be fitted for extra range. Larger jets may have their engines slung beneath the wings in pods. Some low-wing aircraft have their main landing gear retract into the wings, while the nose wheel retracts into the fuselage. On most high-wing aircraft all gear retracts into the fuselage.

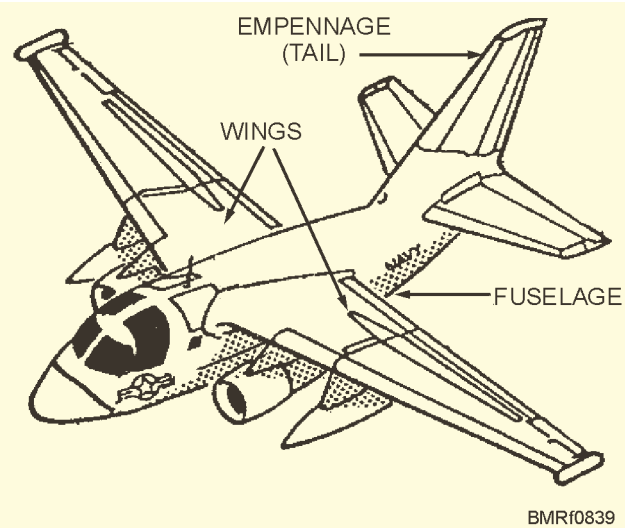



**Figure 8-39. Fixed-wing aircraft.**

**EMPENNAGE**.—The empennage consists of the stabilizing fins mounted on the tail section of the fuselage. These include the vertical stabilizer on which is generally mounted the rudder that is used to control yaw, or direction of the nose about the vertical axis; and the horizontal stabilizer, on the trailing edge of which are the elevators that determine the pitch (climb or dive). Some supersonic aircraft may have a full delta wing. In that case, there is no horizontal stabilizer and the elevators and ailerons are combined into control surfaces called *elevons*.

In aircraft with internally mounted jet engines, exhausts normally are in the tail. High-performance jets have afterburners that give additional thrust at the cost of greatly increased fuel consumption.

Rudder, ailerons, and elevators are collectively grouped as control surfaces. The "stick" or a similar device in the cockpit controls these surfaces, while foot pedals control the rudder. On high-performance aircraft, aerodynamic pressures on these surfaces become too great for a pilot to overcome manually; hence, all high-speed models today have power-assisted controls.

### Rotary-Wing Aircraft Nomenclature

The aerodynamics of rotary-wing aircraft (fig. 8-40) are considerably more complex than those of fixed-wing aircraft. A helicopter essentially consists of a fuselage, main rotor or rotors, and often a tail rotor.

**FUSELAGE.**—As in fixed-wing aircraft, the fuselage contains the cockpit and cabin.

**MAIN ROTOR**.—The main rotor is the approximate equivalent of the wing of a fixed-wing aircraft. Each rotor blade is an airfoil, like a wing, and

***Student Notes:***

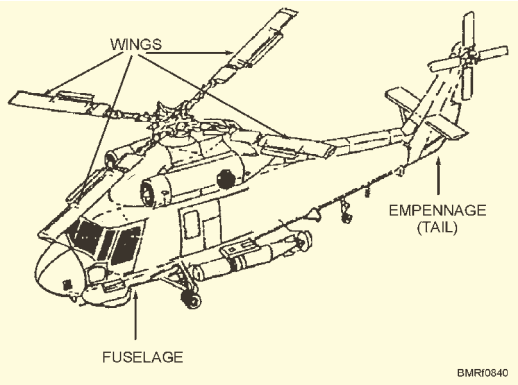



**Figure 8-40.—Rotary-wing aircraft.**

the lift is generated by the rotation of the assembly, which creates a flow of air over the blades.

A helicopter is lifted into the air by the aerodynamic forces on the rotor and not pushed up by the downwash. Some helicopters have twin rotors in tandem at either end of the fuselage; but most have a single, main rotor with a tail rotor mounted at right angles. A few have tandem intermeshing rotors.

**TAIL ROTOR**.—The tail rotor is used for directional control and stability. It is mounted at right angles to the main rotor to counteract the torque of that system. By varying the pitch of the tail rotor blades, the pilot controls yaw.

Helicopter engines are connected to the rotor shaft(s) by a transmission, which may be disengaged. That permits the engine(s) to be operated on the ground without engaging the rotor system and also permits a mode of flight known as *autorotation*. If the engines should stop while in flight, they can be disengaged; the freewheeling action of the rotor will allow a slower descent.

## AIRCRAFT MODEL DESIGNATIONS

All aircraft have tri-service designations; that is, a given aircraft has the same alphanumeric identification symbol, regardless of which service uses the aircraft. Look at table 8-2. Here, you can find the four basic parts of an aircraft model designation.

**Table 8-2.—Aircraft Model Designations**

| Mission/type modification symbol | | Basic mission/type symbol | | Aircraft series number | Model series letter |
|---|---|---|---|---|---|
| A | Attack | A | Attack | These numbers are assigned sequentially within each basic mission category. The number is separated from the basic mission symbol by a dash. | This letter, added to the series number, indicates an improvement or alteration of the basic mode. These are assigned in sequence; for example: F-4A, F-4B, F-4C, and so forth. |
| C | Cargo/transport | B | Bomber | | |
| D | Drone control | C | Cargo/transport | | |
| E | Special electronics | E | Special electronics | | |
| H | Search and rescue | F | Fighter | | |
| K | Tanker | H | Helicopter | | |
| L | Cold weather operations | K | Tanker | | |
| M | Missile capability | O | Observation | | |
| O | Observation | P | Patrol | | |
| Q | Drone | S | Antisubmarine | | |
| R | Reconnaissance | T | Trainer | | |
| S | Antisubmarine | U | Utility | | |
| T | Trainer | V | Vertical takeoff and landing (VTOL)/short takeoff and landing (STOL) | | |
| U | Utility | X | Research | | |
| V | Staff transport | | | | |
| W | Weather reconnaissance | | | | |

1. Mission/type modification symbol
2. Basic mission/type symbol
3. Aircraft series number
4. Model series letter

Now, let's try out this system of aircraft designation. For example:

**EA-6B *Prowler***

1. Find the letter "E" in the first column of the table. This aircraft has special electronics.
2. Find the letter "A" in the second column of the table. The basic mission symbol tells you that this is an attack aircraft.
3. The third column of the table explains the number after the dash. This is the sixth aircraft of this series.
4. The fourth column explains the last letter of the aircraft designation. This is improvement/alteration B.

Let's try another one:

**CH-46 *Sea Knight***

1. First letter is "C." This is a cargo aircraft.
2. Second letter is "H." This is a helicopter.
3. 46. This is the forty-sixth of the series.
4. No letter. There have been no improvements/alterations.

## CURRENT FIXED-WING NAVY AIRCRAFT

This section briefly describes some of the fixed-wing aircraft (fig. 8-41) currently operational within the Navy.

### Attack Class

Attack planes are used for low-level bombing, ground support, or nuclear strikes. They do not need the speed of fighters, but should be capable of heavy payloads, have good stability, and be able to carry enough fuel to remain on station long enough to render extended support to troops, if needed. Attack aircraft normally operate under conditions of good visibility, but some have the equipment needed for all-weather and night attacks.

**EA-6B *PROWLER*.**—The *Prowler* (fig. 8-42) is an all-weather tactical electronic warfare aircraft, based on the A-6 airframe. The *Prowler* provides jamming coverage to prevent missile engagement of U.S. or allied aircraft during strike operations. The *Prowler* also carries the high-speed antiradiation missile (HARM).

**AV-8B *HARRIER*.**—The *Harrier* (fig. 8-43) is the western world's only operational fixed-wing vertical short takeoff or landing (V/STOL) strike aircraft. It is an integrated V/STOL weapons system incorporating the inertial navigation and attack system (INAS) with an electronic display. The aircraft is used by the Marine Corps and is operated from the decks of aircraft carriers and amphibious support ships.

### Fighter Class

Fighters are high-performance aircraft generally employed to gain air superiority. They may be deployed defensively as interceptors, offensively as escorts for bombers or on ground support missions, or independently to counter enemy aircraft. Some are capable of carrying sufficient payloads for bombing missions.

**F-14 *TOMCAT*.**—The F-14 *Tomcat* (fig. 8-44) is an aircraft-carrier-based, jet-powered fighter aircraft. The aircraft is mainly missile oriented, carrying the new air-to-air missile, Phoenix, and capable of carrying the older Sidewinder and Sparrow. The *Tomcat* can be configured for bombing and rocketry.

**F/A-18 *HORNET*.**—The *Hornet* (fig. 8-45) is a sonic, single-seat, twin-engine jet. The fighter and attack versions are identical, except for selected interchangeable external equipment. Conversion from the fighter to attack mode (and vice versa) takes less than 1 hour. The aircraft is designed for aerodynamic agility, high reliability, high survivability, and reduced manpower maintenance requirements.

***Student Notes:***

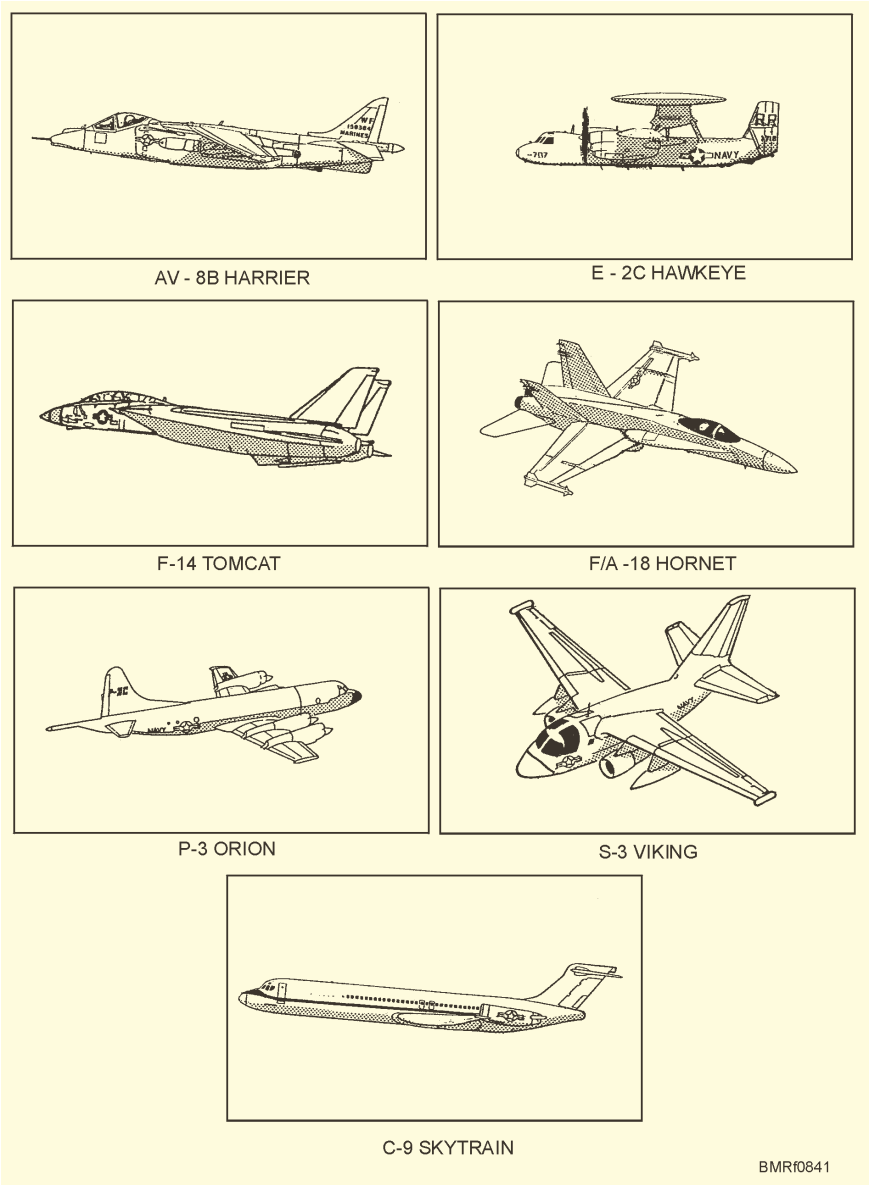



**Figure 8-41.—Representative of fixed-wing aircraft.**

*Photograph courtesy of Senior Airman Greg L. Davie*

**Figure 8-42.—EA-6B *Prowler.***

*Photograph courtesy of PH3 Timothy C. Ward*

**Figure 8-43.—AV-8B H*arrier* lands and launches for deck qualifications on USS *Constitution (CV 64)*.**

*Photograph courtesy of LCDR Mike Harrison*

**Figure 8-44.—F-14 *Tomcat*.**

*Photograph courtesy of Randy Hepp*

**Figure 8-45.—F/A-18 *Hornet*.**

### Patrol Class

Patrol craft are land-based, long-range, multiengine aircraft used primarily for antisubmarine warfare (ASW) patrol. Patrol squadrons operate from the continental United States and overseas bases. The P-3 *Orion* is the Navy's primary ASW patrol aircraft.

The P-3 *Orion* (fig 8-46) is equipped with magnetic anomaly detection (MAD) gear, sonobuoys, radar, and other submarine detection systems. It is armed with torpedoes, bombs, missiles, and depth charges for kills. It has the primary mission of detecting, locating, and destroying enemy submarines. The P-3 *Orion* can respond quickly to hunt down submarine contacts long before surface units can arrive. Other duties include convoy escort, photographic missions, and aerial mining.

*Photograph courtesy of PH2 Damon J. Mortiz*

**Figure 8-46.—P-3 *Orion*.**

### Antisubmarine Class

Antisubmarine aircraft operate from CVs in conjunction with hunter-killer group helicopters and surface craft. The S-3 *Viking* is an example of such an aircraft.

The *Viking* (fig. 8-47) is a high-wing, jet-powered, twin-engine, carrier-based ASW aircraft. It carries surface and subsurface search equipment with integrated target-acquisition and sensor-coordinating systems that collect, interpret, and store ASW sensor data. It has direct attack capability with a variety of armaments.

*Photograph courtesy of LCDR Mike Harrison*

**Figure 8-47.—S-3 *Viking* refueling an F-14 *Tomcat*.**

### Warning Aircraft

Carrier-based airborne early warning (AEW) aircraft maintain station at some distance from a task

***Student Notes:***

force to provide early warning of approaching enemy aircraft and direct interceptors into attack position.

**E-2C *HAWKEYE***.—The E-2C *Hawkeye* (fig. 8-48) has long-range antennas that are enclosed in a saucer-shaped, rotating disk atop the fuselage. The *Hawkeye* is manned by a crew of five.

*Photograph courtesy of PH2 Damon J. Mortiz*

**Figure 8-48.—E-2C *Hawkeye* waits for direction prior to flight operations on the USS *Enterprise* (CVN 65).**

**ES-3 *SHADOW***.— The ES-3 *Shadow* (fig. 8-49) is a jet aircraft used to collect and disseminate tactical aircraft resembles the S-3 *Viking*, with the addition of numerous antennas and antenna housings. The ES-3 *Shadow* is a carrier-based, subsonic, all-weather, long-range, electronic reconnaissance aircraft. It operates primarily with carrier battle groups providing indications and warning support to the battle group and joint theater commanders. It carries an electronic sensors and communications gear.

*Photograph courtesy of LCDR Mike Harrison*

**Figure 8-49.—ES-3 *Shadow* landing aboard USS *George Washington* (CVN 73).**

**C-2A *GREYHOUND***.— The C-2A *Greyhound* (fig. 8-50) is a twin-engine cargo aircraft, designed to land on aircraft carriers. The C-2A *Greyhound* provides logistics support to aircraft carriers. It's powered by two PT-6 turboprop engines and can deliver a payload of up to 10,000 pounds. The cabin can carry cargo, passengers, or both. It's also equipped to accept litter patients in medical evacuation missions. Cargo such as jet engines can be transported from shore to ship in a matter of hours. A cage system or transport stand provides cargo restraint for loads during carrier launch or landing. The large aft cargo ramp and door and a powered winch allow straight-in rear cargo loading and downloading for fast turnaround. The C-2A's open-ramp flight capability allows airdrop of supplies and personnel from a carrier-launched aircraft. This, plus its folding wings and an on-board auxiliary power unit for engine starting and ground power self-sufficiency in remote areas, provide an operational versatility found in no other cargo aircraft.

*Photograph courtesy of Larry Smith*

**Figure 8-50.—C-2A *Greyhound* landing aboard USS *John F. Kennedy* (CV 67).**

**C-2 *SKYTRAIN***.—The C-9 *Skytrain* (fig. 8-51) fleet is located throughout the continental United States, Europe, and Asia. The Navy and Marine Corps C-9 aircraft provide cargo and passenger transportation as well as forward deployment logistics support. The Air Force C-9s are used for medical evacuation, passenger transportation, and special missions. The C-9 *Skytrain*

***Student Notes:***

is the military version of the McDonnell Douglas DC-9 used for many years by commercial airlines.

*Photograph courtesy of Senior Airman Delia Castillo*

**Figure 8-51.—C-2 *Skytrain*.**

**C-12 *HURON*.**—The C-12 *Huron* is a twin-engine logistics aircraft that carries passengers and cargo between military installations. The C-12F provides logistics support between Navy air stations. It's powered by two PT-6A-42 turboprop engines and can deliver a total payload of up to 4,215 pounds. The cabin can carry cargo, passengers, or both. It is also equipped to accept litter patients in medical evacuation missions.

**C-130 H*ERCULES*.**—The C-130 *Hercules* (fig. 8-52) is a four-engine turboprop aircraft. It's the workhorse of the military services, capable of landing and taking off from short, rough dirt runways. It's a people and cargo hauler that's used in a wide variety of other roles, such as gunships, weather watchers, tankers, firefighters and aerial ambulances. There are more than 40 versions of the *Hercules*, and it is widely used by more than 50 nations.

*Photograph courtesy of SGT David W. Richards*

**Figure 8-52.—C-130 *Hercules*.**

**T-45A *GOSHAWK*.—**The T-45A *Goshawk* (fig. 8-53) is a tandem-seat, carrier capable, jet trainer. The T-45A aircraft is used for intermediate and advanced portions of the Navy/Marine Corps pilot training program for jet carrier aviation and tactical strike missions. There are two versions of T-45 aircraft currently in operational use at this time.

- The T-45A has an analog design cockpit.
- The T-45C is built around a new digital "glass cockpit" design.

*Photograph courtesy of Bob Lawson, USN (Ret)*

**Figure 8-53.—T-45A *Goshawk*.**

**T-34C TURBOMENTOR.**—The T-34C *Turbomentor* is an unpressurized two-seat, tandem cockpit low-wing turboprop trainer. The T-34C is used to provide primary flight training for student pilots attached to the Chief of Naval Air Training. As a secondary mission, approximately 10 percent of the aircraft provide pilot proficiency and other aircraft support services.

***Student Notes:***

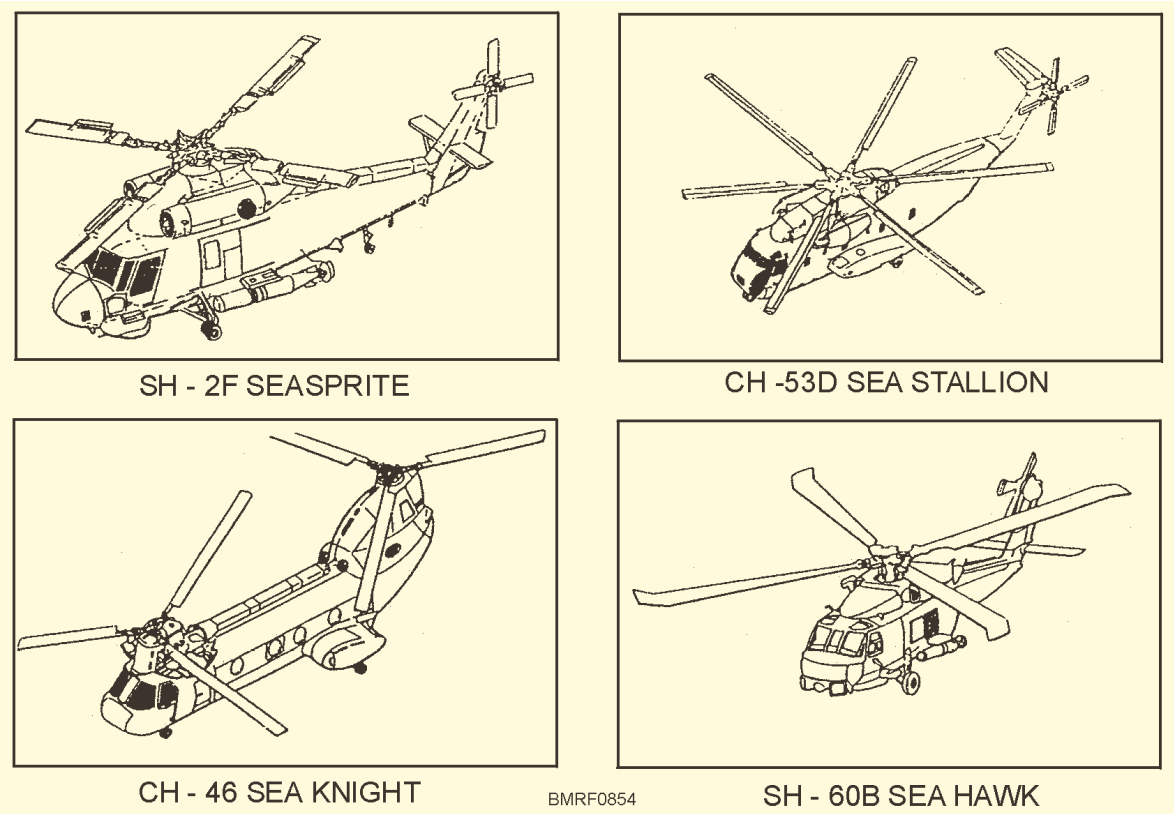



**Figure 8-54.—Representative types of rotary-wing aircraft.**

## CURRENT ROTARY-WING NAVY AIRCRAFT

Since World War II, the helicopter has become an indispensable part of naval warfare. Its applications seem limitless—ASW; pilot rescue; transfer of supplies, mail, and personnel within dispersed forces; amphibious warfare; evacuation of wounded; counterinsurgency; minesweeping; and others. Figure 8-54 shows representative types of rotary-wing aircraft.

### CH-46 *Sea Knight*

The *Sea Knight* (fig. 8-55) is a twin-turbine transport helicopter that provides the fleet with a day/night underway replenishment capability. It is used primarily for supply missions at sea and for casualty evacuation. Its carrying capacity is 25 troops, 15 litters and attendants, or 4,000 pounds of cargo. Rotor blades fold for shipboard use. The CH-46 is a small version of the Army's *Chinook*.

*Photograph courtesy of PHAN Mahaya Jordan*

**Figure 8-55.—CH-45 *Sea Knight* transports ordnance from flight deck of the USS *Independence* (CV 62).**

## *Student Notes:*

### SH-2 *Seasprite*

The *Seasprite* (fig. 8-56), an ex-utility helicopter, is now serving in the LAMPS (light airborne multipurpose system) program with the destroyer Navy.

*Photograph courtesy of PH2(NAC) Jeff Viano*

**Figure 8-56.–SH-2 *Seasprite***

### CH-53D *Sea Stallion*

The *Sea Stallion* (fig 8-57) tows and operates various mine countermeasure devices designed to detect and neutralize submerged naval mines. CH-53D squadrons are capable of rapid worldwide deployment.

*Photograph courtesy of SSGT D.W. Mobley*

**Figure 8-57.—CH-53D *Sea Stallion* airlifts grain for Somalia.**

### SH-60B *Seahawk*

The *Seahawk* SH-60B (fig. 8-58) is placed aboard frigates and destroyers. The *Seahawk* is the airborne platform segment of the LAMPS Mk III weapons system. It can carry personnel as well as weapons to detect, localize, and destroy submarines at long range. It is designed to be in constant voice and data link contact with the ship's CIC. In addition to its primary mission of seeking and engaging submarines many miles from the ship, the *Seahawk* helicopter is able to provide targeting information for over-the-horizon, surface-to-surface missiles. The secondary mission of the *Seahawk* helicopter is search and rescue, medical evacuation, vertical replenishment, and communications relay.

*Photograph courtesy of PH3 Anthony Haley*

**Figure 8-58.—SH-60B *Seahawk* aboard USS *Carney* (DDG 64) during VERTREP.**

### MH-53E *Sea Dragon*

The MH-53E (fig. 8-59) is used primarily for airborne mine countermeasures, with a secondary mission of shipboard delivery. The MH-53E *Sea Dragon* is heavier and has a greater fuel capacity than its ancestor, the CH-53E *Super Stallion*. MH-53s can operate from carriers and other warships. The *Sea Dragon* is capable of carrying up to 55 troops or a 16-ton payload 50 nautical miles or a 10-ton payload 500 nautical miles. The MH-53E is capable of towing a variety of mine-sweeping countermeasures systems, including the Mk 105 minesweeping sled, the ASQ-14

## *Student Notes:*

**Figure 8-59.—MH-53E *Sea Dragon*.**

side-scan sonar, and the Mk 103 mechanical mine-sweeping system.

**V-22A *Osprey***

The V-22 *Osprey* is a joint-service, multimission aircraft with vertical take-off and landing (VTOL) capability. It performs VTOL missions as effectively as a conventional helicopter while also having the long-range cruise abilities of a twin turboprop aircraft. The Marine Corps is the lead service in the development of the *Osprey.* The Marine Corps version, the MV-22A, will be an assault transport for troops, equipment and supplies, and will be capable of operating from ships or from expeditionary airfields ashore. The Navy's HV-22A will provide combat search and rescue, delivery and retrieval of special warfare teams along with fleet logistic support transport. The Air Force CV-22A will conduct long-range special operations missions.

The *Osprey* is a tiltrotor aircraft with a 38-foot rotor system and engine/transmission nacelle mounted on each wing tip. It can operate as a helicopter when taking off and landing vertically. Once airborne, the nacelles rotate 90 degrees for horizontal flight, converting the V-22 to a high-speed, fuel-efficient turboprop airplane. The wing rotates for compact storage aboard ship. The first flight occurred in March 1989. The V-22 is the world's first production tiltrotor aircraft. Planned purchases include 360 for the Marine Corps, 48 for the Navy, and 50 for the Air Force.

**TH-57 *Sea Ranger***

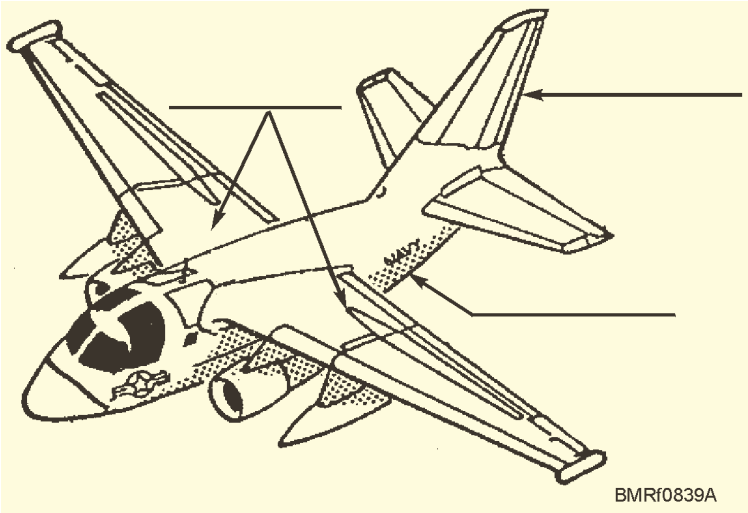
The TH-57 *Sea Ranger* is a derivative of the commercial Bell Jet Ranger 206. Although primarily used for training, these aircraft are also used for photo, chase, and utility missions. The Jet Ranger was initially designed to compete in a U.S. Army light observation helicopter competition. Bell lost that competition; but, the 206 was commercially successful. The TH-57 Sea Ranger provides advanced (IFR) training to several hundred aviation students a year at Naval Air Station Whiting Field in Milton, Florida.

***Student Notes:***

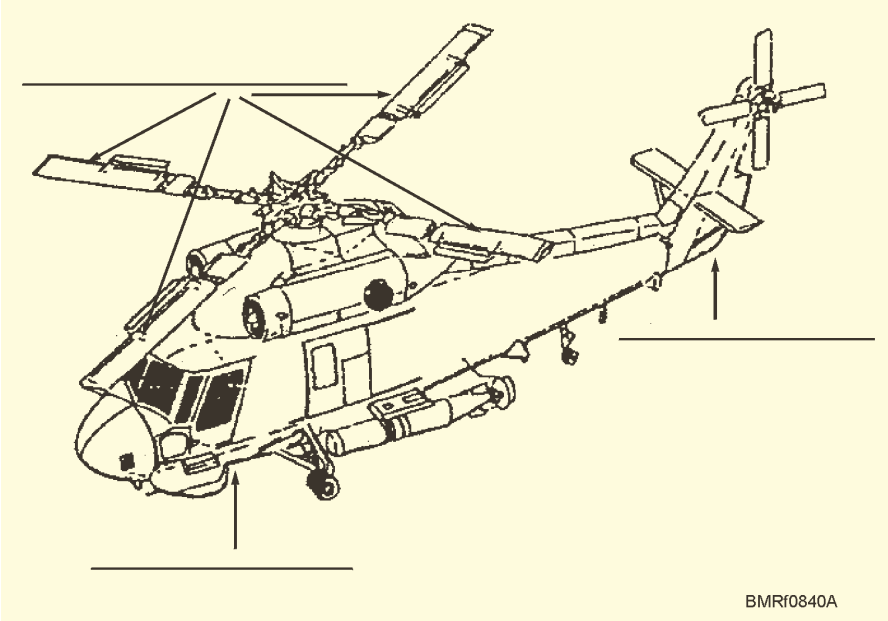
## REVIEW 6 QUESTIONS

Q1. When did the Navy acquire its first aircraft?

Q2. Label the three basic parts of a fixed-wing aircraft.

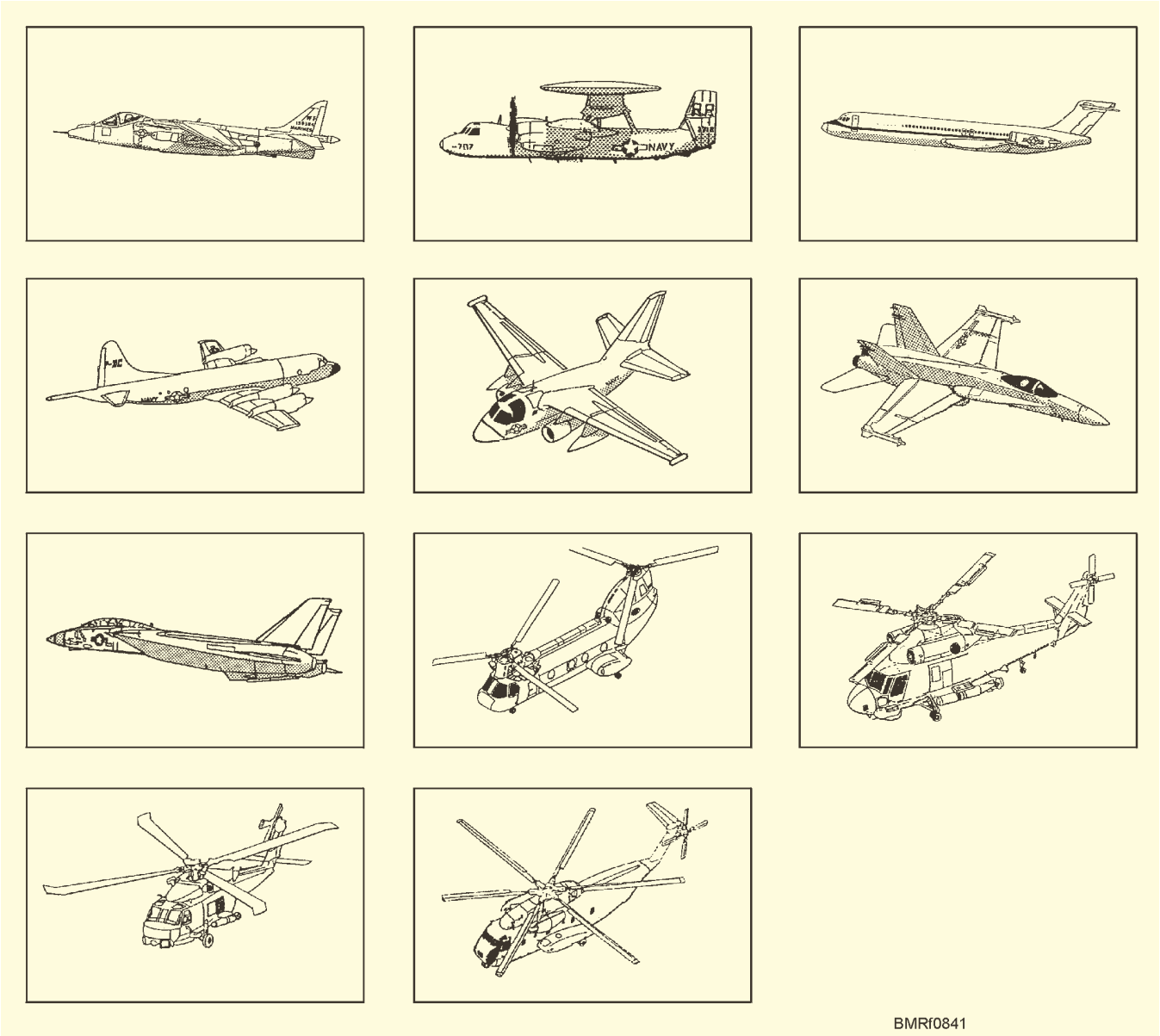



Q3. Label the three basic parts of a rotary-wing aircraft.




Q4. All aircraft have what type of designation?

Q5. Identify the following aircraft.




***Student Notes:***

## SUMMARY

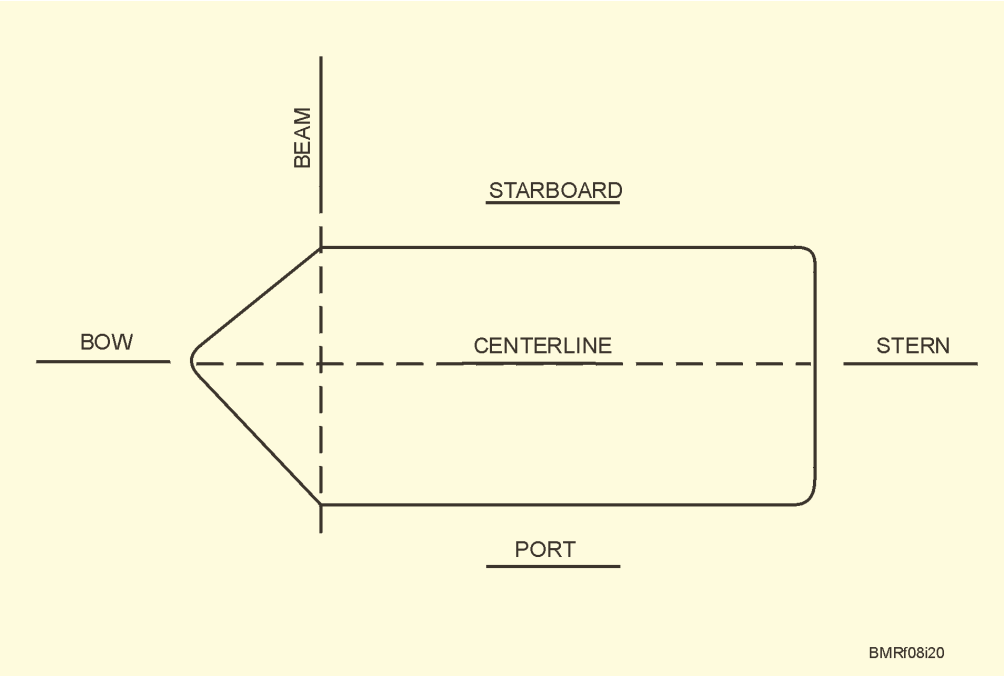
In today's world, the United States requires military power adequate to strengthen national security objectives. The United States Navy is an integral component of this nation's military forces. Freedom of the seas is not a gift; it must be won through naval presence or engagements. Naval forces provide our nation with the ability to provide a significant presence in crisis areas, or, if required, a rapid offensive capability.

The U.S. Navy has the ability to control enemy naval forces in three areas—air, surface, and subsurface. It can also conduct amphibious and mine warfare operations.

One of the most important aspects of naval warfare is the ability to provide supply and support operations. With the Navy's wide range of underway replenishment and supply ships, we can keep U.S. Navy battle groups under way in crisis areas for long periods of time. The most recent example of this ability is the Persian Gulf War. Today's Navy consists of a new generation of cruisers, destroyers, fighter and strike aircraft, high-speed amphibious assault ships, mine countermeasures ships, replenishment ships, submarines, and weapons systems. With these craft, vessels, and weapons systems, our nation employs the most modern and capable naval force in existence.

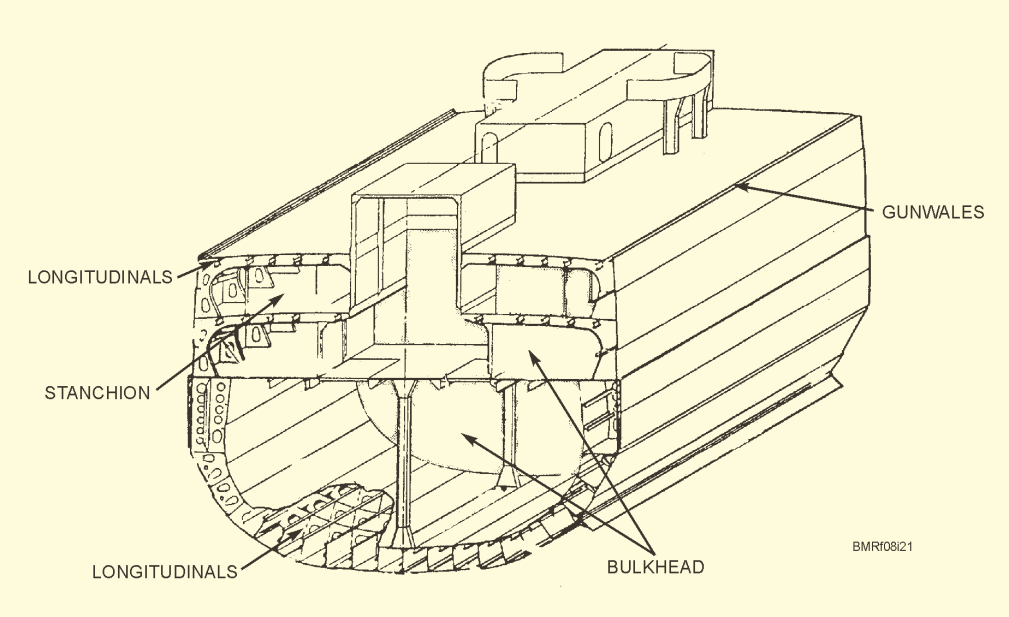
## REVIEW 1 ANSWERS

A1. Ship's parts are labeled as shown.

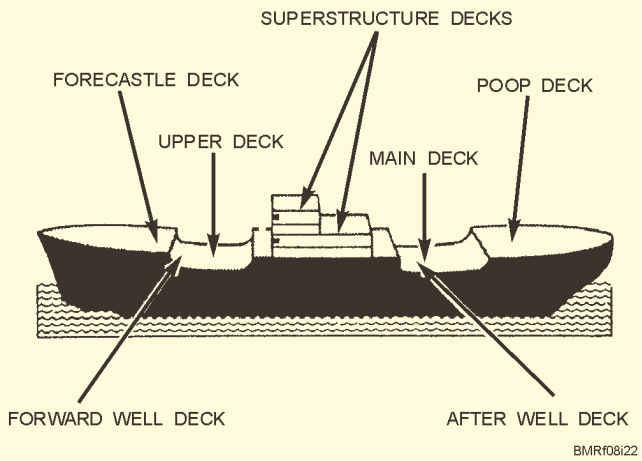



***Student Notes:***

A2. Some of the areas of a ship are labeled as shown.

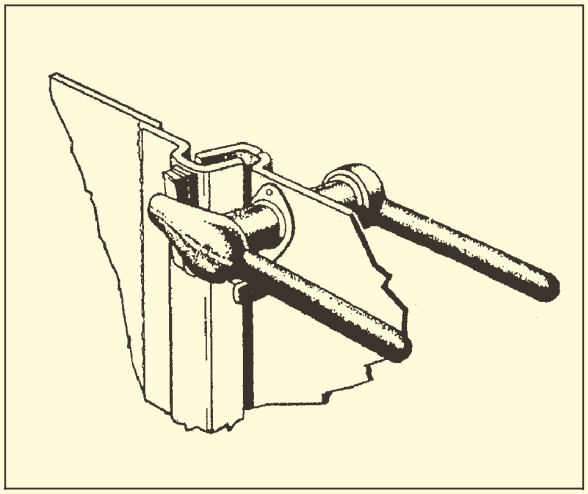



A3. Some of the decks of a ship are labeled as shown.

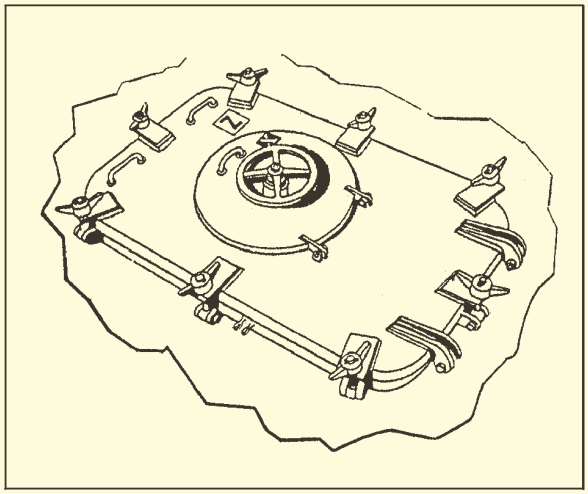



***Student Notes:***

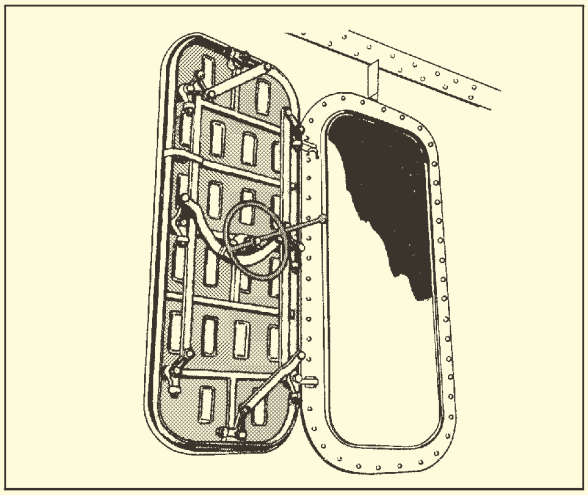
A4. Doors and hatches.



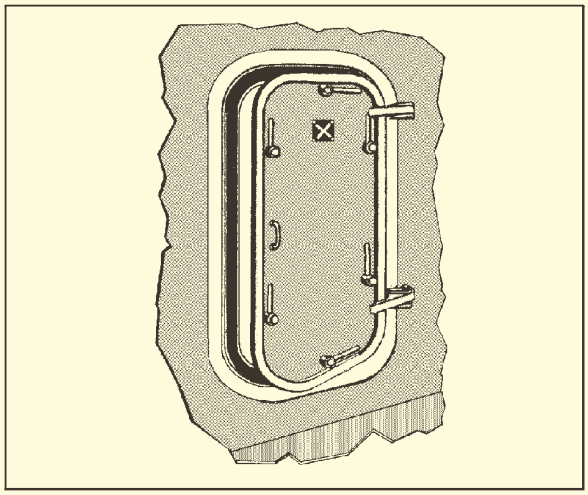
DOGS AND GASKET FOR WATERTIGHT DOOR



BOLTED HATCH WITH ESCAPE SCUTTLE



QUICK-ACTING WATERTIGHT DOOR



WATERTIGHT DOOR WITH INDIVIDUALLY OPERATED DOGS

BMRf0860A

**REVIEW 2 ANSWERS**

A1. Compartment designation number 01-56-2-Q is identified as follows:

01— **Main deck**

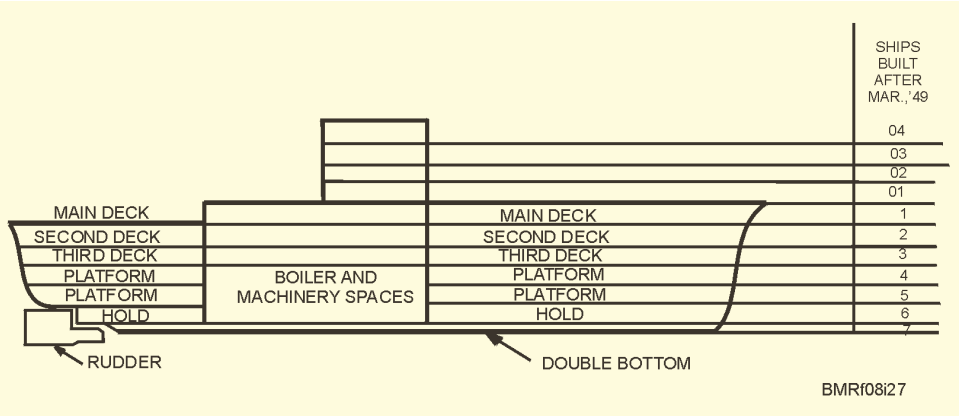
56— **Frame number**

2— **First compartment on the portside**

Q— **Miscellaneous or office space**

***Student Notes:***

A2. The following spaces of a ship are shown.




## REVIEW 3 ANSWERS

A1. The size of a ship is usually given as **displacement in long tons**.

A2. A ship's armor is **the protective armor along the sides of the ship, on the deck, and on some gun mounts and turrets**.

A3. The term used to indicate the speed of a ship is the **knot, which is 1 nautical mile per hour or about 1 1/8 statute miles per hour.**

## REVIEW 4 ANSWERS

A1. The four categories of ships are—

a. **Auxiliary ships**

b. **Combatant craft**

c. **Combatant ships**

d. **Support craft**

A2. The categories of warships include—

a. **Aircraft carriers**

b. **Battleships**

c. **Cruisers**

d. **Destroyers**

e. **Frigates**

f. **Submarines**

A3. The battleships are named after **states**.

A4. The two basic classes of cruisers are—

a. **Guided-missile cruisers (CG)**

b. **Guided-missile cruisers nuclear (CGN)**

A5. For protection, the destroyer depends on its **speed and mobility**.

A6. The class of ship developed for the purpose of open ocean escort and patrol was the **frigates**.

A7. The two classes of submarines are the—

a. **Attack submarine**, and the

b. **Ballistic missile submarine**

A8. The class of ship used to land large numbers of personnel, equipment, and supplies on enemy held territory is the **amphibious war ship**.

***Student Notes:***

## REVIEW 5 ANSWERS

A1. The term used to describe the transfer of fuel and supplies between ships while under way is **replenishment at sea**.

A2. Usually, ships maintain a distance of **100 feet** while taking on supplies at sea.

A3. A receiving ship can stay on station in combat formation while undergoing **vertical replenishment**.

A4. The largest and most powerful auxiliary ship is the **fast combat support ship (AOE)**.

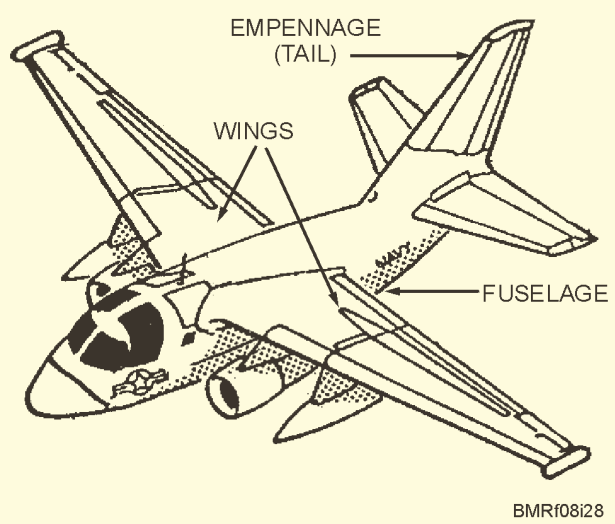
A5. Rescue, salvage, and towing ships provide **rapid firefighting, dewatering, battle damage repair, and rescue towing assistance.**

A6. Support craft designators usually start with the letter ***Y***.

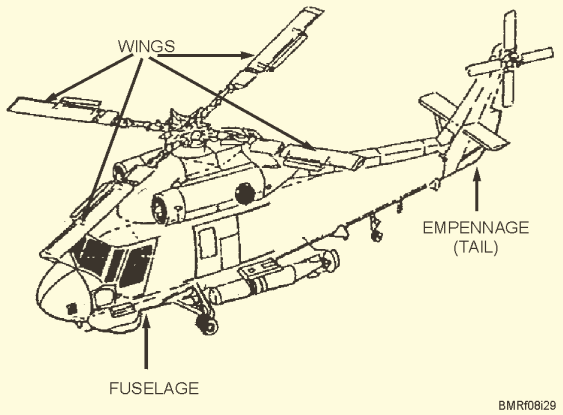
## REVIEW 6 ANSWERS

A1. The Navy acquired its first aircraft in **1911**.

A2. The three basic parts of a fixed-wing aircraft are shown below.



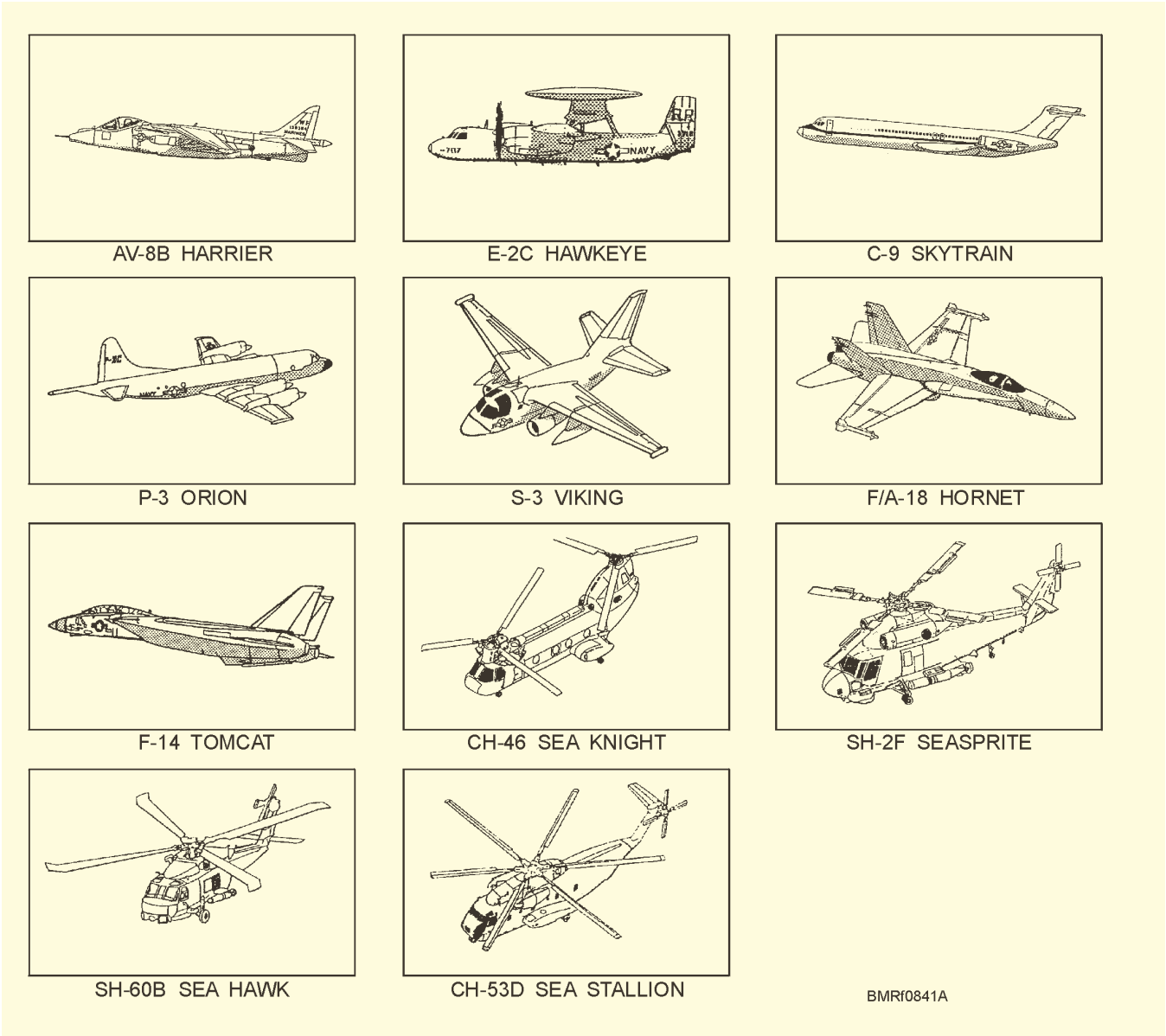

A3. The three basic parts of a rotary-wing aircraft are shown below




A4. All aircraft have **tri-service designations.**

***Student Notes:***

A5. Aircraft identification.




***Student Notes:***

# CHAPTER 9

# CUSTOMS AND COURTESIES

*It rests with us to make the traditions and to set the pace for those who are to follow and so upon our shoulders rests a great responsibility.*

—Esther Voorhess Hasson,
First Superintendent, Navy Nurse Corps, 1908

The military services have a long history. Many traditions have been established as a result of this long history. If you are familiar with some of these traditions, you will understand the military better. These traditions can be broken down into various customs and courtesies.

A custom is a way of acting—a way that has continued consistently over such a long period that it has become like law. A courtesy is a form of polite behavior and excellence of manners. You will find that Navy life creates many situations, not found in civilian life, that require special behavior on your part. Customs and courtesies help make life orderly and are a way of showing respect.

Customs are regular, expected actions. They have been repeated again and again and passed from one generation to the next. Courteous actions show your concern and respect for others and for certain objects or symbols, such as the American flag.

The use of customs, courtesies, and ceremonies helps keep discipline and order in a military organization. This chapter will give you some of the more common day-to-day customs and courtesies and ways to deal with them.

## MILITARY CUSTOMS

**Learning Objective**: When you finish this chapter, you will be able to—

- Recognize the purpose of military customs.

From time to time, situations arise that are not covered by written rules. Conduct in such cases is governed by customs of the service. Customs are closely linked with tradition, and much esprit de corps of the naval service depends on their continued maintenance. (Custom has the force of law; usage is merely a fact. There can be no custom unless accompanied by usage.)

A custom is a usual way of acting in given circumstances. It is a practice so long established that it has the force of law. An act or condition acquires the status of a custom under the following circumstances:

- When it is continued consistently over a long period
- When it is well defined and uniformly followed
- When it is generally accepted so as to seem almost compulsory
- When it is not in opposition to the terms and provisions of a statute, lawful regulation, or order

## MILITARY COURTESIES

**Learning Objectives**: When you finish this chapter, you will be able to—

- Identify how to, when to, and to whom to render the hand and rifle salute.
- Identify the military courtesies when ship and boat passing honors are rendered.

*Courtesy* is an act or verbal expression of consideration or respect for others. When a person acts with courtesy toward another, the courtesy is likely to be returned. We are courteous to our seniors because we are aware of their greater responsibilities and authority. We are courteous to our juniors because we are aware of their important contributions to the Navy's mission.

In the military service, and particularly in the Navy where personnel live and work in close quarters, courtesy is practiced both on and off duty. Military courtesy is important to everyone in the Navy. If you know and practice military courtesy, you will make favorable impressions and display a self-assurance that will carry you through many difficult situations. Acts of

respect and courtesy are required of all members of the naval service; the junior member takes the initiative, and the senior member returns the courtesy.

## SALUTING

One required act of military courtesy is the salute. Regulations governing its use are founded on military custom deeply rooted in tradition. The salute is a symbol of respect and a sign of comradeship among service personnel. The salute is simple and dignified; but, there is great significance in that gesture. It is a time-honored demonstration of courtesy among all military personnel that expresses mutual respect and pride in the service. Never resent or try to avoid saluting persons entitled to receive the salute. (The privilege of saluting is generally denied prisoners because their status is considered unworthy of the comradeship of military personnel.)

The most common form of salute is the hand salute. However, there are other types, such as gun and rifle salutes, which are discussed later in this chapter.

### The Hand Salute

The hand salute began in the days of chivalry when it was customary for knights dressed in armor to raise their visors to friends for the purpose of identification. Because of the relative position of rank, the junior was required to make the first gesture. Another school of thought traces the salute back to a custom at the time of the Borgias. Assassinations by dagger were not uncommon at that time, and it became the custom for men to approach each other with raised hand, palm to the front, to show that there was no weapon concealed.

In the U.S. Navy, it's reasonable to believe that the hand salute came from the British navy. There is general agreement that the salute as now rendered is really the first part of the movement of uncovering. From the earliest days of military units, the junior uncovered when meeting or addressing a senior. Gradually, the act of taking off one's cap was simplified into merely touching the cap or, if uncovered, the head (forelock), and finally into the present form of salute.

The way you render the hand salute depends on whether you are in civilian clothes or in uniform. Personnel in civilian clothes render the salute in two ways:

1. Hat in front of the left shoulder (men only)
2. Right hand over the heart (men without hats; women with or without hats)

**NOTE**

These forms of saluting are used only to salute the flag or national anthem, never to salute officers.

In this chapter, the hand salute usually refers to a salute rendered by personnel in uniform. Except when walking, you should be at attention when saluting. In any case, turn your head and eyes toward the person you're saluting (unless it is inappropriate to do so, such as when a division in ranks salutes an inspecting officer on command). Navy personnel salute the anthem, the flag, and officers as follows:

- Raise the right hand smartly until the tip of the forefingers touches the lower part of the headgear or forehead above and slightly to the right of the eye (fig. 9-1).
- Extend and join the thumb and fingers.
- Turn the palm slightly inward until the person saluting can just see its surface from the corner of the right eye.
- The upper arm is parallel to the ground; the elbow is slightly in front of the body.
- Incline the forearm at a 45° angle; hand and wrist are in a straight line.
- Complete the salute (after it is returned) by dropping the arm to its normal position in one sharp, clean motion.

***Student Notes:***

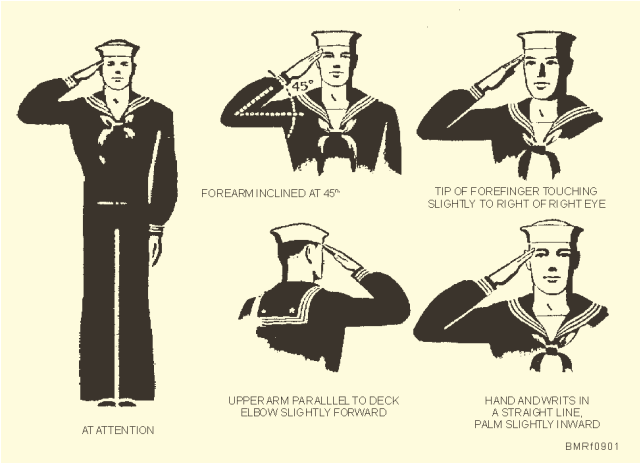



**Figure 9-1.—Hand salute.**

**NOTE**

The salute should not be ended as though the person is waving to someone or trying to get something off the fingers. Navy custom permits left-hand saluting when a salute cannot be rendered with the right hand. Army and Air Force customs permit only right-hand salutes.

Under naval customs, the hand salute is accompanied by a word of greeting. The junior stands at attention, looks the senior straight in the eye, and says (depending upon the time of day) the following:

- From first rising until noon "Good morning, …"
- From noon until sunset "Good afternoon, …"
- From sunset until turning in "Good evening, …"

It is preferable to call the senior by grade and name; that is, "Commander Jones," rather than by the impersonal "sir" or "ma'am."

The following are some of the major points you should remember when rendering a salute:

1. If possible, always use your right hand. Use your left hand only if your right hand is injured. Use your left hand to carry objects and to leave your right hand free to salute.

2. Accompany your salute with a cheerful, respectful greeting; for example, "Good morning, sir"; "Good afternoon, Commander [Jones]"; "Good evening, Chaplain [Smith]".

3. Always salute from the position of attention. If you are walking, you need not stop; but hold yourself erect and square. If on the double, slow to a walk when saluting.

4. Look directly into the officer's eyes as you salute.

5. If you are carrying something in both hands and cannot render the hand salute, look at the officer as though you were saluting and render a verbal greeting as previously described.

6. Remove a pipe, cigar, or cigarette from your mouth or hand before you salute.

7. Salute officers even if they are uncovered or their hands are occupied. Your salute will be acknowledged by a verbal greeting, such as "Good morning," "Good afternoon," or something similar.

8. Army and Air Force policy, unlike the Navy's, is to salute when uncovered. Suppose you are in an office with several Army personnel, and all of you are uncovered. An officer enters and the soldiers rise and salute. You should do likewise; to do otherwise would make you seem ill-mannered or disrespectful.

9. If you are walking with or standing by a commissioned officer and the occasion for a salute arises, do not salute until the officer salutes. Assume that you are walking with a lieutenant. A commander approaches. Do not salute the commander until the lieutenant salutes; but as soon as the lieutenant starts to salute, you should quickly do the same.

10. When approaching an officer, start your salute far enough away from the officer to allow time for your salute to be seen and returned. This space can vary; but a distance of about six paces is considered good for this purpose. Hold your salute until it is returned or until you are six paces past the officer.

11. Salute all officers who are close enough to be recognized as officers. It is unnecessary to identify an officer by name; however, ensure that he/she is wearing the uniform of an officer.

***Student Notes:***

12. Salute properly and smartly. Avoid saluting in a casual or perfunctory manner. A sharp salute is a mark of a sharp Sailor.

**WHOM TO SALUTE**.—Enlisted personnel salute all officers, and officers salute their seniors. Salutes are returned by persons saluted except when they are uncovered—the person saluted should acknowledge the salute with an appropriate greeting or a nod of the head.

Salutes are rendered to all of the following officers:

- Navy.
- Army.
- Air Force.
- Marine Corps.
- Coast Guard.
- National Oceanic and Atmospheric Administration.
- Public Health Service.
- Foreign military services.
- Officers of the Navy, Army, Air Force, Marine Corps, and Coast Guard Reserves.
- Officers of the National Guard when they are on active duty. When not on active duty, they rate a salute only when they are in uniform.

Civilians who are entitled (rate), by reason of their position, gun salutes, or other honors are also entitled (by custom) to the hand salute. The President, as Commander in Chief of the armed forces, is always saluted. Other civilians may be saluted by persons in uniform when appropriate, but the uniform hat or cap must not be raised as a form of salutation.

**WHEN TO SALUTE**.—On occasion, you might be uncertain whether the person approaching you in uniform is an officer, thus rating a salute. The safest course of action is to salute immediately and not wait for the person approaching you to disclose his/her rank. In other words, when in doubt, salute. Figures 9-2 and 9-3 show some examples of when to salute officers.

**Aboard Ship**

When boarding a ship that is flying the national ensign, all persons in the naval service must do the following:

1. Stop on reaching the upper platform on the accommodation ladder or the shipboard end of the brow,
2. Face the ensign,
3. Salute, and
4. Then salute the officer of the deck (OOD).

On leaving the ship, personnel render the salutes in reverse order—first to the OOD and then to the national ensign. These salutes also are rendered aboard foreign men-of-war.

You are required to salute all flag officers (officers above the grade of captain), the commanding officer, and visiting officers (senior to the commanding officer) on every occasion of meeting, passing near, or being addressed. On your first daily meeting, you salute all senior officers attached to your ship or station. Many ships consider salutes rendered at quarters sufficient for this first salute of the day. When the progress of a senior officer may be blocked, officers and enlisted personnel clear a path by calling out “Gangway” and stand at attention facing the senior officer until he/she passes.

**In Boats**

When a boat is not under way, the person in charge salutes officers that come alongside or pass nearby. If there is no one in charge, all those in the boat render the salute. Boat coxswains salute all officers entering or leaving their boats. (Although it is customary to stand when saluting, if the safety of the boat is endangered by standing, remain seated.) When boat awnings are spread, enlisted personnel sit at attention while saluting; they should not rise. Officers seated in boats rise when rendering salutes to seniors who are entering or leaving.

When boats pass each other with embarked officers or officials in view, hand salutes are rendered by the senior officer and coxswain in each boat. Coxswains rise to salute unless it is dangerous or impracticable to do so.

***Student Notes:***

**Figure 9-2.—When to salute officers.**

### In a Group

If enlisted personnel and officers are standing together and a senior officer approaches, the first to see the senior should call out "Attention," and all face the officer and salute.

### Overtaking

Never overtake and pass an officer without permission. If it becomes necessary for you to pass, you should do so to the left, salute when abreast of the officer, and ask, "By your leave, sir/ma'am?" The officer should reply, "Very well," and return the salute.

***Student Notes:***

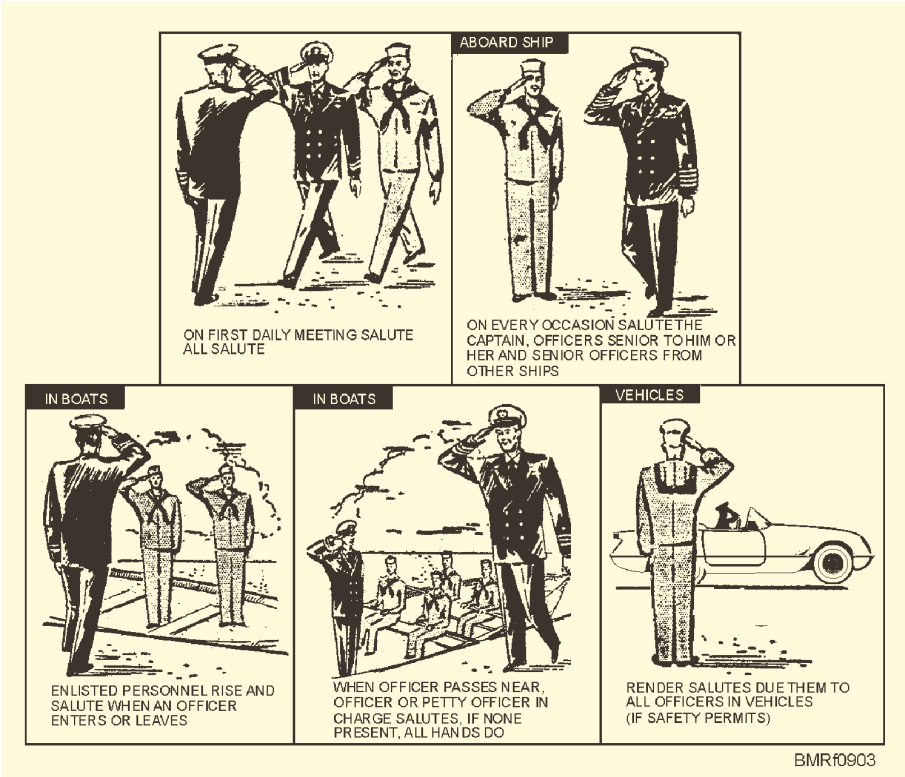



**Figure 9-3.—When to salute officers (Continued).**

### Reporting

When reporting on deck or out-of-doors ashore, you should remain covered and salute accordingly. When reporting in an office, you should uncover upon approaching the senior; therefore, you should not salute.

### Sentries

Sentries at gangways salute all officers going or coming over the side and when passing or being passed by officers close aboard in boats.

### In Vehicles

You salute all officers riding in vehicles, while those in the vehicle both render and return salutes, as required. The vehicle's driver salutes if the vehicle is stopped; to do so while the vehicle is in motion endangers the safety of the occupants and may be omitted.

### In Civilian Clothes

If you are in uniform and recognize an officer in civilian clothes, you should initiate the proper greeting and salute. In time of war, however, an officer not in uniform may be deliberately avoiding disclosure of his/her identity, so you should be cautious in following the normal peacetime rule.

### At Crowded Gatherings

At crowded gatherings or in congested areas, you normally salute only when addressing or being addressed by officers.

### Rifle Salutes

When armed with a rifle, you should use one of the three rifle salutes described in this section instead of the hand salute. (**NOTE**: The salute at sling arms shown in fig. 9-4 is simply a hand salute and is not considered a rifle salute.) The occasions for rendering each type of rifle salute are as follows:

***Student Notes:***

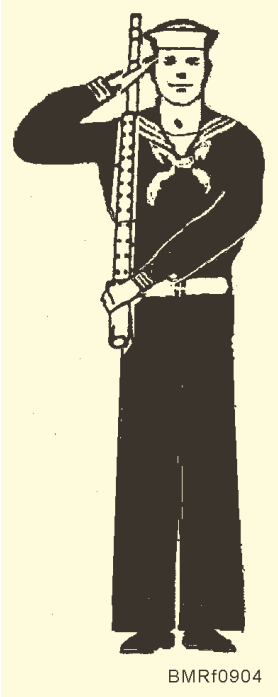



**Figure 9-4.—Hand salute at sling arms.**

1. Present arms (fig. 9-5, view A)
   - When standing in a sentry box or on a post and addressed or approached by any person entitled to a salute.
   - When halted while on patrol (such as an area security patrol) to reply to or to address an officer.
   - When in ranks and so commanded; for example, at colors.
2. Rifle salute at order arms (fig. 9-5, view B)
   - When standing sentry or guard duty by a door inside a building. Present arms may also be required by competent authority; but where there is considerable traffic, the salute at order arms is usually prescribed.
   - When reporting individually to an officer indoors. For example, you would approach an officer's desk at trail arms, come to order arms, and render the rifle salute at order arms.

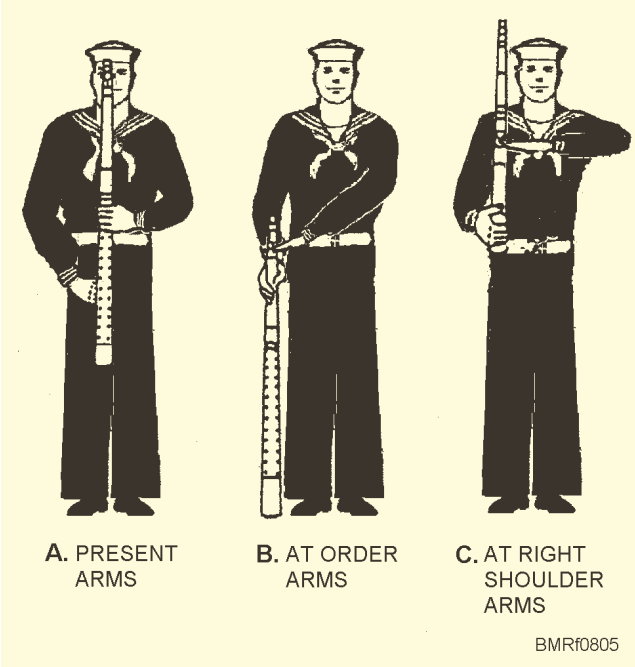



**Figure 9-5.—Rifle salutes.**

   - When reporting a roll call (if already at order arms).
3. Rifle salute at right shoulder arms (fig. 9-5, view C)
   - When on patrol and passing, without halting, a person entitled to a salute.
   - When leading a detail past an officer.
   - When reporting a roll call (if already at shoulder arms). When reporting at shoulder arms to an officer outdoors.
   - When going individually to and from drill or place of duty and you pass any person entitled to a salute.

## WHEN NOT TO SALUTE

There are some situations in which it is improper for you to salute (fig. 9-6 and fig. 9-7). These are as follows:

- When uncovered, except where failure to salute might cause embarrassment or misunderstanding.

***Student Notes:***

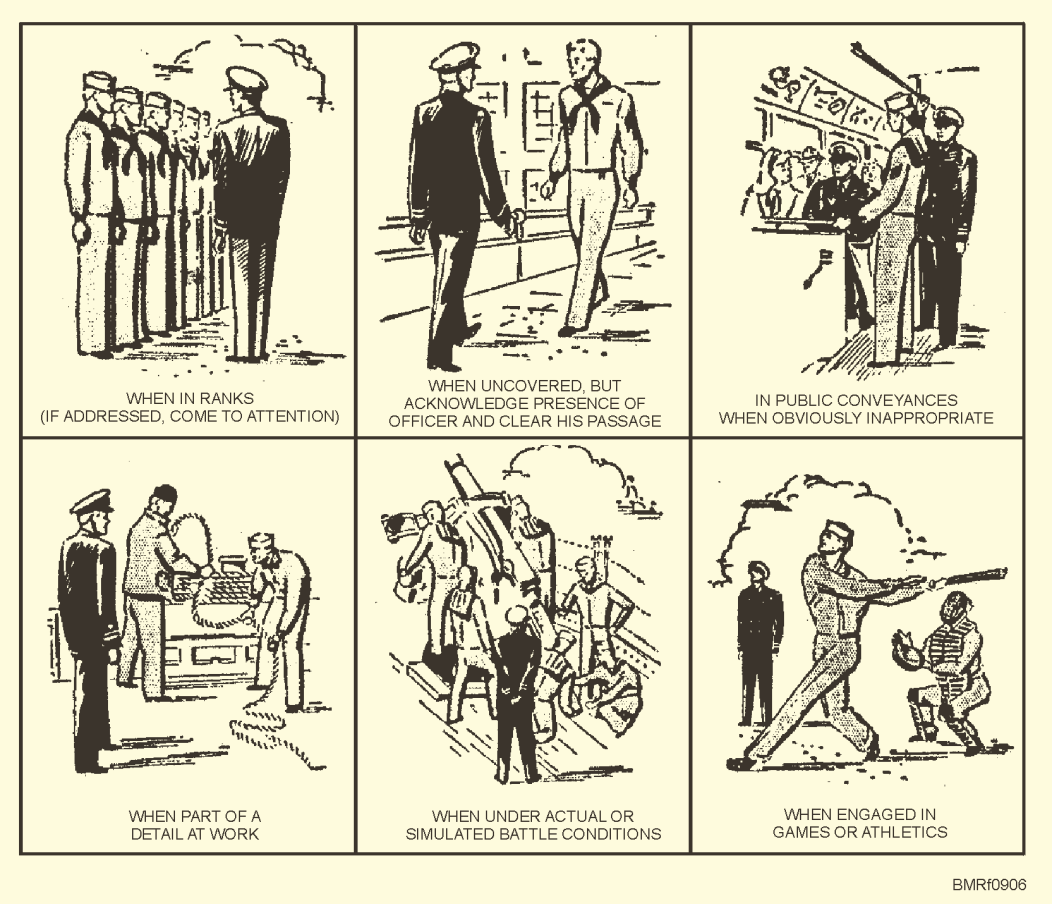



**Figure 9-6.—When not to salute officers.**

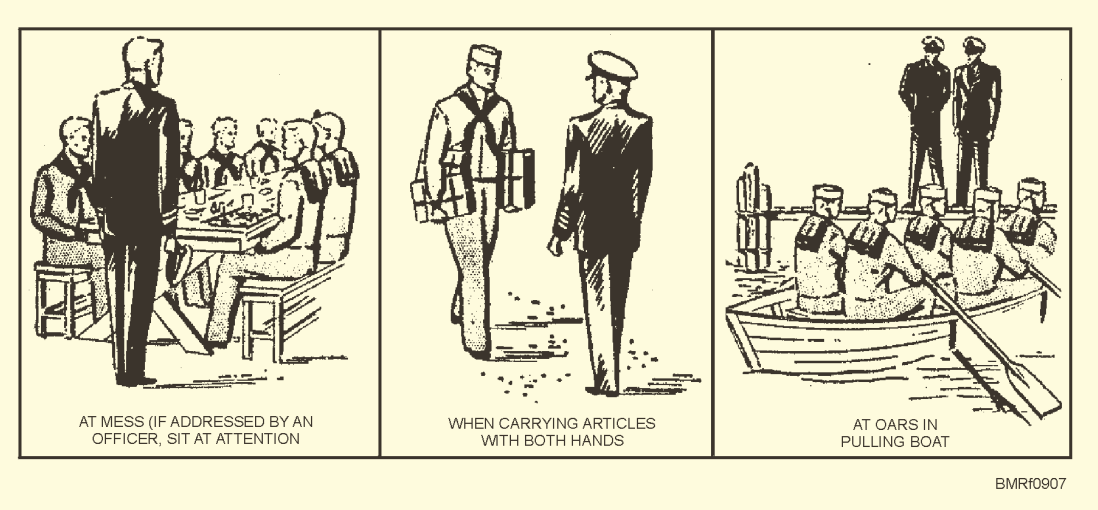



**Figure 9-7.—When not to salute officers (Continued).**

## *Student Notes:*

- In formation, except on command.
- On a work detail (the person in charge of the detail salutes).
- When engaged in athletics or assembled for recreation or entertainment.
- When carrying articles with both hands, or otherwise occupied making saluting impracticable.
- In public places where saluting is obviously inappropriate (theaters, restaurants, elevators, etc.).
- In public transportation.
- In action or under simulated combat conditions.
- When a member of a guard is engaged in performance of a duty that prevents saluting.
- At mess (when addressed, stop eating and show respectful attention).
- When guarding prisoners.

**Honors**

Honors are salutes rendered to individuals of merit, such as recipients of the Medal of Honor, to high-ranking individuals, to ships, and to nations. The type of honors rendered depends upon who or what is being saluted. Passing honors are rendered by a ship to other ships and to boats having officials embarked. Side honors are rendered to officials or officers as they board and depart a Navy ship. Gun salutes are rendered to high-ranking individuals, to nations, and to celebrate national holidays. Honors are not rendered to nations or officials of nations not recognized by the United States. Officials and officers who request that the honors be dispensed with do not receive them.

**PASSING HONORS**.—Passing honors are honors (other than gun salutes) rendered on occasions when ships, officials or officers pass in boats or gigs, or are passed (flag officers or above) close aboard. "Close aboard" means passing within 600 yards for ships and 400 yards for boats. Passing honors between ships, consisting of sounding "Attention" and rendering the hand salute by all persons in view on deck and not in ranks, are exchanged between ships of the Navy and between ships of the Navy and the Coast Guard passing close aboard.

Signals for the actions required to be performed by personnel are as follows:

- One blast—Attention (to starboard)
- Two blasts—Attention (to port)
- One blast—Hand salute
- Two blasts—End salute
- Three blasts—Carry on

**NOTE**

Signals are given by police whistle on small ships and by bugle on large ships.

On the signal of "Attention," all hands in view on deck (starboard or port as indicated by number of blasts) come to attention and face outboard. At the sound of one blast, all hands in view and not in ranks salute. (When personnel are in ranks, only the division officer and the division petty officer salute; all other persons stand at attention.) At two blasts, persons saluting bring their hands back to their sides but remain at attention until three blasts are sounded.

For boats passing honors, flag officers, unit commanders, or commanding officers in uniform embarked in boats are saluted by all persons on the quarterdeck.

Passing honors for the President of the United States and for rulers of foreign nations include manning the rail. Manning the rail consists of the ship's company lining up at regular intervals along all weather deck rails. Normal saluting procedures are followed.

Having the crew at quarters when the ship is entering or leaving port is a less formal ceremony than manning the rail. The crew is paraded at quarters on ceremonial occasions, such as—

***Student Notes:***

- When the ship is entering or leaving U.S. ports at times other than operational visits,
- When the ship is visiting foreign ports, or
- When the ship is departing for or returning from extended deployments, and other special occasions as determined by a superior.

When the ship is entering or leaving U.S. ports on operational visits or home port on local operations, the normal procedure is to parade only an honor guard.

**SIDE HONORS**.—Side honors, rendered to officers and officials boarding and departing the ship, are a part of the honors stipulated on the occasion of an official visit. The honors consist of parading the proper number of side boys and piping the side.

Acting as a side boy may be one of your shipboard duties. When you are assigned to side boy duty, you must remain in dress uniform and in the vicinity of the quarterdeck at all times, ready to fall in when required. Your uniform must be clean and neat, and you must be especially neat and military in appearance. Enlisted women may be detailed to this duty, but they are still called *side boys*.

Side boys are paraded between 0800 and sunset daily except on Sunday. Normally, side boys are not called away during meal hours, general drills, all hands evolutions, or periods of regular overhaul except in honor of civil officials or foreign officers; then, they may be called away at any time during daylight. The number of side boys paraded varies from two to eight (always an even number), depending on the rank of the individual being saluted.

When called away, side boys form two ranks facing each other to form a passageway at the gangway. When the Boatswain's Mate (BM) begins to pipe the call "Over the Side," the side boys salute in unison, hold the salute until the last note of the call, and then drop their hands smartly to their sides.

### Gun Salutes

Gun salutes are used to honor individuals, nations, and certain national holidays. Practically all shore stations have saluting batteries, but not all ships are so equipped. Whether aboard ship or ashore, you must be able to act properly whenever you hear a gun salute being rendered.

The salutes always consist of an odd number of guns, ranging from 5 for a vice consul to 21 for the President of the United States and for rulers of foreign nations recognized by the United States. Military officers below the rank of commodore are not entitled to gun salutes. Normally, only one gun is fired at a time at intervals of about 5 seconds. During the salutes, persons on the quarterdeck, in the ceremonial party, or if ashore, render the hand salute. All other personnel in the vicinity (in the open) should stand at attention and, if in uniform, render the hand salute.

Gun salutes also mark special occasions in our country's history. On President's Day, Memorial Day, and Independence Day, a standard 21-gun salute is fired at 1-minute intervals, commencing at 1200. Thus, on these holidays, the salute ends at 1220.

### REVIEW 1 QUESTIONS

Q1. Define the following terms.

a. Courtesy—

b. Custom—

Q2. Name a required act of military courtesy.

Q3. What is the most common form of saluting?

Q4. When in uniform, Navy personnel salute which of the following persons/things?

a. Flag
b. Anthem
c. Officers
d. Each of the above

Q5. True or false. Under naval customs, the hand salute is accompanied by a word of greeting.

***Student Notes:***

Q6. As an enlisted person, who should you salute?

Q7. What procedure should you follow when boarding a ship that is flying the national ensign?

a.

b.

c.

Q8. As a sentry at a gangway, when should you render a salute?

a.

b.

Q9. List the three rifle salutes.

a.

b.

c.

Q10. Define the term *honors*.

Q11. Name the passing honors for the President of the United States?

Q12. A ruler of a country recognized by the United States rates which of the following gun salutes?

a. 5
b. 17
c. 21

## MILITARY CEREMONIES

**Learning Objective**: When you finish this chapter, you will be able to—

- Identify the procedures for conducting colors, performing military courtesies, handling the Ensign and Union Jack, and boarding.

Ceremonies are formal acts performed on public occasions. There are too many types of ceremonies and too many occasions when they are performed to include them all here. Instead, you will learn about some of the common situations involving a formal ceremony and the behavior required of you during the event.

### COLORS

At commands ashore and aboard ships of the Navy not under way, the ceremonial hoisting and lowering of the national flag at 0800 and sunset are known as *morning* and *evening colors*. Every Navy shore command, and every ship not under way, performs the ceremony of colors twice a day.

You will render honors as follows:

- If you are in ranks, you will be called to attention or order arms.
- If you are in uniform but not in ranks, face the colors and give the hand salute.
- If you are driving a vehicle, stop and sit at attention but do not salute.
- If you are a passenger in a boat, remain at attention, seated or standing. The boat officer or coxswain salutes for the boat.
- If you are in civilian clothes or athletic uniform, face the colors at attention and salute by placing your right hand over your heart.

Aboard Navy ships or naval shore activities, when the national ensign is hoisted and lowered or half-masted for any occasion, the motions of the senior officer present are followed. Five minutes before morning and evening colors, the PREPARATIVE

***Student Notes:***

pennant (called *PREP*) is hoisted. Ceremonies for colors begin when PREP is hauled to the dip (the halfway point).

Navy ships not under way also hoist and lower the union jack on the jackstaff, at the ship's bow, and at morning and evening colors. The union jack is also flown from a yardarm to denote that a general courts-martial or court of inquiry is in session. The union jack is the rectangular blue part of the United States flag containing the stars (fig. 9-8).

If a band is available for color ceremonies, "Attention" is sounded, followed by the band playing the national anthem. At morning colors, hoisting the ensign begins when the music starts. It is hoisted smartly to the top of the flagstaff. At evening colors, lowering of the ensign also starts at the beginning of the music. Hoisting and lowering of the ensign are completed at the last note of the music. The national flag is always hoisted smartly and lowered ceremoniously. "Carry on" is sounded at the completion of the music.

If a band is not available for colors, "To the Colors" is played on the bugle at morning colors, and "Retreat" is played at evening colors. For ships without a band or a bugler, "Attention" and "Carry on" are signals for beginning and terminating the hand salute.

Sometimes the music for colors from another U.S. ship can be overheard aboard your ship. When this happens, and no band or bugler is aboard your ship, the command to "Carry on" should not be given until the music being overheard is completed.

After morning colors, if foreign warships are present, the national anthem of each country

**Figure 9-8.—Union Jack.**

represented is also played. If your ship is visiting a foreign country, the national anthem of that country is played immediately following morning colors, followed by the national anthems of any other foreign nations represented. You should show the same respect for national anthems of foreign countries as you do for our own.

On Sundays, authorized holidays, and other days proclaimed by the President, the largest national ensign in the ship's or station's allowance is flown. This ensign is referred to as *holiday colors*. When the holiday colors are flown on a Navy ship not under way, the union jack flown is the same size as the blue field in the holiday colors.

Ships that are under way do not hold morning or evening colors because the ensign usually is flown day and night. Just as the ship gets under way, the ensign is shifted from its in-port position on the stern to its at-sea position at the mainmast. This is called *shifting the colors.*

## HALF-MASTING THE ENSIGN

National flags flown at half-mast (or half-staff ashore) are an internationally recognized symbol of mourning. The United States honors its war dead on Memorial Day by half-masting the flag from 0800 until the last gun of a 21-minute-gun salute that begins at noon (until 1220 if no gun salute is rendered).

Normally, the flag is half-masted on receiving information of the death of one of the officials or officers listed in *U.S. Navy Regulations*. Notification may be received through news media reports or by an official message.

In half-masting an ensign already flying at the peak or truck aboard ships under way, lower it ceremoniously to half-mast. If the ensign is not flying, hoist it smartly to the peak or truck before lowering it to half-mast. In lowering a half-masted ensign, raise it first to the peak or truck, then lower it ceremoniously.

When the national anthem, "To the Colors," or "Retreat" is played at morning or evening colors aboard ships not under way, all hands should hold the salute during the raising or lowering of the flag. In half-masting during morning colors, "Carry on" should

***Student Notes:***

not be sounded until the flag is lowered to half-mast. At evening colors, “Attention” is sounded and the salute rendered before raising the flag to the top of the flagstaff from its half-mast position.

If the ensign is flown from the flagstaff and is half-masted, the union jack is half-masted also. Distinctive marks, such as commission or command pennants, are not half-masted except when the ship’s commanding officer or the unit commander dies.

A special ceremony calling for half-masting the ensign is required of ships passing Washington’s tomb between sunrise and sunset. A full guard and band are paraded (if aboard), the ship’s bell is tolled, and the ensign is half-masted as the ship comes in sight of Mount Vernon, Virginia. When the ship is opposite the tomb, the guard and all persons on deck face the tomb and salute. When the bugler begins to sound taps, the ensign is raised to the peak; tolling of the bell ceases on the last note of taps. The band then plays the national anthem, followed by the command to “Carry on.”

You may have the duty of raising or lowering the ensign at some time in your career. You should remember that the ensign is raised smartly but lowered ceremoniously. After the ensign is lowered, it is folded properly and placed in safekeeping until morning colors. Figure 9-9 shows the correct way to fold the ensign. The union jack is folded and handled in the same manner as the national ensign.

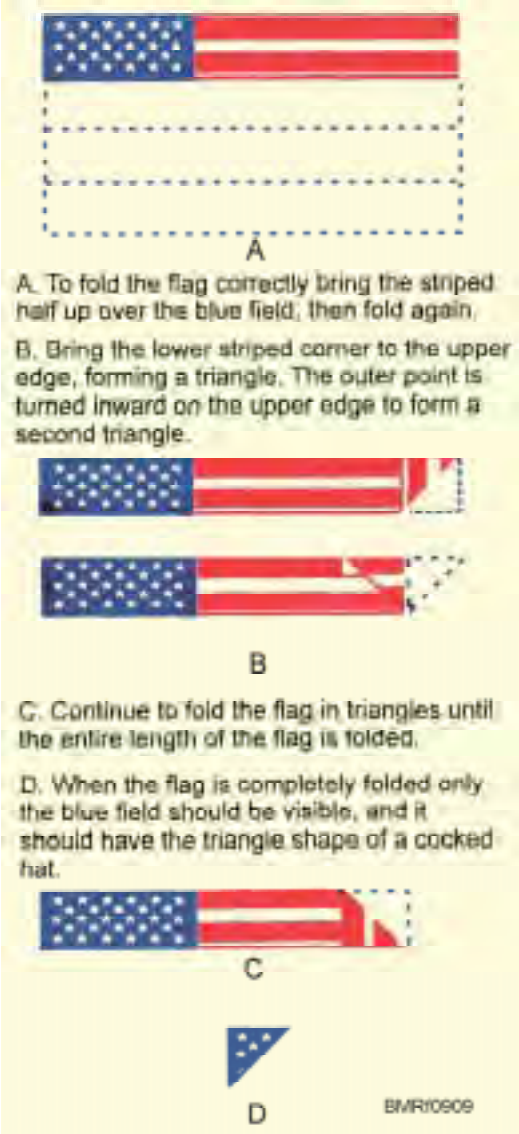



**Figure 9-9.—Folding the ensign.**

## NATIONAL ANTHEM AND FLAG HONORS

Honors to the ensign or national anthem are rendered on occasions other than at colors. In this section, you will learn about procedures for rendering honors when the anthem is played indoors and outdoors, with or without the flag present. Foreign anthems and ensigns are shown the same mark of respect as our own anthem and ensign. All salutes are held from the first note of the anthem to the last.

All the following rules for saluting the national anthem apply only when you hear it played as part of a public ceremony at which you are present. If you hear a broadcast or recording of the anthem on a radio, tape or CD player, television, or as you pass a store, you don’t need to stop or salute.

### Indoors

If the flag is **not** displayed when the anthem is played inside a building, you stand at attention facing the source of the music. If you are in uniform and covered, you render the hand salute; if not covered, you stand at attention. If you are in civilian clothes, render the hand-over-the-heart salute.

***Student Notes:***

If the flag is displayed when the anthem is played, you face the flag and stand at attention. If in uniform and covered, render the hand salute; if in civilian clothes or if in uniform and uncovered, you place your right hand over your heart. Persons in formation stand at attention, and those in charge of the formation salute.

**Outdoors**

With some exceptions, saluting procedures when the anthem is played outdoors (with or without the flag displayed) are the same as when indoors. Marching formations are halted at attention, and the person in charge faces and salutes the flag or music, as appropriate.

Personnel in boats, whether in uniform or in civilian clothes, do not salute during the playing of the anthem. Only the boat officer (or coxswain if there is no boat officer) stands and salutes; all other personnel remain seated at attention.

You are not likely to hear "The Star Spangled Banner" played in a parade, but most marching units do carry the national ensign. The rules for saluting the flag passing in a parade are simple: come to attention, face the flag, and salute. (If you are in a vehicle, remain seated at attention.)

The musical selection "Hail to the Chief" is performed to honor the President of the United States. When "Hail to the Chief" is played, stand at attention and salute.

**BOARDING AND LEAVING A NAVAL VESSEL**

You cannot just walk on and off a ship as you would enter and leave your home. You must follow certain procedures.

When you are in uniform and boarding **any** ship and the national ensign is flying, you halt at the gangway, face aft, and salute the ensign. You then turn to the OOD and salute. If you are returning to your own ship, you say, "I request permission to come aboard, sir/ma'am." The OOD returns both salutes and says, "Come aboard" or a similar expression.

When you salute the OOD in boarding a ship other than your own, you say, "I request permission to come aboard, sir/ma'am." You should then add the purpose of your visit: "to visit a friend" or "to go to small stores."

When you leave a ship, the order of saluting is reversed. You salute the OOD first and say, "I request permission to leave the ship, sir/ma'am." After receiving permission, you then face and salute the ensign (if it is flying) and depart. If you are not in the liberty uniform, state your reason for wanting to leave the ship: "I request permission to go on the pier to check the mooring lines, sir/ma'am."

When boarding a ship in civilian attire and the national ensign is flying, you will halt at the gangway, at attention, and face aft. You then turn to the OOD at attention. If you are returning to your own ship, you say, "I request permission to come aboard, sir/ma'am." The OOD salutes and says, "Very well" or a similar expression.

When you board a ship other than your own, you say, "I request permission to come aboard, sir/ma'am." You should then add the purpose of your visit. The OOD will then say, "Permission granted" or "Permission not granted."

When you are leaving a ship in civilian attire, the procedure is reversed. You stand at attention in front of the OOD first and say, "I request permission to leave the ship, sir/ma'am." After receiving permission, you then stand at attention facing the ensign (if it is flying) and depart.

Sometimes it is necessary for destroyers, submarines, and other ships to tie up in nests alongside a repair ship, tender, or pier. In this case, you may have to cross several ships to go ashore or return to your own ship. When you have to cross one or more ships to reach the pier, to reach another ship or to return to your own ship, you should use the following procedure: Upon boarding a ship that you must cross, salute the colors (if flying), then turn toward and salute the OOD, and request permission to cross. After receiving permission, proceed to cross without delay. When you depart that ship, it is not necessary to salute the colors or OOD again. Repeat this crossing procedure until you reach your destination.

***Student Notes:***

On many ships, particularly those of destroyer size and smaller, there may be a first-class or chief petty officer instead of an officer on the quarterdeck. Although you do not salute enlisted personnel, you must salute an enlisted person who is the OOD because you are saluting the position and authority represented—not the individual. If you are part of a working party that will be using the quarterdeck when loading supplies, you normally salute only when first leaving the ship.

### REVIEW 2 QUESTIONS

Q1. Hoisting the national flag at 0800 and lowering at sunset are known as

Q2. Define the term *shifting the colors*.

Q3. What is the significance of national flags flown at half-mast (half-staff ashore)?

Q4. You are indoors for an event, and the anthem is being played but the flag is not displayed. What should you do—

a. When in uniform and covered—

b. When in uniform and uncovered—

c. When in civilian clothes—

## MILITARY ETIQUETTE

**Learning Objectives**: When you finish this chapter, you will be able to—

- Recognize military etiquette when addressing and introducing enlisted personnel.
- Recognize military etiquette when passing, meeting, addressing, replying to, walking or riding with an officer of the U.S. or foreign armed forces to include aboard ship or in a boat.

The rules of behavior to be observed by Navy personnel at certain times, in specified places, and on certain occasions are described in this section. "Behavior," in this case, means social conduct rather than strict military behavior, though the two sometimes are related.

For passing through doorways, let the senior go first; if possible, hold the door for him or her. On meeting an officer in a passageway, step aside so the officer may pass. If other enlisted persons and/or junior officers are present, call out "Gangway" so everyone can make way for the senior officer.

Juniors should show respect to seniors at all times by recognizing their presence and by being courteous and respectful in speech and manner. Juniors take the leftmost seat in a vehicle and walk on the left side of seniors whom they are accompanying.

### ABOARD SHIP

There are rules of etiquette to follow during divine services, on the quarterdeck, or in officer's country.

When **divine services** are held on board ship, the following word is passed: "Divine services are being held in (such and such a space). The smoking lamp is out. Knock off all games and unnecessary work. Maintain quiet about the decks during divine services."

If you enter the area where divine services are being held, you must uncover even though you are on watch and wearing a duty belt. (Remain covered during Jewish ceremonies.)

Another area in which special rules apply is the **quarterdeck**. The quarterdeck is not a specific deck; it is an area designated by the commanding officer to serve as the focal point for official and ceremonial functions. The quarterdeck, consequently, is treated as a "sacred" part of the ship; and you should obey the following rules:

1. Don't be loud or sloppy in its vicinity.
2. Never appear on the quarterdeck unless you are in complete uniform.

***Student Notes:***

3. Never smoke or have coffee cups and soda cans or bottles on the quarterdeck.
4. Never cross or walk on the quarterdeck except when necessary.
5. Don't lounge on or in the vicinity of the quarterdeck.
6. When on the quarterdeck, salute whenever the quarterdeck watch salutes (as during a gun salute).

Shore stations, as well as ships, have areas designated as the quarterdeck. The same rules apply in all cases.

A **messing compartment** is where enlisted personnel eat; the **wardroom** is where officers eat. If you enter any of these areas while a meal is in progress, you must uncover.

**Officers' country** is the part of the ship where officers have their staterooms and wardrooms; **CPO country** is where the chief petty officers have their living spaces and mess. You must avoid entering these areas except on official business. Never use their passageways as thoroughfares or shortcuts. If you enter the wardroom or any compartment or office of an officer or a CPO, you must remove your hat, unless you are on watch and wearing the duty belt. Always knock before entering an officer's or a chief petty officer's room.

## IN A BOAT

The basic rule in Navy etiquette, as in civilian etiquette, is to make way for a senior. Thus the rule for entering boats, airplanes, and vehicles is seniors in last and out first. (Enlisted personnel board a boat first, leaving room, of course, for officers.) The reason is that the captain should not have to wait in a boat for a less senior person to amble down the accommodation ladder. When the destination is reached, the senior is allowed to disembark first as a mark of respect from juniors.

In general, seniors take the seats farthest aft. If officers are present, enlisted personnel should not sit in the stern seats unless invited to do so. Enlisted personnel maintain silence as long as officers are in the boat. (For reasons of safety, personnel should never become noisy or boisterous in a boat regardless of the hour, condition of the sea, or who is present.)

The boat coxswain salutes all officers entering or leaving the boat. Enlisted personnel seated well forward do not rise when officers enter or leave the stern seats. Personnel in the after section, however, rise and salute when an officer enters or leaves. (Although it is customary to stand when saluting, this formality is dispensed with if the safety of the boat crew would be endangered.) When boat awnings are spread, enlisted personnel remain seated at attention while saluting; they do not rise under these circumstances.

A boat assumes rank according to the rank of the highest grade officer embarked in the boat. The coxswain and senior officer in each boat salute, with the person in the junior boat saluting first. Other crew members stand at attention; passengers sit at attention. The rules of etiquette for personnel aboard airplanes and other vehicles are the same as for boats.

Boats passing a ship during colors must lie to, or proceed at the slowest safe speed. The boat officer, or in his or her absence, the coxswain, stands (if safe to do so) and salutes. Other persons in the boat remain seated or standing, but do not salute.

## ADDRESSING AND INTRODUCING NAVAL PERSONNEL

Custom, tradition, and social change determine how members of the naval service are introduced. Although tradition and military customs generally hold true, there are some differences in methods of addressing and introducing military personnel, depending on whether you are in civilian or military circles.

The proper forms of addressing and introducing naval personnel are summarized in table 9-1. Except as provided in the paragraphs that follow, all officers in the naval service are addressed or introduced with the titles of their grades preceding their surnames.

Officers of the Medical or Dental Corps, and officers of the Medical Service Corps having a doctoral degree, may be addressed as "doctor." Likewise, an officer of the Chaplain Corps may be addressed as "chaplain." However, if a doctor or chaplain prefers to

***Student Notes:***

be addressed by the title of his or her grade, such preference should be honored. When you are addressing an officer whose grade includes a modifier (for example, lieutenant commander), the modifier (lieutenant) may be dropped.

As a general rule, use the officer's title and name. It is better to say, "Yes, Ensign Smith"; "No, Doctor Brown"; or "Yes, Lieutenant Jones"; than to say, "Yes, sir" or "No, ma'am." However, in prolonged conversation where repetition would seem forced or awkward, the shorter "sir" or "ma'am" is used more often.

Aboard ship, the regularly assigned commanding officer is addressed as "captain" regardless of grade. The regularly assigned executive officer (if of the grade of commander) may be addressed as "commander" without adding the name. In some ships it is customary to address the executive officer as "commander" even though the grade is that of lieutenant commander.

Naval officers are introduced to civilians by title, and the method of introduction should give a clue as to how the person should be addressed from then on. You might say, "This is Lieutenant Jones. Mr. Jones is a shipmate of mine." This serves a double purpose; it gives the civilian to whom you are introducing the officer knowledge of the naval person's grade, and it also gives the correct method of address, "Mr. Jones."

Military and civilian practices differ in the introducing and addressing of enlisted personnel. Under military conditions, petty officers are addressed and introduced by their respective title followed by their last name. Petty officers in paygrades E-7, E-8, and E-9 are introduced and addressed as "Chief _____ ," prefixed by "Senior" or "Master," if appropriate. Petty officers in paygrades E-4 through E-6 are addressed and introduced as "Petty Officer _____ ." Persons in paygrades E-3 and below are addressed by their last names only in informal situations. However, in the formal situation or introductions, their last names are preceded by "Seaman," "Fireman," "Airman," and so forth, as appropriate.

Civilians sometimes feel uncomfortable in social gatherings when addressing enlisted personnel as described in the preceding paragraph. It is customary, therefore, for those outside the service to extend to enlisted personnel the same courtesies they would extend to them in civilian life and to prefix their names with Mr., Mrs., Miss, or Ms., as the case may be. In introducing them, one should give their titles and names, then the mode of address: "This is Petty Officer Smith. Mr. Smith will be visiting us for a while." Thereafter, he will be addressed as "Mr. Smith."

In civilian life you are supposed to introduce men to women and youth to age; that is, a young man to a young woman or a young woman to an older woman. If the person is a male member of the clergy, however, you introduce women of any age to him; or, if a man is aged or distinguished, you introduce the woman to him.

The same general rules are followed in military life, except that in most instances naval rank establishes the order of introduction. Thus, you introduce the junior to the senior, whether male or female. An exception is that you always introduce others, regardless of the rank or sex, to a chaplain. If one of the persons is a civilian, you follow the rules of youth to age and male to female.

The only proper response to an oral order is "Aye, aye, sir/ma'am." This reply means more than yes. It indicates "I understand and will obey." Such responses to an order as "O.K., sir" or "All right, sir" are taboo. "Very well" is proper when spoken by a senior in acknowledgment of a report made by a junior, but a junior never says "Very well" to a senior.

"Sir" or "Ma'am" should be used as a prefix to an official report, statement, or question addressed to a senior. It should also be used when addressing an official on duty representing a senior. For example, the OOD, regardless of grade, represents the commanding officer and should be addressed as "Sir" or "Ma'am."

If you are a junior addressing a senior, you should introduce yourself unless you are certain the senior knows you by sight.

**REVIEW 3 QUESTIONS**

Q1. What is the quarterdeck?

Q2. Aboard ship, how is the CO addressed?

***Student Notes:***

**Table 9-1.—Introducing and Addressing Naval Personnel**

| PERSON ADDRESSED OR INTRODUCED | TO MILITARY | | TO CIVILIAN | |
|---|---|---|---|---|
| | INTRODUCE AS: | ADDRESS AS: | INTRODUCE AS: | ADDRESS AS: |
| COMMANDER or above | COMMANDER (or appropriate rank) SMITH | COMMANDER (or appropriate rank) SMITH | COMMANDER (or appropriate rank) SMITH | COMMANDER (or appropriate rank) SMITH |
| LIEUTENANT COMMANDER or below | LIEUTENANT COMMANDER (or appropriate rank) SMITH | COMMANDER SMITH | LIEUTENANT COMMANDER SMITH | Mr. (Mrs., Miss, Ms.) SMITH |
| MEDICAL And/or DENTAL CORPS OFFICER | DR. SMITH | DR. SMITH | LIEUTENANT SMITH OF THE NAVY MEDICAL CORPS | DR. SMITH |
| CHAPLAIN CORPS OFFICER | CHAPLAIN SMITH | CHAPLAIN SMITH | CHAPLAIN SMITH | CHAPLAIN |
| NAVY NURSE CORPS OFFICER | COMMANDER (or appropriate rank) SMITH | COMMANDER SMITH | COMMANDER SMITH OF THE NAVY NURSE CORPS | COMMANDER (Mr., Mrs., Miss., Ms.) SMITH |
| CHIEF WARRANT OFFICER | CHIEF WARRANT OFFICER SMITH | CHIEF WARRANT OFFICER SMITH | CHIEF WARRANT OFFICER SMITH | MR. (Mrs., Miss., Ms.) SMITH |
| MIDSHIPMAN | MIDSHIPMAN SMITH | MIDSHIPMAN SMITH | MIDSHIPMAN SMITH | MR. (Mrs., Miss., Ms.) SMITH |
| CHIEF PETTY OFFICER | CHIEF SMITH | CHIEF or SMITH | CHIEF YEOMAN SMITH | MR. (Mrs., Miss., Ms.) SMITH |
| AVIATION CADET | AVIATION CADET SMITH | MR. SMITH | AVIATION CADET SMITH | MR. (Mrs., Miss., Ms.) SMITH |
| PETTY OFFICER | PETTY OFFICER SMITH | PETTY OFFICER SMITH | PETTY OFFICER SMITH | MR. (Mrs., Miss., Ms.) SMITH |
| SEAMAN | SEAMAN SMITH | SMITH | SEAMAN SMITH | MR. (Mrs., Miss., Ms.) SMITH |

## SUMMARY

Customs and courtesies play an integral part of the seafarer's life. Through them, we show respect for each other and for certain symbols or objects, such as the American flag. When we address the commanding officer as *captain*, even though he or she holds the rank of commander, we are using a time-honored custom of respect for the person in command.

The courtesy of the salute is not only the required recognition of a senior but also the expression of mutual respect and pride in service. The courtesy of rendering honors to the Arizona Memorial and Washington's tomb is a sign of respect. The custom of officer personnel boarding ships' boats after enlisted personnel is another sign of respect. The customs and courtesies of removing your hat indoors or in the presence of a lady, of rendering honors to the national ensign, and of playing the national anthem at morning and evening colors are also signs of respect. Our customs and courtesies will continue to be a part of our daily routine as long as we maintain pride and respect in our Nation, our service, and ourselves.

## REVIEW 1 ANSWERS

A1. Define the following terms.

a. Courtesy—**an act or verbal expression of consideration or respect for others**

b. Custom—**a usual way of acting in a situation that has been practiced so long that it has the force of law**

A2. A **salute** is a required act of military courtesy.

A3. The **hand salute** is the most common form of salute.

A4. When in uniform, Navy personnel salute the **flag, anthem, and officers.**

A5. **True**, under naval customs, the hand salute is accompanied by a word of greeting.

A6. As an enlisted person, you should salute **all officers.**

A7. When boarding a ship in which the national ensign is flying, you should—

a. **Stop on reaching the upper platform of the accommodation ladder or end of brow**

b. **Face the ensign and salute**

c. **Salute the OOD**

A8. As a sentry at a gangway, you should render a salute—

a. **To all officers going or coming over the side**

b. **When passing or being passed by officers close aboard in boat**s

A9. The three rifle salutes are—

a. **Present arms**

b. **Rifle salute at order arms**

c. **Rifle salute at right shoulder arms**

A10. Honors are **salutes rendered to ships, high-ranking individuals, and nations**.

A11. **Manning the rail** is a passing honor rendered to the President of the United States.

A12. A ruler of a country recognized by the United States rates a **21-gun** salute.

## REVIEW 2 ANSWERS

A1. Hoisting and lowering the national flag at 0800 and sunset are known as **morning colors** and **evening colors**.

A2. Shifting the colors—**as a ship gets underway, the ensign is shifted from its in-port position on the stern to its at-sea position on the mainmast**.

A3. National flags flown at half-mast are **internationally recognized symbols of mourning.**

***Student Notes:***

A4. When indoors at an event and the anthem is being played but the flag is not displayed, you should—

a. In uniform and covered—**render a hand salute**

b. In uniform and uncovered—**stand at attention**

c. In civilian clothes—**place your hand over your heart**

**REVIEW 3 ANSWERS**

A1. The quarterdeck is **an area designated by the CO that serves as the focal point for official and ceremonial functions.**

A2. Aboard ship, the CO is addressed as **captain, regardless of rank**.

# CHAPTER 10

# UNIFORMS AND FORMATIONS

*You shall wear your uniforms properly as described in these regulations. Naval personnel must present a proud and professional appearance that will reflect positively on the individual, the Navy, and the United States. The uniforms of the United States Navy and the indications of rank and specialty displayed thereon, are but outward symbols of naval organization and military rank or rating. As such, the Navy uniform is a visibly important element in the morale, pride, discipline and effectiveness of the organization.*

—*U.S. Navy Uniform Regulations*, NAVPERS 15665

Today's Navy has narrowed the gap between men's and women's career paths. Women now perform many of the same tasks and have the same specialties as their male counterparts. These changes caused Navy uniform policy to change, bringing the uniforms of both men and women more closely in line with each other. Navy uniforms are distinctive visual evidence of the authority and responsibility vested in their wearer by the United States.

Because Navy ways are new to you, many questions probably have crossed your mind, such as, "What is that officer's rank"? "What does that petty officer's insignia mean"? "What does that pin stand for"? This chapter explains officer grades; precedence; authority; the enlisted rating structure; and how to wear, mark, and exchange uniforms.

The United States Navy has had a basic uniform policy for many years. The purpose of the uniform policy is to ensure that naval personnel have attractive, distinctive, and practical uniforms. *U.S. Navy Uniform Regulations*, NAVPERS 15665, provides the basic naval uniform policy. You can download the *U.S. Navy Uniform Regulations* from the BUPERS homepage at www.bupers.navy.mil. When you get to this page, select the "services" button and look under "uniform matters."

## WEARING THE UNIFORM

**Learning Objective**: When you finish this chapter, you will be able to—

- Recognize uniform components.
- Identify the proper procedures for wearing uniforms.

Your dress and conduct should always reflect credit upon yourself, the Navy, and the United States. It should be a matter of personal pride to present the best possible appearance in **your** manner of dress and grooming.

You are given a complete issue of regulation clothing when you enter the Navy. The maintenance of your uniform and the replacement of articles of clothing are **your** responsibility. You cannot use the excuse, "I have nothing fit to wear," or "I'm out of clean uniforms."

### ENLISTED MEN

Look at figures 10-1 and 10-2. Here, most enlisted (E-6 and below) men's uniforms are shown. Uniforms must be tailored according to the specifications in the following paragraphs:

The dress blue and dress white jumpers must hang straight and be the same length. The sleeves of the dress white jumper are cut square at the cuff openings.

The **dress white trousers** have a zipper front and are the same length as the blue trousers. A white belt with a regulation buckle is worn with the white uniform. The belt should be of the same fabric as the uniform.

The **neckerchief** is 36 inches square and made of black silk, acetate, or other suitable material. It is folded diagonally to form a triangle, then rolled (fig.10-3) and placed around the neck under the collar. It is tied (fig. 10-4) in a square knot with both ends of equal length and falling naturally. The upper edge of the knot must be even with the lowermost point of the collar opening. Neckerchiefs are worn with both the dress blue and the dress white uniforms. (**NOTE**: For enlisted women neckerchiefs are worn with dress white uniform only.)

**Dress blue and dress white jumpers**. The dress

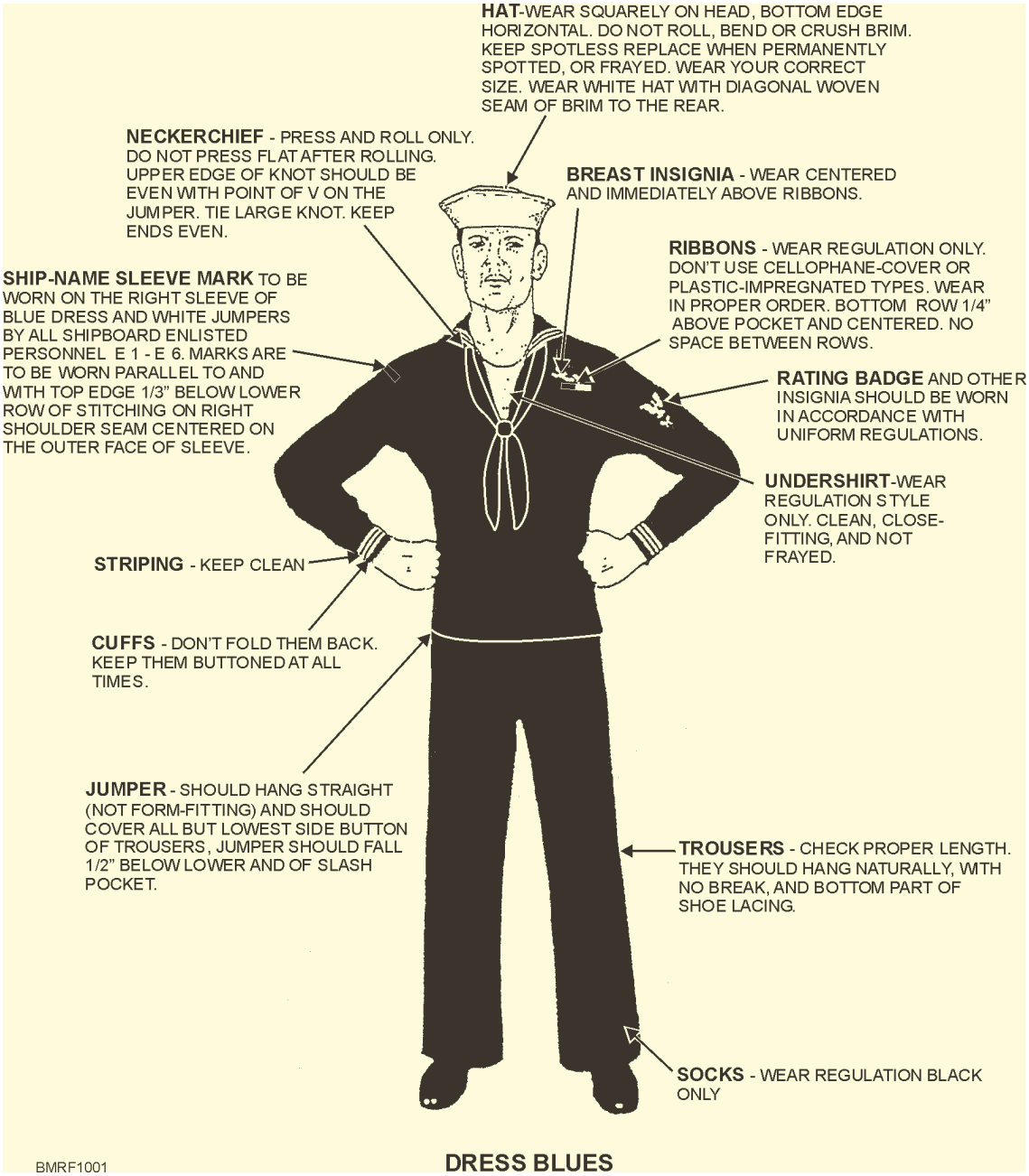



**Figure 10-1.—Proper wearing of uniforms.**

blue jumper should hang straight and be long enough to cover all but the lowest button of the 13-button broadfall front trousers. Sleeves have two button cuffs, the edges of which reaches to the knuckles when the cuffs are unbuttoned. The collar has three stripes of white tape (piping). The dress blue trousers are plain and cuffless and have a 13-button broadfall front. The old story that the 13 buttons represent the 13 original colonies is false.

Government-issue dress blue jumpers and trousers are made of wool serge. The dress white jumpers and trousers are made of a polyester material designated certified Navy twill.

**Dungarees and winter working blues**. Dungarees and winter working blues are considered to be the working uniforms. Dungarees consist of a blue

***Student Notes:***

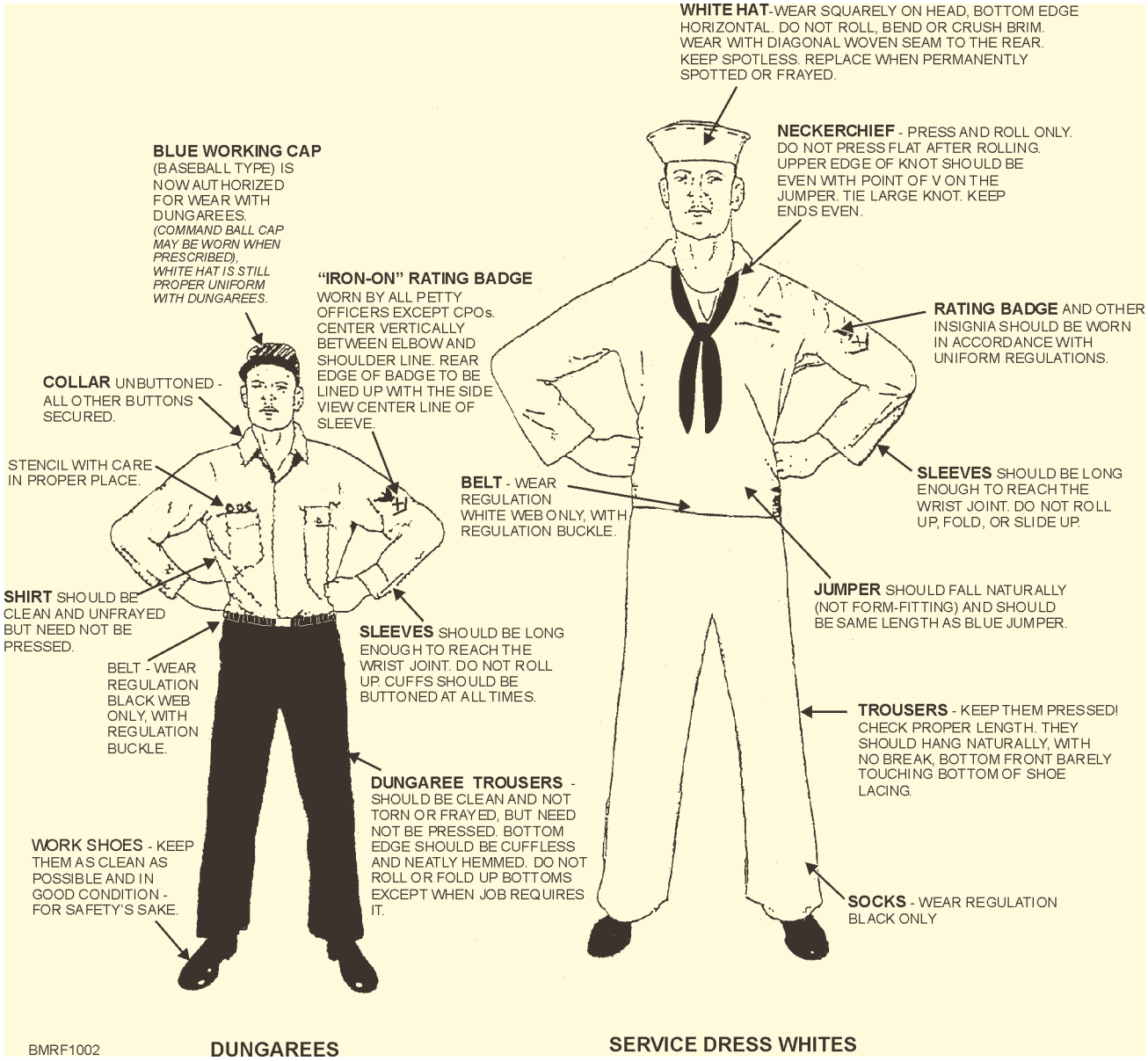



**Figure 10-2.—Proper wearing of uniforms (continued).**

chambray shirt and blue denim trousers. Command or navy ball caps are only authorized for use with dungarees. The winter working blue uniform consists of blue winter shirt and blue trousers. Enlisted men E-6 and below have the option of wearing the garrison cap instead of the white hat with the winter working blue uniform (command ball cap may be authorized as with dungarees and worn within unit premises or working areas). Both uniforms are to be worn in working spaces where other uniforms would be unsafe, inconvenient, or would become excessively soiled.

**Shoes**. Black dress shoes and black socks are worn with all uniforms. Shoes may be of leather or a synthetic material with a plain toe.

**Peacoat**. The peacoat is a blue winter-weight coat that may be prescribed with an appropriate winter uniform. It is an easy-fitting, double-breasted coat with a convertible collar. The peacoat should reach the hips. The sleeves should reach to about three fourths of the distance from the wrist to the knuckles of the hand when the arms hang naturally at the sides. The peacoat must

***Student Notes:***

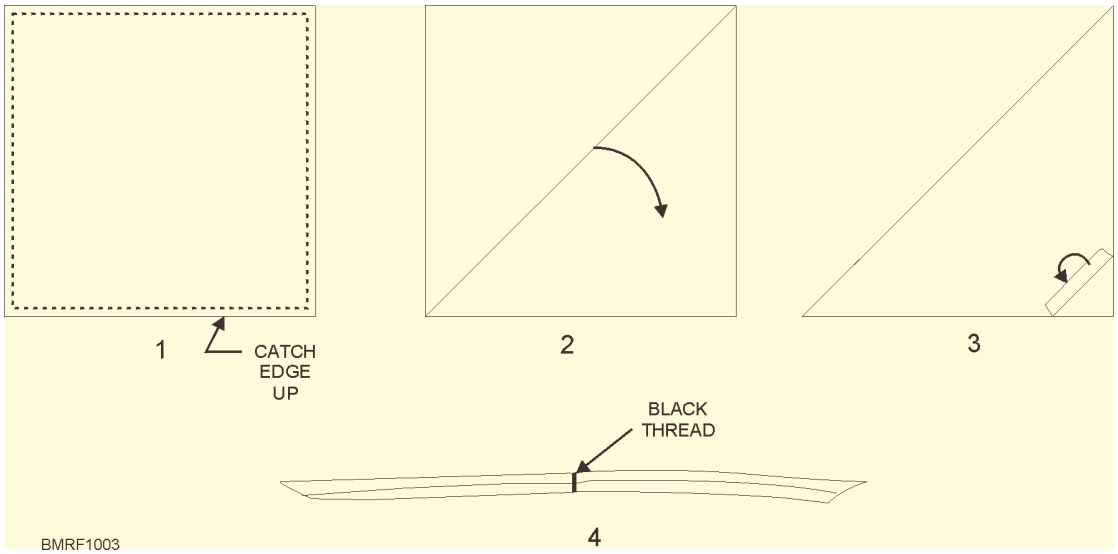



**Figure 10-3.—Rolling the neckerchief.**

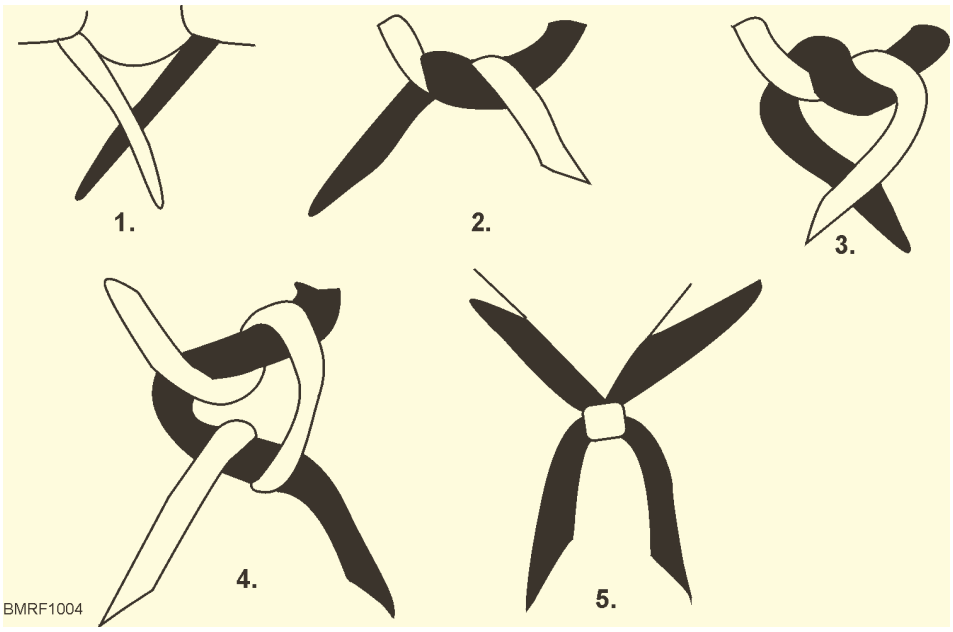



**Figure 10-4.—Tying the neckerchief.**

be worn buttoned with the three lower buttons on the right side. In foul weather, the coat may be buttoned to the neck.

**All-weather coat**. A black, single, breasted, beltless, water-repellant coat. It's made from 65% polyester and 35% cotton poplin fabric. The coat has epaulets, tabs on the cuffs, and a zip-out lining. Women's coats button to the left and men's coats button to the right. When worn, button all the buttons except the collar button (in bad weather, the collar button may be buttoned). When wearing the all-weather coat, a clear plastic, combination cap rain cover may be worn.

**Blue working jacket**. The blue working jacket is made of navy blue material. It is fully lined with a zipper front. Two military organization patches may be worn on the jacket on an optional basis, subject to the following restrictions:

***Student Notes:***

- The patch of the command to which you are assigned must be centered on the left breast.
- A second unit patch of your choice, acceptable to the command, will be centered on the right breast.

The blue working jacket may be worn with the dungarees uniform.

**Hat**. The white hat should be worn squarely on the head, as shown in figure 10-1.

**Medals**. Large medals may be prescribed for wear with the dress blue jumper for special occasions, such as change of command or formal inspections. Medals and neckerchief may be prescribed for wear with the dress white jumper. When large medals are worn with either uniform, the uniform is called *full dress*.

## ENLISTED WOMEN

Enlisted (E-6 and below) women's uniforms and their proper wear are shown in figures 10-5 and 10-6 (not all uniforms are shown). Uniforms must be tailored according to the specifications in the following paragraphs:

**Service dress blues**. The enlisted women's service dress blues (fig. 10-5) is worn with ribbons. The necktie or necktab is worn with the outer edges parallel to the outer edges of the collar. An equal amount of the necktab should show on each side of the collar. For prescribed (required) and optional items, refer to NAVPERS 15665.

**Full dress blue**. The full dress blue uniform is the same as the service dress blue uniform. Large medals and ribbons are worn (fig. 10-5) with this uniform.

**Dress white jumper**. The enlisted women's dress white jumper (fig. 10-6). The jumper should fit comfortably with no binding. The sleeves will have inverted creases at the inside and outside edge, hang straight, and be long enough to cover the wristbone. The bottom of the jumper should be loose fitting at the hips. Normally, a white belted skirt is worn with the dress white jumper. However, white jumper slacks can be worn with the dress white jumper. (**NOTE**: When white jumper slacks are used with the white jumper, the hem of the jumper should fall to within 1 inch above the bottom of the pocket opening of the slacks.) The slacks have side seam pockets and inverted creases. The slacks

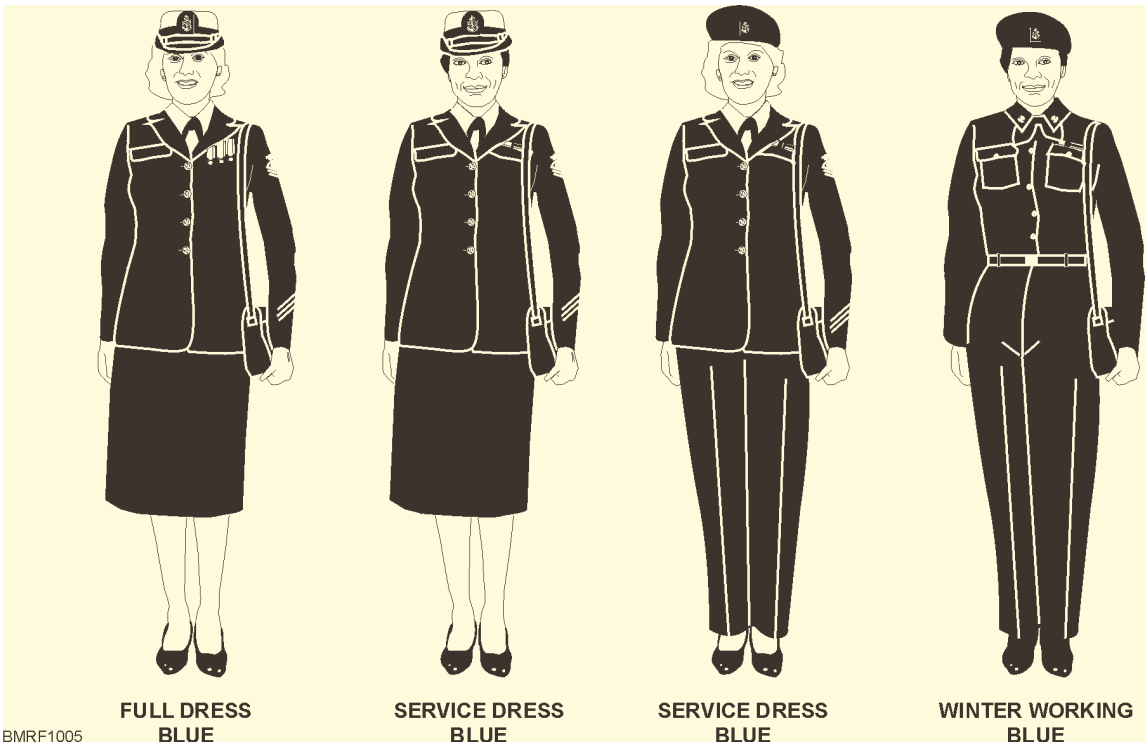



**Figure 10-5.—Enlisted women's uniforms.**

## *Student Notes:*

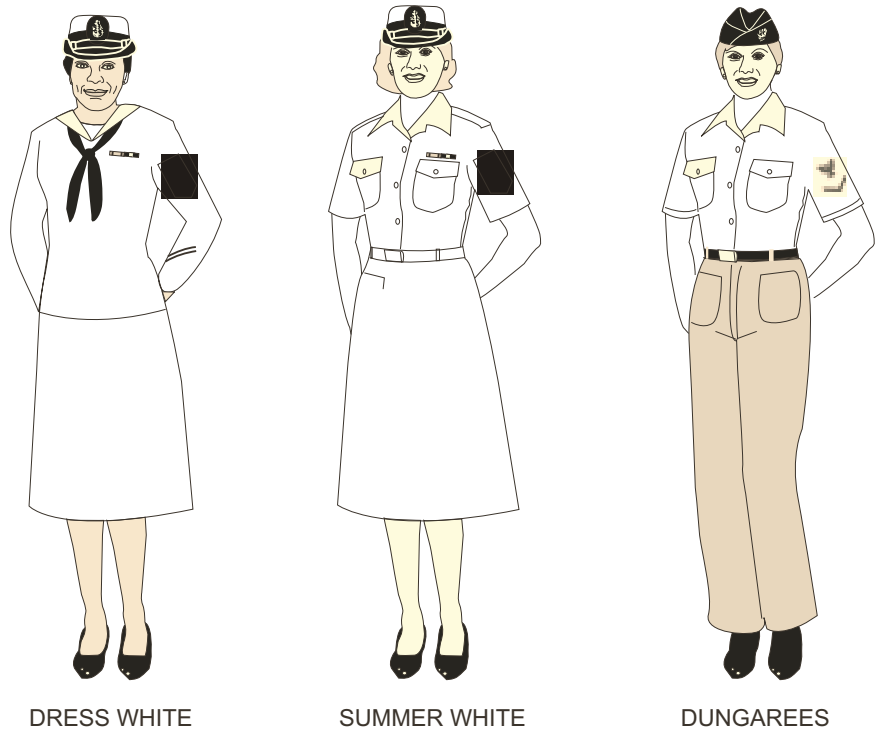



**Figure 10-6.—Enlisted women's uniforms (continued).**

should cover the shoes at the heel by 1 inch.

**Working uniforms**. Working uniforms consist of belted blue slacks or skirt and blue winter shirt. Dungarees (fig. 10-6) are also authorized. Black socks, a garrison cap, black service shoes, and a black handbag may be worn with each. Command ball caps, berets, and the blue cardigan are other items that may be prescribed.

**Shoes**. Black dress shoes are pumps made of smooth leather, calf, or synthetic leather. They will be of plain design with closed heels and toes. The heels will be no higher than 2 5/8 inches nor less than 5/8 inch when measured from the forward edge of the heel. Wedge heels are not authorized. The black service shoes will be laced leather or synthetic oxfords with one line of black stitching around the top of the toe.

**Hat**. The combination hat may be worn with all dress uniforms. It is oval in shape, with a stiffened crown. The brim is rolled at the sides and straight in front and back. The hat is worn with a detachable white hat cover. Enlisted women E-6 and below may wear the garrison cap as an option with blues only when wearing the black v-neck sweater instead of the service dress blue coat. As with the enlisted male E-6 and below, command or navy ball caps are only authorized with dungaree uniforms.

## UNIFORM OF THE DAY

The uniform of the day is that uniform prescribed by proper authority to be worn on occasions such as work, liberty, and inspections. The prescribed uniform of the day is published in the Plan of the Day or the Plan of the Week. Wear your uniform with pride in self, the Navy, and the United States.

### REVIEW 1 QUESTIONS

Q1. What is the length of the dress blue jumper for men?

Q2. What uniform should enlisted women E-1 through E-6 wear with the black silk neckerchief?

***Student Notes:***

Q3. When wearing a peacoat over a dress blue jumper uniform, the uniform collar should be—

Q4. When added to a service dress white uniform, what uniform component makes the service dress white uniform a full dress uniform?

## PROPER CARE OF UNIFORMS

**Learning Objectives**: When you finish this chapter, you will be able to—

- Identify the methods for caring for and maintaining uniforms to include marking enlisted clothing and transferring clothing.
- Identify the contents and layout of the seabag.
- Identify the uniform components that can be worn with civilian clothes and recognize the rules for wearing civilian clothes.

All Navy personnel must maintain their full requirement of authorized uniforms and are forbidden to possess or wear unauthorized uniforms. Division officers are required to inspect the uniforms of all nonrated personnel at regular intervals. The purpose of the inspection is to make sure that each person has the prescribed outfit. Insignia, decorations, medals, badges, and ribbons are worn as prescribed. All uniforms must be kept scrupulously clean; gold bullion lace, devices, and insignia must be kept free of tarnish and corrosion. Shoes should be kept well shined and in good repair.

You should **not** wear a uniform if any of the following conditions exist:

- Frayed, torn, ill fitting, badly wrinkled, badly stained, or dirty uniforms. (A little leeway is permitted in the dungaree uniform, but if it is damaged beyond the possibility of a professional-looking repair, the item of clothing should be discarded.)
- Discolored or frayed piping.
- Missing buttons.
- Cracked, badly stained, or nonregulation shoes.
- Badly faded, discolored, or frayed ribbons or rate/rating badges; tarnished or corroded metal devices.

You may not wear any uniform, article, insignia, or decoration that is not yours or to which you are not entitled.

Further, you should **not** wear a uniform in the following manner:

- Unbuttoned coats
- Rolled up sleeves, hat not squared, cuffs unbuttoned, or shirttails hanging out
- Incomplete or nonregulation uniforms

### MARKING ENLISTED CLOTHING

You should mark your clothing legibly with your name and social security number. Use black marking fluid for marking white clothing and chambray shirts. Use white marking fluid for marking blue clothes and dungaree trousers. Where labels are provided, mark them with indelible ink.

If available, men's and women's clothing should be marked with a 1/2-inch stencil or stamp. If a 1/2-inch stamp is not available, a stencil no larger than 1 inch may be used.

Required items of men's and women's clothing (tables 10-1 and 10-2) are marked according to current Navy uniform regulations and as indicated in the chart shown below. Where the word *right* or *left* appears in marking instructions, it means the owner's right or left when wearing the garment. On towels and similar articles, it means the owner's right or left when standing behind the article.

***Student Notes:***

**Table 10-1.—Marking Men's Clothing**

| ITEM | LOCATION |
|---|---|
| Shirts | 1. Blue chambray—Vertically, beginning 1 inch from the bottom on the inner side of the right front facing on which the buttons are sewn; embroider last name on right front, 1 inch above pockets.<br><br>2. Winter blue —Vertically, beginning 1 inch from the botton on the lower side of the right front facing.<br><br>3. White summer—Same as winter blue. |
| Jumper (blue or white) | 1. Turn inside out, front down, collar away from you, stencil three initials, ¾ inch below collar seam to left of center, and last four digits of SSN ¼ inch below horizontal seam using white ink; fill in manufacturer's tag, using ball- point pen. |
| Trousers | 1. Dress blue—On designated nameplate, turn trousers inside out, fly down, waistband away from you, stencil three initials and last four digits of SSN on rear pocket, 1/4 inch below horizontal seam using white ink; fill in manufacturer's tag, using ball-point pen.<br><br>2. Dungaree—On waistband inside front at the right of center line, last name will be embroidered in white on the outside, 1 inch above right hip pocket, centered.<br><br>3. White long—Turn inside out, fly down, waistband away from you, stencil three initials and last four digits of SSN on left rear pocket in between the horizontal seams; fill in manufacturer's tag, using ball-point pen. |
| Caps | 1. Command ball—Initials only on sweatband.<br><br>2. Knit (watch)—Initials only, on a label on the inside.<br><br>3. White hat—On the inside of the hem at the right of the center line on the back. |
| Jackets | 1. Blue windbreaker—On the inside of the hem at the right center line on the back.<br><br>2. Blue working—On the inside of the hem at the right on the center line on the back; last name only on the left 1 inch above the pocket; centered. Will be white. |
| Peacoat | 1. On label located on the inside breast pocket. |
| All-weather coat | 1. Inside lining, 3 inches below collar seam. |
| Sweater | 1. On label on the inside below the back of the collar. |
| Shoes | 1. Initials only inside, near top. |
| Socks | 1. Initials only on the foot. |
| Drawers | 1. On the outside of the right half of the waistband, or immediately underneath the waistband on drawers with elastic waistbands. |
| Undershirts | 1. On outside of the front, 1 inch from the bottom of the shirt, right of the center. |
| Belts | 1. Inside near tab. |
| Gloves | 1. Initials only on inside, near the top. |
| Neckerchiefs | 1. Diagonally across the center before folding, initials only. |

**Table 10-2.—Marking Women's Clothing**

| ITEM | LOCATION |
|---|---|
| Coat (blue) | 1. On designated name label. |
| Jumper (white) | 1. Same as for men. |
| Shirts | 1. Blue chambray—Vertically, beginning 1 inch from the bottom on the inner side of the right front fold on which the buttons are sewn. The chambray shirt is embroidered in black, last name only on right front, 1 inch above the pocket, centered. Maternity chambray shirts that do not have pockets are embroidered in the same relative position as the blue chambray shirt, with pockets.<br>2. Blue winter—Vertically, beginning 1 inch from the bottom on the inner side of the right front fold on which the buttons are sewed.<br>3. White—Same as blue winter. |
| Skirts | 1. Blue, belted—Center front, inside waistband.<br>2. Blue, unbelted—Center front, inside on waistband.<br>3. Blue, formal—Center front, inside on waistband.<br>4. White, belted—White-certified Navy twill skirts will be marked on the name tag sewn on the liner directly underneath the right pocket. |
| Slacks (blue, white, or dungarees) | 1. Blue and white—Center back, inside on waistband.<br>2. Dungarees—Center back, embroidered inside on waistband |
| Caps | 1. Command ball—Initials only on sweatband.<br>2. Knit (watch)—Initials only on label on the inside.<br>3. Beret—On designated nameplate.<br>4. Combination white—On designated nameplate.<br>5. Garrison blue—On designated nameplate. |
| Jackets | 1. Blue windbreaker—On the inside of the hem at the right on the center line on the back.<br>2. Blue working—On the inside of the hem at the right of the center line of the back and the last name only on the left front, 1 inch above the pocket; centered. Will be in white |
| Overcoat | 1. On designated nameplate; and inside left front panel. |
| Peacoat | 1. On the label located on the inside breast pocket. |
| All-weather coat | 1. Inside the lining, 3 inches below collar seam. |
| Sweater | 1. On the manufacturer's tag. |
| Scarf (blue or white) | 1. Center back, inside. |
| Shoes (black dress or black service) | 1. Initials only inside, near top. |
| Socks (black) | 1. Initials only on the foot. |
| Undershirt | 1. On the outside of the front, 1 inch from the bottom of the skirt and at the right on the center. |
| Belts (black or white) | 1. Inside, last name and the first and middle initials only. |

Table 10-2.—Marking Women's Clothing (continued)

| ITEM | LOCATION |
|---|---|
| Handbag | On the manufacturer's tag inside large pocket. |
| Necktie | Inside, center, back. |
| Neckerchief | Same as for men. |

**NOTE**

Embroidered name/nametags are required on the chambray shirt and dungaree trousers.

Your clothing is marked for good reasons. When you send your clothing to the laundry, there must be a method to identify it. If your clothing is lost or misplaced, the only way it can be recovered is if it has been properly marked.

## TRANSFER OF CLOTHING

No transfer or exchange of an enlisted person's uniform clothing will be made without the commanding officer's authorization. When such transfers or exchanges are authorized or when clothing belonging to deserters is sold, obliterate (make the name unreadable) the former owner's name with a red "D.C." stamp. The purchaser's name will be placed above, below, or next to it.

## SEABAGS

The CO requires clothing of all nonrated personnel to be inspected at regular intervals to make sure that each person has the required seabag items (table 10-3 and table 10-4). Also, before a nonrated person is transferred to another ship or station, another seabag inspection is made. Petty officers clothing may be inspected on an individual basis, as appropriate. All personnel are required to have at least the following items and quantities in their seabag:

Table 10-3.—Seabag Requirements for Enlisted E-1 through E-6—Men

| ENLISTED MEN | | | |
|---|---|---|---|
| ITEM | QUANTITY | ITEM | QUANTITY |
| All-weather coat (blue) | 1 | Shirt, winter blue | 2 |
| Bag, duffel | 1 | Shirt, blue chambray, long sleeve | 1 |
| Belt, web, black, with silver clip | 2 | Shirt, blue chambray, fire retardant, long sleeve | 4 |
| Belt, web, white, with silver clip | 3 | Shirt, white short sleeve | 2 |
| Buckle, silver | 4 | Shoes, dress black | 1 pr |
| Cap, ball | 2 | Shoes, safety chukka | 1 pr |
| Cap, knit | 2 | Socks, cotton/nylon, black | 6 pr |
| Gloves, leather, black | 1 pr | Sweater, wool, blue | 1 |
| Group rate mark, black | 3 | Towel, bath | 4 |
| Group rate mark, white | 4 | Trousers, broadfall, blue | 1 pr |
| Hat, white | 3 | Trousers, poly/wool, dress blue | 2 pr |
| Jacket, blue working | 1 | Trousers, dungaree/denim | 1 pr |

***Student Notes:***

Table 10-3.—Seabag Requirements for Enlisted E-1 through E-6—Men (continued)

| ENLISTED MEN | | | |
|---|---|---|---|
| ITEM | QUANTITY | ITEM | QUANTITY |
| Jumper, blue working | 1 | Trousers, dungaree, fire retardant | 4 pr |
| Jumper, blue dress | 1 | Trousers, white | 2 pr |
| Jumper, white dress | 2 | Trousers, white jumper (polyester) | 2 pr |
| Neckerchief | 1 | Undershirts | 8 |
| Necktie, black | 1 | Undershorts, white | 8 |

Table 10-4.—Seabag Requirements for Enlisted E-1 through E-6—Women

| ENLISTED WOMEN | | | |
|---|---|---|---|
| ITEM | QUANTITY | ITEM | QUANTITY |
| All-weather coat (blue) | 1 | Shirt, cotton/poly, blue chambray, long sleeve | 1 |
| Bag, duffel | 1 | Shirt, blue chambray, fire retardant, long sleeve | 4 |
| Belt, web, black, with silver | 2 | Shirt cotton/poly white short sleeve | 3 |
| Belt, web, white, with silver | 3 | Shirt, winter blue | 2 |
| Buckle, silver | 2 | Shoes, black dress pumps | 1 pr |
| Cap, ball | 2 | Shoes, black safety | 1 pr |
| Cap, combination with 2 crowns | 1 | Shoes, service black | 1 pr |
| Cap, garrison, blue | 2 | Skirt, blue belted | 1 |
| Cap, knot, blue | 1 | Skirt, blue unbelted | 1 |
| Coat, service dress blue | 1 | Skirt, CNT, poly white belted | 1 |
| Gloves, leather, black | 1pr | Skirt, poly/cotton, white belted | 2 |
| Group rate mark, black | 3 | Slacks, blue belted | 2 pr |
| Group rate mark, white | 5 | Slacks, blue unbelted | 1 pr |
| Handbag, black | 1 | Slacks, cotton/poly, dungaree/denim | 1 pr |
| Hosiery, nylon | As needed | Slacks, dungaree, fire retardant | 4 pr |
| Insignia, service, hat, cap | 1 | Slacks, dress, CNT, white | 2 pr |
| Jacket, utility (blue working) | 1 | Slacks, poly/cotton, white | 2 pr |
| Jumper, white dress | 1 | Socks, black | 5 pr |
| Lingerie | As needed | Sweater, blue | 1 |
| Neckerchief, black | 1 | Towel, bath | 4 |
| Necktab, black | 1 | Undershirts | 8 |

## CIVILIAN CLOTHING

You may be permitted to have civilian clothing in your possession aboard ship or at a naval activity ashore. You may wear such clothing while leaving or returning to your ship or station, while awaiting transportation after permission to leave the ship has been given, while on authorized leave of absence, liberty, or in any off-duty status ashore.

When wearing civilian clothing, you must ensure that your dress and personal appearance are appropriate for the occasion and won't bring discredit upon the naval service. Current styles and fashions are authorized. Tank-top shirts, white undershirts worn as outer garments, cutoff shorts, and shower sandals are considered appropriate civilian attire for occasions such as picnics, athletic events, and other daytime activities of an extremely casual nature. The above items will not otherwise be worn within the confines of a military installation.

In cases of individuals who do not wear civilian clothing as outlined or who fail to maintain proper and adequate uniforms, individual commands may suspend the privilege of wearing civilian clothing to and from the command.

Military personnel may wear the following military uniform articles with civilian clothing:

- All-weather coat/raincoat (without insignia)
- Belts with civilian buckles
- Knit watch cap
- Command/Navy ball cap (without insignia)
- Gloves
- Handbag
- Blue windbreaker jacket (without insignia)
- Khaki windbreaker jacket (without insignia)
- Shoes
- Socks/hosiery
- Cardigan and blue pullover sweaters (recruit issue)
- Black V-neck pullover sweater (without nametag)
- Underwear

### REVIEW 2 QUESTIONS

Q1. DELETE

Q2. Men and women stencil what uniform the same way?

Q3. What person can authorize the transfer of an enlisted person's clothing to another enlisted person?

Q4. You are required to have fire retardant dungaree shirts and trousers/slacks in your seabag. How many pair(s) should you have?

Q5. List five uniform items that you can wear with civilian clothes.

a.

b.

c.

d.

e.

***Student Notes:***

## OFFICER AND ENLISTED INSIGNIA

**Learning Objective**: When you finish this chapter, you will be able to—

- Identify rating insignia to include service stripes, paygrade insignia of U.S. armed forces enlisted personnel, grade insignia and corps devices of naval officers, and special insignia.

In the enlisted branch of the Navy, a field of work or an occupation is called a *rating*. Levels within the rating are called *rates*. In the case of a Boatswain's Mate second class (BM2), for example, Boatswain's Mate is the rating and second class is the rate. In other words, rating is the job or occupation, while rate is the paygrade of the person.

As a newcomer without previous military experience, you probably entered the service as a recruit in paygrade E-1. This is the basic paygrade in the armed forces grading structure. From the recruit rate, you began to train in one of the six broad occupational groups. Your occupational group is identified by a group rate mark, which is worn on the left sleeve of jumpers and white summer shirts. Group rate marks are shown in figure 10-7.

Personnel in paygrades E-1, E-2, and E-3 who have qualified in a particular rating will wear the specialty mark of that rating. This is called a *striker mark*. The striker mark is worn immediately above the group rate mark. If you were a qualified striker and in paygrade E-1, you would wear the striker mark, even though you wouldn't wear the group rate mark.

After advancing to Seaman, Fireman, Airman, Constructionman, Hospitalman, or Dentalman, you'll want to qualify for the lowest petty officer rate—petty officer third class. The rating you are trying for will depend on your personal qualifications and desires. At this time, you will enter the occupational field that you will normally follow for the rest of your Navy career. Subject to standard instructions, changes from one field to another are allowed quite freely in the lower paygrades before a person has been intensively trained in one particular field. This lets you have enough time to find the choice of work you want in the Navy. However, once you have advanced to a senior petty officer level, changes to another field are seldom permitted.

As mentioned before, every enlisted person in the Navy has a rate. You must be able to identify a person's rate. To enable you to do this, every enlisted person in the Navy (with the exception of E-1) is required to wear an insignia indicating rate on the left arm of the service uniform. This is usually called a rating badge. Figures 10-8 through 10-10B identifies all enlisted rating insignia.

### SERVICE STRIPES

Service stripes (called *hash marks*) indicate length of service. One stripe is worn on the left sleeve of jumpers for each **full** 4 years of active or Reserve service in any of the armed forces, or any combination thereof, such as 2 years in the Army and 2 years in the Navy. Scarlet hash marks and rating badges are worn on blue uniforms; blue hash marks on white uniforms.

Gold rating badges and service stripes are worn when good conduct in the naval service totals 12 years. This 12 years may be active or drilling reserve time in the Navy, Navy Reserve, Marine Corps, or Marine Corps Reserve. For more information about authority to wear gold rating badges and service stripes, refer to the *U.S. Navy Uniform Regulations*, NAVPERS 15665.

### RATE INSIGNIA OF THE U.S. NAVY AND OTHER U.S. ARMED FORCES ENLISTED PERSONNEL

Look at figure 10-11, which shows the rate insignia of all the U.S. armed forces enlisted personnel.

The most senior enlisted person in the U.S. Navy is the master chief petty officer of the Navy (MCPON). (**NOTE**: The senior enlisted insignia for the other armed services are shown directly under the MCPON in fig. 10-11.) The rating insignia of the MCPON is similar to that of all other master chief petty officers, except that it has three gold stars in line above the eagle and a gold star in the space between the eagle and the upper chevron that replaces the specialty mark.

Major commands have a Command Master Chief Petty Officer (CM/C). The CM/C insignia differs from the MCPON. There are two silver stars above the eagle, and there is a silver star that replaces the specialty mark.

***Student Notes:***

| GROUP | PAYGRADE | RATE | ABBR | UPPER SLEEVE |
|---|---|---|---|---|
| DECK/ADMINSTRATION MEDICAL/DENTAL | E-1 | SEAMAN RECRUIT<br>HOSPITALMAN RECRUIT<br>DENTALMAN RECRUIT | SR<br>HR<br>DR | |
| | E-2 | SEAMAN APPRENTICE<br>HOSPITALMAN APPRENTICE<br>DENTALMAN APPRENTICE | SA<br>HA<br>DA | |
| | E-3 | SEAMAN<br>HOSPITALMAN<br>DENTALMAN | SN<br>HN<br>DN | |
| ENGINEERING/HULL | E-1 | FIREMAN RECRUIT | FR | |
| | E-2 | FIREMAN APPRENTICE | FA | |
| | E-3 | FIREMAN | FN | |
| AVIATION | E-1 | AIRMAN RECRUIT | AR | |
| | E-2 | AIRMAN APPRENTICE | AA | |
| | E-3 | AIRMAN | AN | |
| CONSTRUCTION (SEABEES) | E-1 | CONSTRUCTION RECRUIT | CR | |
| | E-2 | CONSTRUCTION APPRENTICE | CA | |
| | E-3 | CONSTRUCTION | CN | |

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**Figure 10-7.—Group rate marks for paygrades E-1 through E-3.**

| ENGINEERING SPECIALTIES | |
|---|---|
| DAMAGE CONTROLMAN - DC | ELECTRICIAN'S MATE - EM |
| ENGINEMAN - EN | GAS TURBINE SYSTEM TECHNICIAN - GS* |
| HULL MAINTENANCE TECHNICIAN - HT | INTERIOR COMMUNICATIONS ELECTRICIAN - IC |
| MACHINIST'S MATE - MM | MACHINERY REPAIRMAN - MR |

*GAS TURBINE TECHNICIAN IS USED AT PAYGRADE E-9 ONLY. LEADING TO GSCM IS THE GAS TURBINE SYSTEM TECHNICIAN - ELECTRICAL (GSE) AND GAS TURBINE ELECTRICIAN - MECHANICAL (GSM)

| CONSTRUCTION SPECIALTIES | |
|---|---|
| BUILDER - BU[1] | CONSTRUCTION ELECTRICIAN - CE[2] |
| CONSTRUCTION MECHANIC - CM[3] | ENGINEERING AID - EA[1] |
| EQUIPMENT OPERATOR - EO[3] | STEELWORKER - SW[1] |
| UTILITIESMAN - UT[2] | |

[1]BU, EA, AND SW BECOME CUCM AT PAYGRADE E-9
[2]CE AND UT BECOME UCCM AT PAYGRADE E-9
[3]CM AND EO BECOME EQCM AT PAYGRADE E-9

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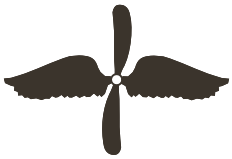
**Figure 10-8.—Rating insignias for enlisted personnel.**

| AVIATION SPECIALTIES | |
|---|---|
| AVIATION BOATSWAIN'S MATE - AB[1] | AIR TRAFFIC CONTROLLER - AC |
|  AVIATION MACHINIST'S MATE - AD[3] | AVIATION ELECTRICIAN'S MATE - AE |
| AEROGRAPHER'S MATE - AG | AVIATION STOREKEEPER - AK |
| AVIATION STRUCTURAL MECHANIC - AM[2,3] | AVIATION ORDNANCEMAN - AO |
| AVIATION SUPPORT EQUIPMENT TECHNICIAN - AS | AVIATION ELECTRONICS TECHNICIAN - AT[4] |
| AVIATION WARFARE SYSTEMS OPERATOR - AW | AVIATION MAINTENANCE ADMINISTRATIONMAN - AZ |
| PHOTOGRAPHER'S MATE - PH | AIRCREW SURVIVAL EQUIPMENTMAN - PR |

[1] AVIATION BOATSWAIN'S MATE IS USED AT PAYGRADE E-9 ONLY. LEADING TO ABCM IS LAUNCHING AND RECOVERY EQUIPMENT (ABE), FUELS (ABF), AND AIRCRAFT HANDLING (ABH).
[2] STRUCTURAL MECHANIC IS USED AT PAYGRADE E-8 ONLY. LEADING TO AMCS IS SAFETY EQUIPMENT (AME), HYDRAULICS (AMH), AND STRUCTURES (AMS).
[3] ADCS AND AMCS LEADING TO AFCM.
[4] ATCS AND AECS LEADING TO AVCM.

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**Figure 10-9.—Rating insignias for enlisted personnel (continued).**

| DECK SPECIALTIES | | |
|---|---|---|
| BOATSWAIN'S MATE - BM | ELECTRONICS WARFARE TECHNICIAN - EW | MASTER-AT-ARMS - MA |
| QUARTERMASTER - QM | OPERATIONS SPECIALIST - OS | SIGNALMAN - SM |
| SONAR TECHNICIAN - ST [1] | | |

[1] SONAR TECHNICIAN HAS TWO BRANCHES: SONAR TECHNICIAN-SURFACE (STG) AND SONAR TECHNICIAN-SUBMARINE (STS)

| ADMINISTRATION/TECHNICAL SPECIALTIES | | |
|---|---|---|
| CRYPTOLOGIC TECHNICIAN - CT [2] | DISBURSING CLERK - DK | ELECTRONICS TECHNICIAN - ET |
| ILLUSTRATOR DRAFTSMAN -DM | INTELLIGENCE SPECIALIST - IS | INFORMATION SYSTEMS TECHNICIAN - IT |
| JOURNALIST - JO | LITHOGRAPHER - LI | LEGALMAN - LN |
| MESS MANAGEMENT SPECIALIST - MS | MUSICIAN - MU | NAVY COUNSELOR - NC |
| POSTAL CLERK - PC | PERSONNELMAN - PN | RELIGIOUS PROGRAM SPECIALIST - RP |
| SHIP'S SERVICEMAN - SH | STOREKEEPER - SK | YEOMAN - YN |

[2] CRYPTOLOGIC TECHNICIAN HAS OF SIX BRANCHES: CRYPTOLOGIC TECHNICIAN-ADMINISTRATION (CTA); CRYPTOLOGIC TECHNICIAN-INTERPRETIVE (CTI); CRYPTOLOGIC TECHNICIAN-MAINTENANCE (CTM); CRYPTOLOGIC TECHNICIAN-COMMUNICATIONS (CTO); CRYPTOLOGIC TECHNICIAN-COLLECTION (CTR); AND CRYPTOLOGIC TECHNICIAN-TECHNICAL (CTT)

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**Figure 10-10A.—Rating insignias for enlisted personnel (continued).**

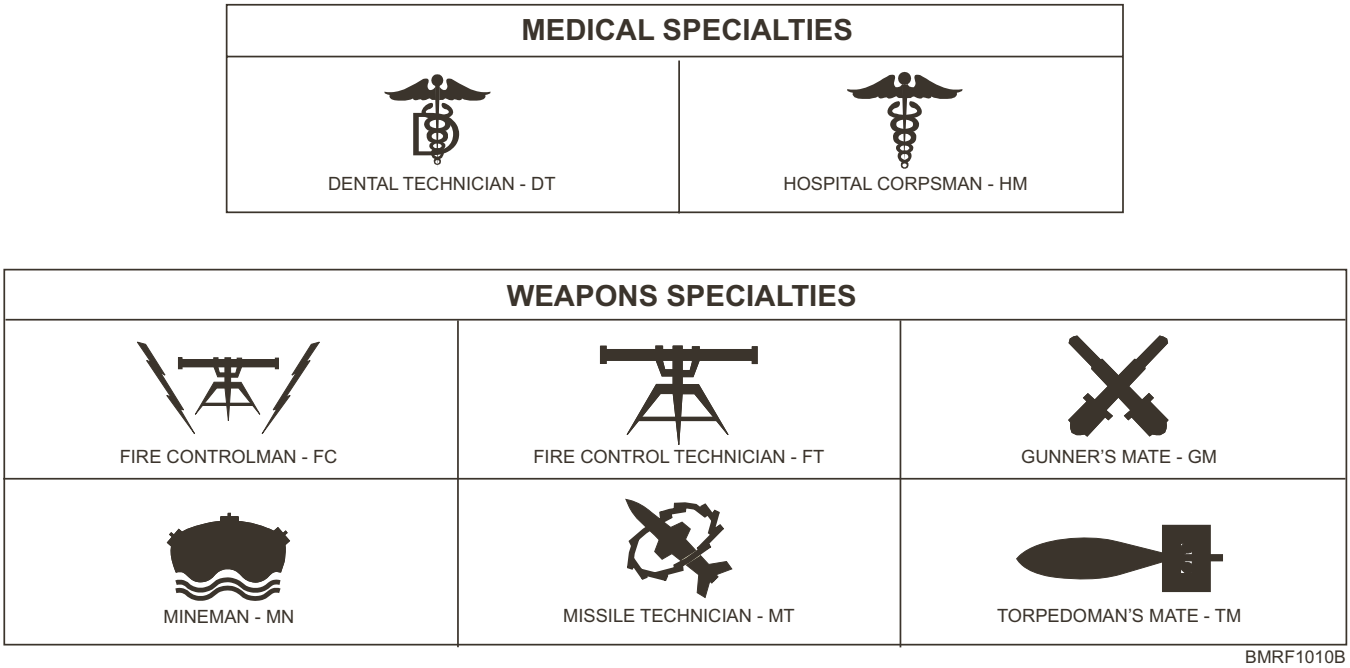


**Figure 10-10B.—Rating insignias for enlisted personnel (continued).**

You should also be familiar with the rating structure of the other branches of the U.S. military. Refer to figure 10-11 for a comparison of the Navy, Marine Corps, Army, and Air Force enlisted structure.

## RANK INSIGNIA/CORPS DEVICES—U.S. NAVAL OFFICER

The paygrade of an enlisted person is referred to as a rate. For example, an E-4 is a petty officer third class. The paygrade of a commissioned officer is called a *rank*. A lieutenant is an 0-3. Commissioned officers hold their positions of command by the authority given them by the President of the United States.

### Naval Officers

An officer of a given grade is junior to all officers of higher grades and senior to all officers of lower grades. Any commissioned officer is senior to any warrant officer or enlisted person. When officers are of the same grade, then the officer first commissioned in that grade outranks officers commissioned at later dates. In other words, officers of the same grade rank according to their date of commission—the earlier the date, the more senior the officer. If the officers have the same date of rank, then they take precedence according to a numerical listing kept by the Navy Department. Figures 10-12, 10-13, and 10-14 show the rank insignia of U.S. naval officers as well as the insignia of other branches of the U.S. armed forces.

***Student Notes:***

| PAY GRADE | E-1 | E-2 | E-3 | E-4 | E-5 | E-6 | E-7 | E-8 | E-9 | * |
|---|---|---|---|---|---|---|---|---|---|---|
| NAVY | SEAMAN RECRUIT | SEAMAN APPREN-TICE | SEAMAN | PETTY OFFICER THIRD CLASS | PETTY OFFICER SECOND CLASS | PETTY OFFICER FIRST CLASS | CHIEF PETTY OFFICER | SENIOR CHIEF PETTY OFFICER | MASTER CHIEF PETTY OFFICER | MASTER CHIEF PETTY OFFICER OF THE NAVY |
| | | | | | | | SENIOR PETTY OFFICERS COLLAR DEVICES | | | |
| MARINES | PRIVATE | PRIVATE FIRST CLASS | LANCE CORPORAL | CORPORAL | SERGEANT | STAFF SERGEANT | GUNNERY SERGEANT | FIRST SERGEANT<br>MASTER SERGEANT | SERGEANT MAJOR<br>MASTER GUNNERY SERGEANT | SERGEANT MAJOR OF THE MARINE CORPS |
| ARMY | PRIVATE | PRIVATE | PRIVATE FIRST CLASS | CORPORAL<br>SPECIALIST | SERGEANT | STAFF SERGEANT | SERGEANT FIRST CLASS | FIRST SERGEANT<br>MASTER SERGEANT | COMMAND SERGEANT MAJOR<br>SERGEANT MAJOR | SERGEANT MAJOR OF THE ARMY |
| AIR FORCE | AIRMAN BASIC | AIRMAN | AIRMAN FIRST CLASS | SERGEANT<br>SENIOR AIRMAN | STAFF SERGEANT | TECHNICAL SERGEANT | MASTER SERGEANT | SENIOR MASTER SERGEANT | CHIEF MASTER SERGEANT | COMMAND CHIEF MASTER SERGEANT |
| | | | | | | | ALL STARS SILVER | | | |

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*AUTHORIZED ONLY WHILE SERVING AS THE SENIOR ENLISTED MEMBER OF ANY BRANCH OF MILITARY SERVICE.

**Figure 10-11.—Rate insignia of U.S. armed forces enlisted personnel.**

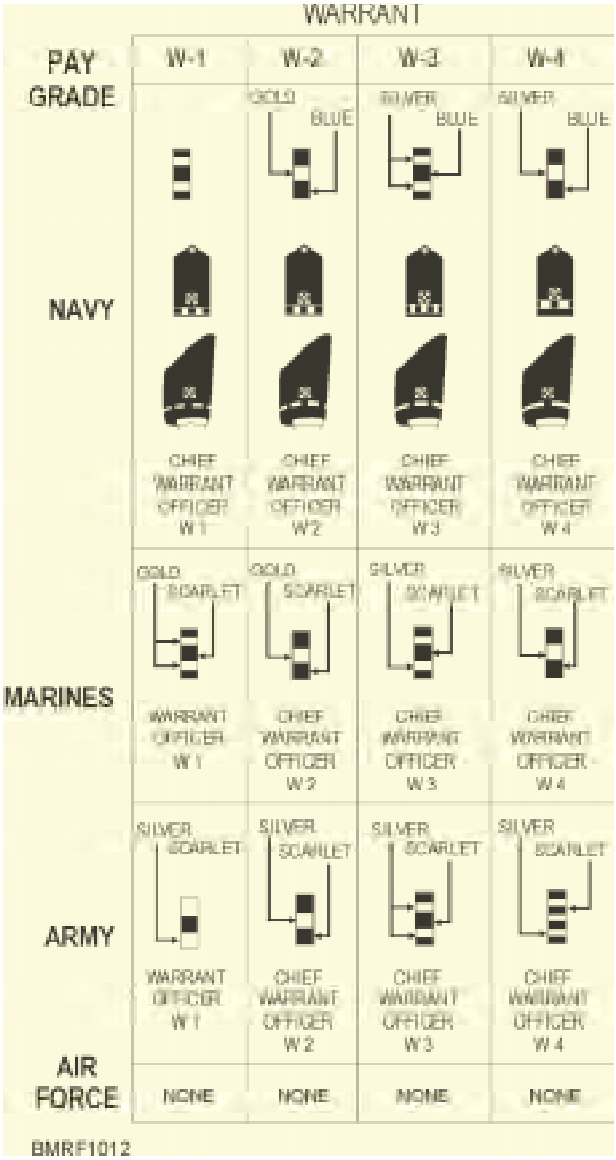


**Figure 10-12.—Rank insignia of warrant officers of the U. S. armed services.**

Officers are also divided into line officers and staff corps officers. A star is worn on the sleeve or shoulder board of the line officer, depending on the uniform. The line category is subdivided into unrestricted and restricted line.

- Only unrestricted line officers are eligible for command at sea and the command of aircraft squadrons, fleets, and shore bases such as naval bases and naval air stations. Included in this category are limited duty officers (LDOs), who have been specifically authorized to assume such command and certain naval aviators.

- Restricted line officers are those designated for engineering or other special duty, such as communications, naval intelligence, photography, and other technical fields. They aren't eligible for command at sea but may assume command of designated shore facilities.

- Staff corps officers are specialists in certain areas, such as supply and medicine. They wear staff corps insignia (fig. 10-15). A doctor can become the commanding officer (CO) of a hospital or a medical school or the chief of the Bureau of Medicine. A supply officer can become the CO of a supply depot or a school or the head of the Navy Supply Systems Command.

When officers are of the same grade and date of commissioning, but from different officer's categories, seniority takes precedence in the following order:

1. Line
2. Medical
3. Supply
4. Chaplain
5. Civil Engineer
6. Judge Advocate General
7. Dental
8. Medical Service
9. Nurse

In addition to regular commissioned officers, the Navy has another group of officers called *commissioned warrant officers*.

### Warrant Officers

The Navy needs specialists to supervise the operation of equipment and weapons and needs enlisted personnel to maintain them. Chief warrant officers fill the gap between enlisted personnel and commissioned officers. They are former enlisted personnel selected for warrant status because of their professional ability and for their demonstrated qualities of leadership, loyalty,

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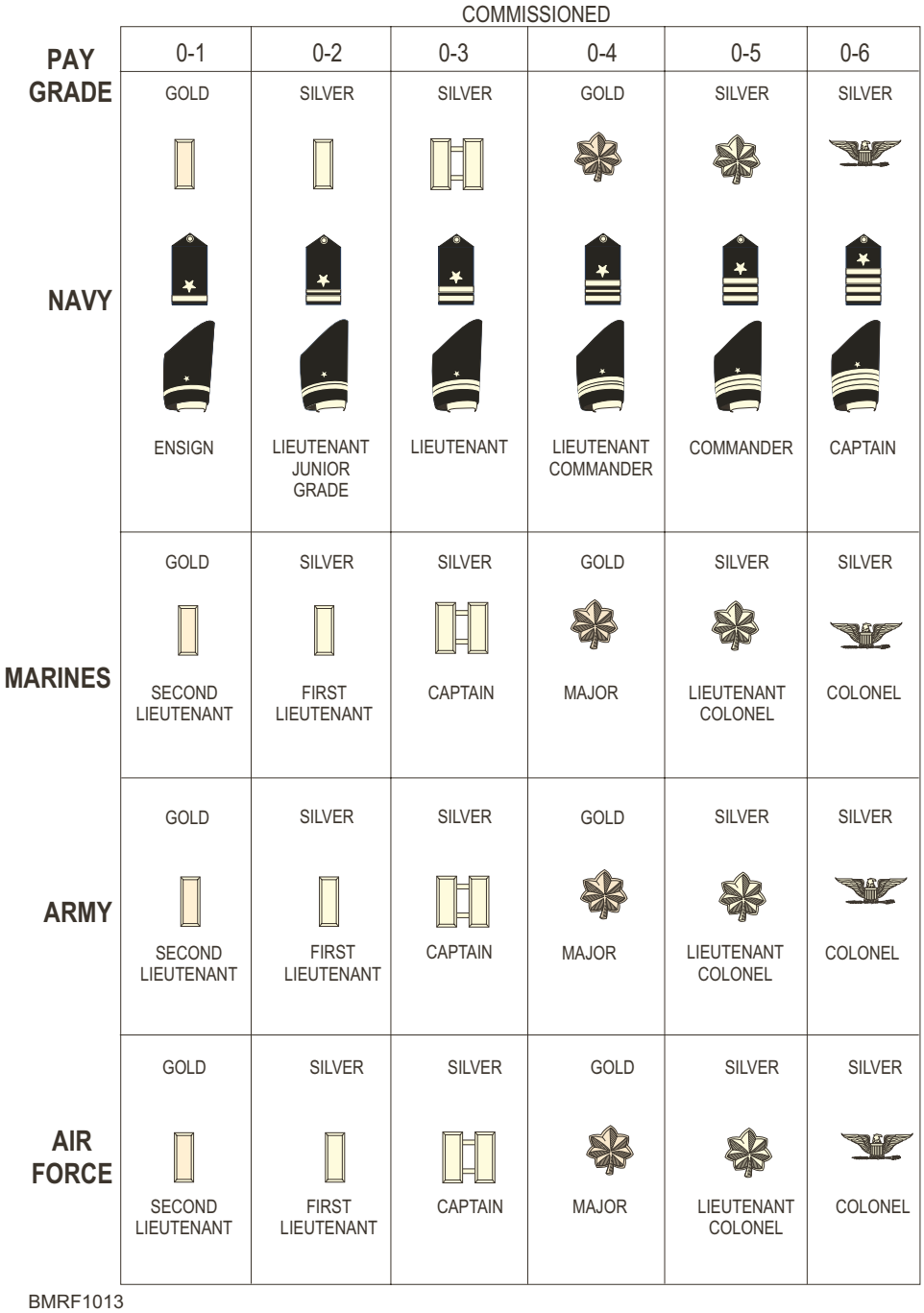


**Figure 10-13.—Rank insignia of commissioned officers of the U. S. armed services.**

and devotion to duty. All warrant officers are commissioned as W-2s.

Chief warrant officers wear collar devices or sleeve insignia symbolic of their specialty in the same manner as staff corps officers, as shown in figures 10-16 and 10-17.

## SPECIAL INSIGNIA

Special insignia are worn on the breast to indicate special qualifications or designations (figs. 10-18 and 10-19). (**NOTE**: Not all insignias are shown.) Some examples of special insignia are as follows:

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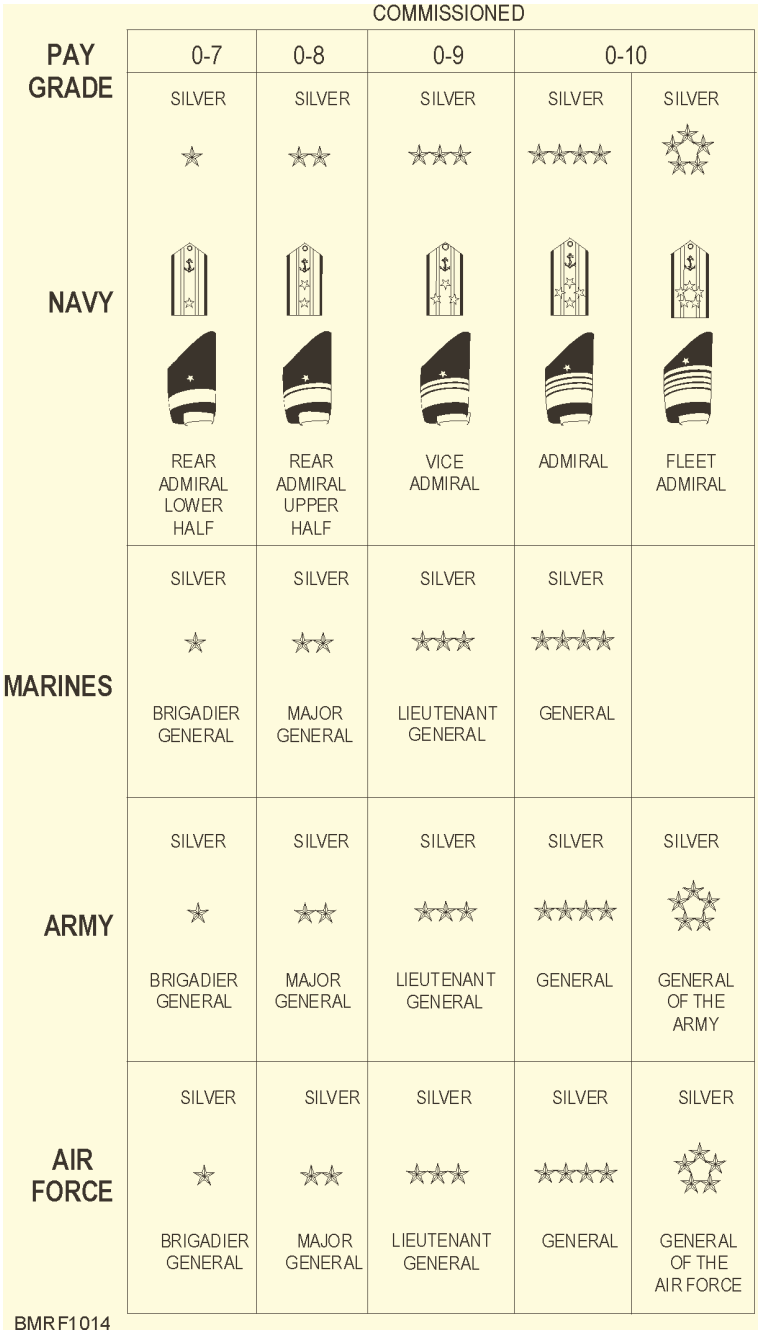


**Figure 10-14.—Rank insignia of commissioned officers of the U. S. armed services (Continued).**

The **Command at Sea** insignia is worn by persons below flag rank who have or have had command of commissioned ships or aviation squadrons at sea. Officers currently in command wear the insignia on the right breast. Those not presently in command, but who have held command, wear it on the left breast below any ribbons, medals, or other insignia.

The **Command Ashore/Project Manager** insignia is worn by officers below flag rank who have or have had command ashore or served as a project manager. It is worn in the same manner as the Command at Sea insignia.

The **Small Craft OIC/POIC** insignia is worn by

***Student Notes:***

**Figure 10-15.—Line and staff corps officers' insignia.**

enlisted and officer personnel currently serving or who have previously served as an officer in charge of a small craft. Enlisted personnel wear silver and officers wear gold when they are authorized to wear these special insignias. This insignia is worn in the same manner as the Command at Sea insignia.

The **Surface Warfare** insignia is worn by officers and enlisted personnel who have qualified in all phases of surface warfare.

The **Submarine Warfare** insignia is worn by personnel who have qualified to serve in submarines. In addition to the basic insignia, other submarine insignia include those for submarine medical, engineer, and supply officers and for all who participated successfully in combat patrols.

The **Aviation Warfare** insignia is worn by personnel qualified to serve in flight. In addition to the Aviation insignia, other insignia are worn by flight officers, flight surgeons, flight nurses, aircrewmen, astronauts, and air warfare specialists.

The **Special Warfare** insignia is worn by personnel qualified in underwater and beach reconnaissance, demolition, and special warfare tactics. They are usually associated with underwater demolition or

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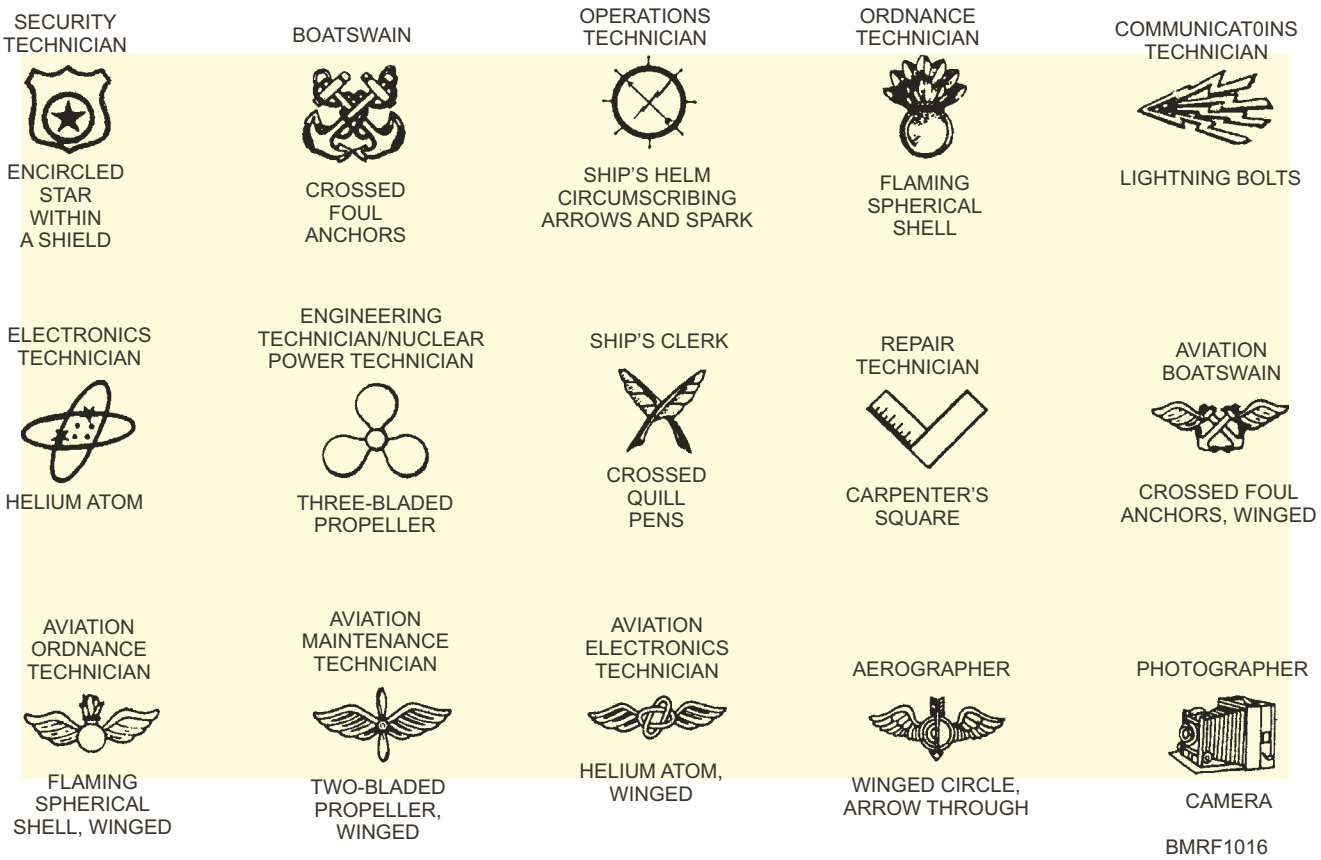


**Figure 10-16.—Warrant officers' specialty insignia.**

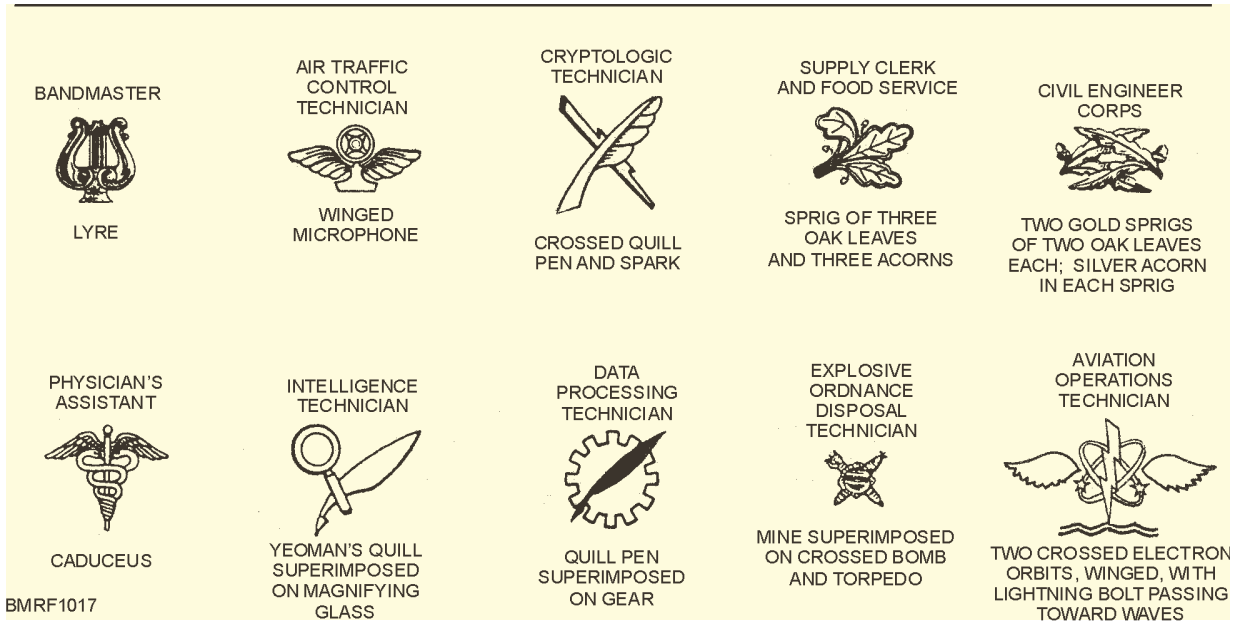


**Figure 10-17.—Warrant officers' specialty insignia (continued).**

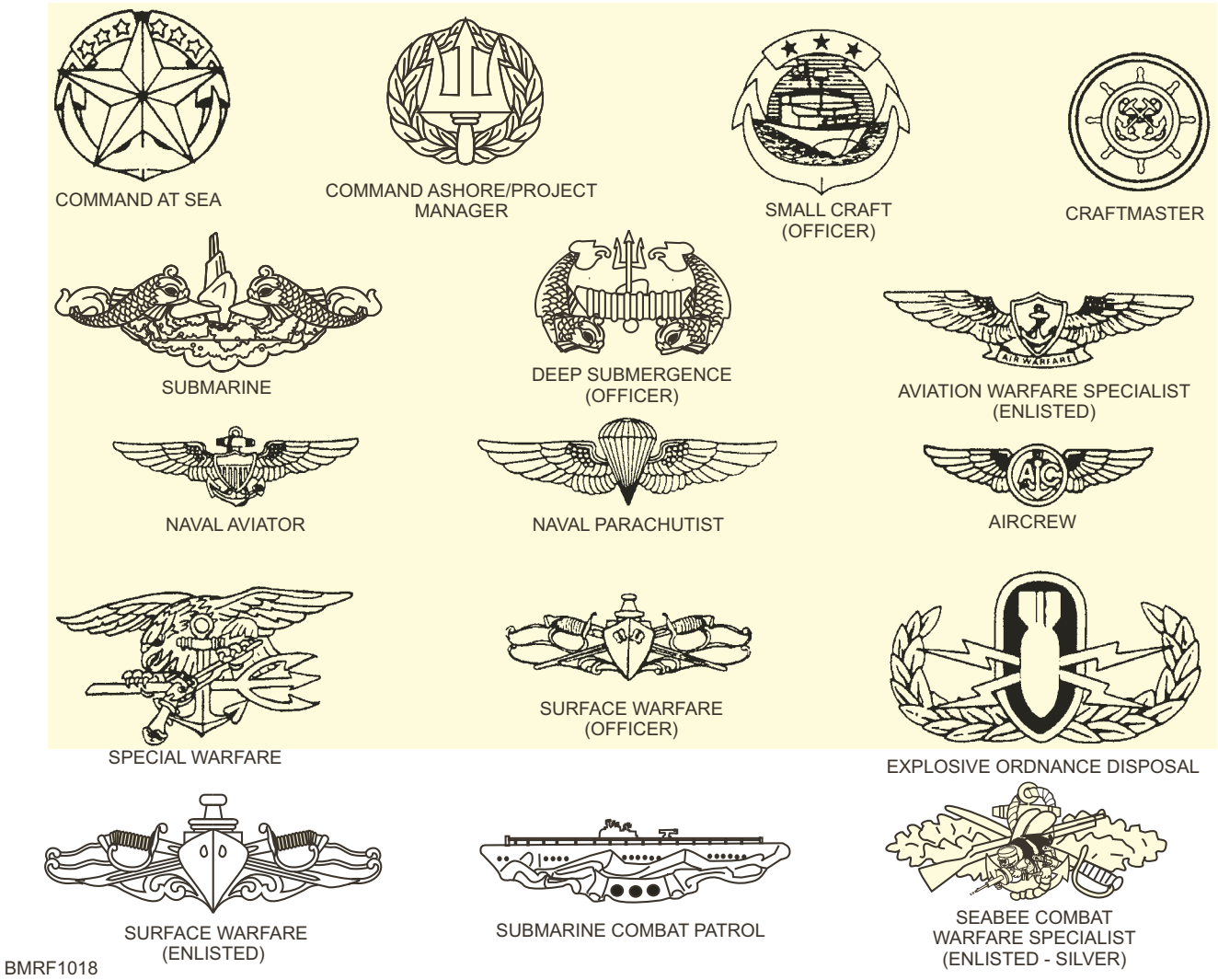


**Figure 10-18.—Breast insignia.**

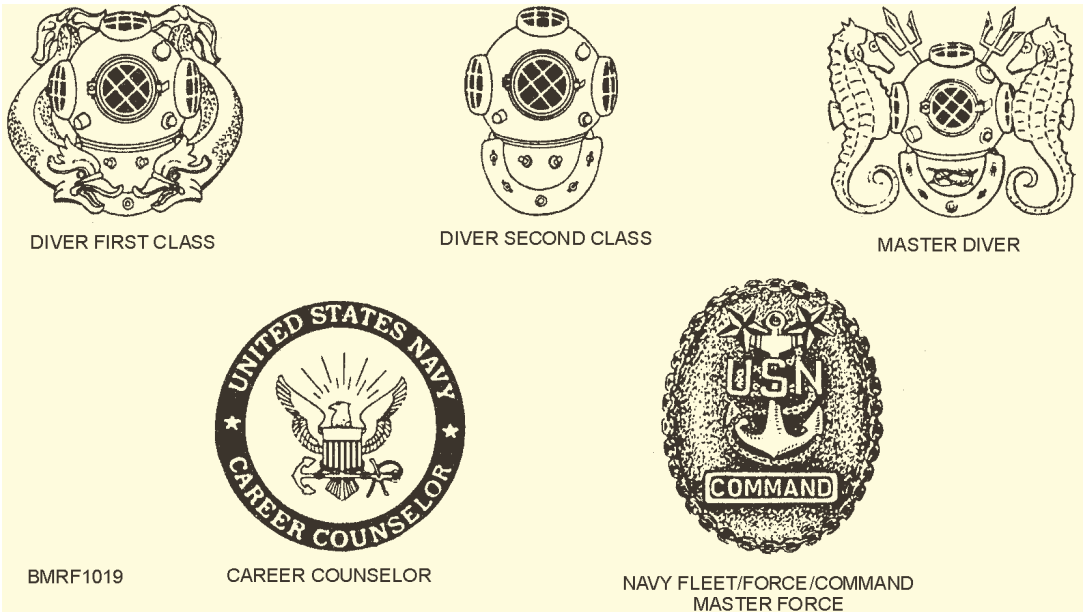


**Figure 10-19.—Breast insignia (continued).**

sea-air-land (SEAL) team detachments.

The **Explosive Ordnance Disposal Warfare** insignia is worn by personnel who are qualified in the identification and safe disposal of many different types of ordnance produced by the United States, our allies, and our enemies.

The **Underwater** insignia is worn by officer and enlisted personnel qualified in various classes of diving. The Underwater insignia is silver with the exception of the Diving Officer and the Diver Medical insignia, which are gold.

The **Seabee Combat Warfare Specialist** insignia is worn by personnel who are qualified in all phases of Naval Mobile Construction Battalion operations including mobilization, combat operations, disaster recovery, and combat readiness.

Most insignia worn by officers and enlisted personnel are identical, with one exception—those worn by officers are gold, while those worn by enlisted personnel are silver. Examples of some of these are **Submarine**, **Small Craft**, and **Explosive Ordnance Disposal**. Two exceptions to this are the **Enlisted Aircrew** insignia and the **Naval Parachutist's** insignia, which are gold.

Another type of special insignia worn by naval personnel is an identification badge, which is displayed by those engaged in Presidential service or assigned to certain staffs, such as the organization of the Joint Chiefs of Staff (JCS) or the Office of the Secretary of Defense.

## EMBLEM

Different commands within the Navy have special emblems. Figure 10-20 shows one example of an emblem.

**Figure 10-20.—Chaplain corps emblem.**

### REVIEW 3 QUESTIONS

Q1. What is a striker mark?

Q2. To be eligible to wear a service stripe, you must have served 4 full years of active or Reserve service in what branch of the U.S. Armed Forces?

Q3. A naval officer is wearing one silver star insignia on the uniform collar. What rank does this insignia show?

Q4. When worn as a sleeve insignia, what device designates the officer as a line officer?

Q5. What kind of special insignia is worn on the breast by personnel qualified in underwater and beach reconnaissance and demolition?

## AWARDS

**Learning Objectives**: When you finish this chapter, you will be able to—

- Recognize authorized military awards.
- Identify the regulations governing their wear.

***Student Notes:***

An award is any decoration, medal, badge, ribbon, or letter of commendation given to an individual or unit in recognition of outstanding acts or service performed. There are seven broad categories of awards:

1. Military decorations
2. Unit awards
3. Nonmilitary decorations
4. Campaign and service awards
5. Foreign decorations and non-U.S. service awards
6. Marksmanship awards
7. Awards of military societies and other organizations

**Military decorations**. A military decoration is an award given to an individual for a specific personal act of gallantry or meritorious service. Some examples of military decorations are the Medal of Honor, Navy Cross, Distinguished Service Medal, and Purple Heart.

The first military decoration awarded to individuals by this country was the Purple Heart. The Purple Heart was founded by George Washington in 1782. It was awarded for unusual gallantry and/or extraordinary fidelity and essential service. Only three people were awarded the original Purple Heart. The awards were made for action during the Revolutionary War. One hundred and fifty years later, in 1932, the President Franklin Deleno Roosevelt revived the Purple Heart decoration.

The basis for this award was changed from the original idea. As reestablished, the Purple Heart is now awarded for wounds received as a result of enemy action.

**Unit awards**. An award presented to an operating unit worn only by members of the unit who participated in the cited action. Unit awards include the Presidential Unit Citation, the Navy Unit Commendation, and the Navy "E."

**Nonmilitary decorations**. Nonmilitary decorations are awarded for various actions by an individual. A few examples are the Presidential Medal of Freedom, the Gold and Silver Life Saving Medals, and the National Sciences Medal.

**Campaign and service awards**. Campaign and service awards are issued to personnel who have participated in designated wars, campaigns, expeditions, or who have fulfilled creditable, specific, service requirements. Examples of campaign and service awards are the Prisoner of War Medal, Good Conduct Medal, Antarctica Service Medal, Armed Forces Expeditionary Medal.

**Foreign decorations and non-U.S. service awards**. The foreign decorations and non-U.S. service awards that may be worn are listed in the *U.S. Navy Uniform Regulations*, NAVPERS 156650.

**Marksmanship awards**. Some examples of the marksmanship awards include the Navy Pistol Marksmanship Medal/Ribbon, the Distinguished Marksman Badge, and the Navy Rifleman Excellence In Competition Badge.

**Awards of military societies and other organizations**. Awards of military societies and other organizations are awards from the following organizations: Regular Army and Navy Union, Medical Scientific Societies, Naval Reserve Association, and the Moreell Medal.

Normally, awards are medals suspended from a pin by a distinctive ribbon; but there are exceptions, such as the Presidential Unit Citation, Navy Unit Commendation, Meritorious Unit Commendation, and Combat Action Ribbon. These awards are not medals but ribbons that denote the citation.

Medals are attached to the uniform just above the left breast pocket. Up to three medals are worn side by side. When there are more than three medals, they are attached to a bar in an overlapping fashion with a maximum of five medals to a row (in their order of precedence).

Except on special occasions (such as a personnel inspection), replicas of the medal suspension ribbons are worn. These ribbons are part of the service dress uniform. They are worn centered 1/4 inch above the left breast pocket, with no space between ribbons or between rows. Each row may contain no more than three

***Student Notes:***

ribbons. A row of fewer than three ribbons is centered above a full row. Persons possessing four or more ribbons must wear a minimum of three but may wear all if desired. The ribbons, which may be either sewn on the uniform or attached to bars, are worn in their order of precedence—from top to bottom and inboard to outboard within rows. Transparent covering or the use of preservatives isn't permitted. No alteration may be made that would change the appearance of the ribbons. When medals are prescribed as part of the uniform, ribbons that don't have corresponding large medals are worn on the right breast.

### REVIEW 4 QUESTIONS

Q1. If a person has four or more ribbons, what is the minimum number of medals that can be worn on the uniform?

Q2. List four examples of military decorations.

a.

b.

c.

d.

Q3. List two types of nonmilitary decorations.

a.

b.

Q4. When wearing medals or ribbons on a uniform, what is their order of precedence?

## IDENTIFICATION CARDS

**Learning Objective**: When you finish this chapter, you will be able to—

- Identify the regulations governing military identification (ID) cards and identification tags.

The armed forces identification card is used to identify you as a member of the U.S. armed forces. It isn't a pass. It remains the property of the United States. Anyone altering, damaging, lending, counterfeiting, or using the card in an unauthorized manner is subject to disciplinary action.

You must carry the card at all times. You can't give your ID card as security for the return of property or equipment provided by civilian or naval recreational activities.

The active-duty ID card **must be** surrendered by the holder for the following reasons:

- When it is replaced. It must be replaced for the following reasons:
  - — To show a change in rank or rate.
  - — To show a change in the card's expiration date
  - — To replace a lost, stolen, or destroyed card.
  - — To correct an error.
  - — To replace a mutilated card.
  - — To change data that makes the card questionable as a means of identification.
  - — To effect a name change.
- When the holder is released from extended active duty.
- When it is required by proper military authority for identification or investigation purposes, or while in disciplinary confinement.

Since the armed forces ID card (active) meets all the requirements of article 17 of the Geneva Convention pertaining to the treatment of prisoners of war, it serves as identification for that purpose. If you're captured as a prisoner of war, you **may** show your ID card to the capturing authorities but you **may not** surrender it to

***Student Notes:***

them.

Identification tags (dog tags) are designed for the identification and casualty reporting of members who become casualties and for grave registration of members who die in a combat zone. As soon as possible after reporting for active duty, each Navy member is issued two complete identification tags.

Identification tags are made of metal, approximately 2 inches long by 1 1/8 inches wide, and attached to a 25-inch necklace. These tags are a prescribed part of your uniform and must be kept in your possession. When prescribed by directives, they are worn suspended from the neck under the clothing. When not required to be worn, they should be regarded as part of your equipment and will be regularly inspected as such.

Identification tags must be worn while you are on active duty in the Navy under the following conditions:

- In time of war
- In time of national emergency
- When engaged in flight operations
- When traveling in aircraft
- When reporting to an armed forces medical facility for treatment
- When prescribed by the Chief of Naval Operations (CNO)
- When prescribed by competent authority

Each tag is embossed with the following information:

**First line**—Last name, first name, and middle initial of the wearer; that is, DOE, John R. When the space provided for the first line is insufficient for the name as prescribed above, the first line will contain only the last name.

**Second Line**—The first name and middle initial, if needed.

**Third line**—Military personnel identification number (SSN), the letters USN, and the blood type and Rh factor.

**Fourth line**—The religious preference of the wearer.

**REVIEW 5 QUESTIONS**

Q1. Name five actions that you should **not** take with regard to your ID card.

a.

b.

c.

d.

e.

Q2. Describe the difference between the purpose for the military ID card and dog tags in wartime.

Q3. List the information contained on the dog tags.

a.

b.

c.

d.

**GROOMING STANDARDS**

**Learning Objective**: When you finish this chapter, you will be able to—

- Recognize grooming standards for men and women.

Grooming standards are based on several elements—including neatness, cleanliness, safety, military image, and appearance in uniform. The standards aren't intended to be overly restrictive or designed to isolate Navy men and women from society. The limits are reasonable; they make sure that personal appearance contributes to a favorable military image,

***Student Notes:***

yet they allow a degree of individuality. The seeming difference between the policy on grooming for male and female members is simply recognition that there is a difference between the sexes—mustaches and sideburns for men, longer hair and cosmetics for women.

Remember! Grooming promotes pride in who and what you are, pride of being in the Navy, and pride in being in the United States.

## GROOMING STANDARDS FOR MEN

Hair will be neat and clean and present a groomed appearance. Hair above the ears and around the neck will be tapered from the lower hairline upward at least 3/4 inch and outward to greater than 3/4 inch to blend with the hairstyle. Hair on the back of the neck may not touch the collar. Hair will be no longer than 4 inches and groomed so that it does not touch the ears or collar, extend below the eyebrows when headgear is removed, or interfere with proper wearing of the headgear. The primary consideration remains a neatly groomed appearance for the hairstyle and the type of hair that the individual has.

Sideburns are permitted, but they are to be of even width (not flared), end with a clean-shaven horizontal line, and cannot extend below the middle of the ear.

In most instances, mustaches also are permitted, but must be kept neatly trimmed so that they don't appear ragged. No eccentricities, such as long drooping mustaches, are permitted. Beards are not allowed.

Articles such as pencils, pens, watch chains/fobs, pins, jewelry, handkerchiefs, combs, cigars, cigarettes, or pipes must not be worn or carried exposed on the uniform. Wristwatches, bracelets, and rings (one ring per hand) are permitted. While in uniform, men may wear one necklace or choker, but it must not be visible. Men must not wear earrings while in uniform or while in civilian clothes, while on a military installation, or when attending a military function.

Navy personnel assigned to Marine Corps units, **must** abide by the grooming standards established for Marines; otherwise, when wearing Navy uniforms (including fatigues), they must abide by Navy regulations.

## GROOMING STANDARDS FOR WOMEN

Hairstyles will be neat and present a groomed appearance. They will not be outrageously multicolored or faddish, to include shaved portions of scalp or designs cut or braided into the hair. Haircuts and styles will present a balanced appearance. Lopsided and extremely asymmetrical (not balanced) styles aren't authorized.

### Braids

Braided hairstyles must be conservative and conform to the guidelines stated in NAVPERS 15665. Some of the guidelines include the following information:

- Ponytails, pigtails, widely spaced individual hanging locks, and braids that protrude from the head **aren't** authorized.
- Multiple braids are authorized.
- When a hairstyle of multiple braids is worn, braids will be
  - — Uniform in dimension
  - — Small in diameter (approximately 1/4 inch)
  - — Tightly interwoven to present a neat, professional, well-groomed appearance.
  - — Foreign material (such as beads or decorative items) will not be braided into the hair.
  - — Short hair may be braided in symmetrical fore and aft rows (corn rowing) that minimizes scalp exposure.
  - — Corn row ends will not protrude from the head and must be secured with inconspicuous rubber bands that match the hair color.

### Hairstyles

Appropriateness of the hairstyle is judged by its appearance when headgear is worn. All headgear must fit snugly and comfortably around the largest part of the head without distortion or excessive gaps. Hair shouldn't show from under the front of the brim of the

***Student Notes:***

combination hat, garrison, or command ball cap. Hairstyles that don't allow headgear to be worn in this way, or that interfere with the proper wear of protective masks or equipment, are prohibited.

**Hair Length**

When in uniform, the hair may touch, but not fall below a horizontal line level with the lower edge of the back of the collar. With jumper uniforms, hair may extend a maximum of 1 1/2 inches below the top of the jumper collar. Long hair, including braids, that falls below the lower edge of the collar must be neatly and inconspicuously fastened, pinned, or secured to the head. No portion of the bulk of the hair as measured from the scalp will exceed approximately 2 inches.

**Barrettes/Combs/Clips**

A maximum of two small barrettes/combs/clips, similar to hair color, may be used in the hair. Additional bobby pins or rubber bands matching the hair color may be used to hold hair in place, if necessary. Fabric elastics and colored bands/pins aren't authorized. Hair ornaments will not present a safety or foreign object damage (FOD). Hair nets will not be worn unless authorized for a specific type of duty.

**Fingernails**

Fingernails must not exceed 1/4 inch measured from the tip of the finger. Nail polish must be a soft shade, complementary to the skin tone.

**Cosmetics**

Cosmetics should be conservative in color and applied sparingly. No eccentricities or faddishness of dress, jewelry, or grooming is permitted. No pencils, pens, pins, handkerchiefs, or jewelry may be worn or exposed on the uniform. Earrings may be worn with the uniform and must be the 6mm-ball (approximately 1/4 to 1/8 inch) type with a plain brushed matte finish or a shiny finish; either the screw-on or post type. E-6 and below must wear silver earrings; CPOs and officers must wear gold. Small single pearl earrings are authorized for dinner or formal dress uniforms. While in uniform, women may wear one necklace or choker, but it must not be visible.

**Maternity Uniforms**

The wearing of the maternity uniform is mandatory for all pregnant women in the Navy when a uniform is prescribed, and regular uniforms no longer fit.

**REVIEW 6 QUESTIONS**

Q1. While in uniform, how many (a) wristwatches and (b) bracelets can be worn?

a.

b.

Q2. To what Navy publication should you refer for further explanation of grooming standards?

Q3. When in uniform, what type of earrings is authorized for E-6 and below and CPOs and above?

a. E-6 and below:

b. CPO and above:

**DRILL AND FORMATIONS**

**Learning Objectives**: When you finish this chapter, you will be able to—

- Recognize the purpose of formations.
- Identify facing movements within a formation.

Understanding and correctly following the basic drill positions and facing movements are a necessary part of your military life. Drills teach discipline and instill habits of precision and automatic response to orders.

What is the purpose for formations? Is it to see if you know your right from our left? Not really!

***Student Notes:***

One of the purposes for formations is to move a large number of personnel from one place to another in an orderly manner. Another purpose is to make sure people receive correct up-to-date information. People listen more closely to and better understand what is being said when they are alert and paying attention. Just imagine a group of people standing around, their hands in their pockets, daydreaming or talking while someone is trying to relay important information. How many people will actually hear and understand what is being said? Probably not many! Formations also help teach a group of individuals to act as members of a team instead of "doing their own thing."

## POSITIONS WITHIN A FORMATION

Many military functions, such as morning quarters and personnel inspections, require that you assemble in formation. The terms used to identify these formations may vary at different commands. For example, the term *squad* or *platoon* at one command may be a *detail*, *division*, or *class* at another. Here, the term *squad* is used to represent a basic formation. Remember that the members of any formation must respond in unison (together) to the commands given. By studying the following terms and referring to the diagram in figure 10-21, you can easily learn the basic positions within a formation:

*Distance*. A space of 40 inches between the chest of one person and the back of the person ahead within ranks.

*Element*. An individual, squad, section, platoon, company, or some other unit that is part of a larger unit.

*File or column*. A formation of elements or persons placed one behind the other.

*Flank*. The extreme right or left of a unit, either in line or in column. The element on the extreme right or left of the rank. A direction at a right angle to the direction an element or a formation is facing.

*Formation*. An arrangement of elements in line, in column, or in any other prescribed manner.

*Guide*. The individual on whom a formation or element regulates its alignment. The guide is usually positioned to the right.

*Interval*. The space between individuals from shoulder to shoulder, normally one arm's length.

*Pace*. The length of a full step (30 inches for men and 24 inches for women).

*Rank or line*. A formation of elements or persons abreast of each other or side by side.

*Step*. The distance from heel to heel between the feet of a marching person. The half step and back step are 15 inches. The right and left steps are 12 inches.

## POSITION AND FACING COMMANDS

The two types of commands are the preparatory command, such as RIGHT, which indicates the type of movement to be made, and the command of execution, such as FACE, which causes the desired movement to be

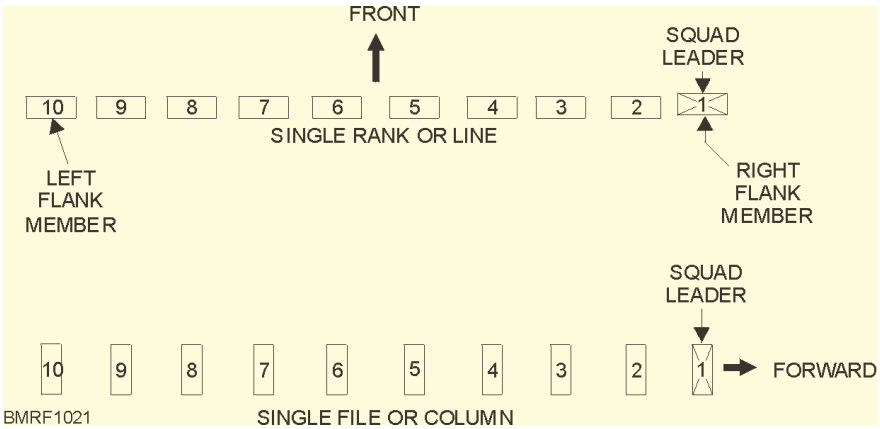


**Figure 10-21.—Positions within a formation.**

## *Student Notes:*

made. **In this chapter, preparatory commands are bolded and the first letter is capitalized. In commands of execution, each letter is capitalized. When both types of commands are combined, such as FALL IN, AT EASE, and REST, they are capitalized just like commands of execution**.

The command AS YOU WERE cancels a command or an order started but not completed. On this command, you resume your former position.

**POSITIONS**

Assume the following positions only when you are at a halt. One person or an entire formation may execute them.

ATTENTION. The position of attention is the basic military position. It indicates you are alert and ready for instruction. In this position, stand with your heels together, feet forming an angle of 45°, head and body erect, hips and shoulders level, and chest lifted. As shown in figure 10-22, allow your arms to hang naturally—thumbs along skirt or trouser seams and fingers joined and in their natural curl. Keep your legs straight, but not stiff at the knees. Direct your head and eyes to the front. Keep your mouth closed, and pull your chin in slightly. When called to attention, bring the heel of your left foot to the heel of your right foot.

PARADE REST. The command Parade REST is given only when the formation is at attention; the movement is executed in one count (fig. 10-23).

AT EASE. On the command AT EASE, you can relax and shift about, but keep your right foot in place. Do not talk. This command may also be given when you are not in ranks, as in a classroom. You must not talk, but you may remain relaxed.

REST. On the command REST, follow the same movement restrictions as you would when at ease, but you may talk.

FALL OUT. (This command is not a dismissal order.) Upon the command FALL OUT, leave your position in ranks but remain nearby. On the command FALL IN, resume your place in ranks, and come to attention.

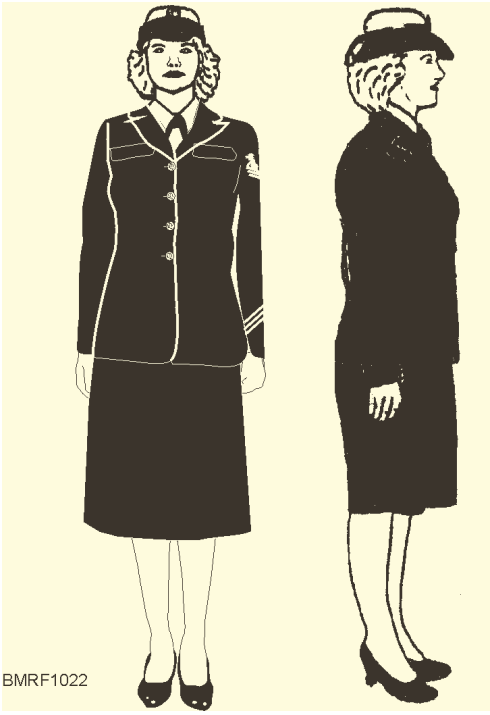


**Figure 10-22.—Attention.**

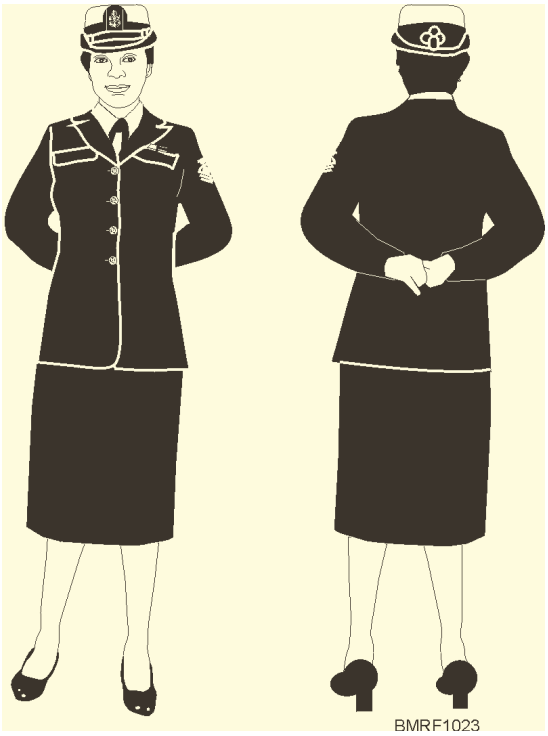


**Figure 10-23.—Parade rest.**

***Student Notes:***

To bring a formation to attention again when it is in any one of the four positions of rest, the person issuing commands gives a preparatory command (such as **Company**) before the command ATTENTION. If at rest or at ease, come to the position of parade rest on the preparatory command.

## FACINGS

Facings are movements that can be made either to the right or left, with the exception of about face. While facing, your arms should remain at the position of attention. The following commands describe only the movement to the right. To perform a movement to the left, simply substitute "left" for "right" and "right" for "left."

RIGHT FACE. Right face (fig. 10-24) is a two-count movement started on the commands Right FACE. On the command FACE, (1) raise your left heel and right toe slightly and turn 90° to the right. Keep your left leg straight but not stiff; (2) bring your left heel smartly alongside the right heel and stand at attention.

**EYES** RIGHT. When given the commands **Eyes** RIGHT, smartly turn your head 45° to the right on the command RIGHT. The commands to turn your head back to the position of attention are **Ready** FRONT. On the command FRONT, snap your head to the front.

**ABOUT** FACE. About face is a two-count movement performed on the commands **About** FACE. On the command **About**, shift your weight to your left leg without noticeable movement. On the command FACE, (1) place your right toe about 6 inches behind and slightly to the left of your left heel (fig. 10-25; (2) on the ball of the right foot and the heel of the left foot, turn smartly to the right until you are facing the rear. Your feet will be in the position of attention when the turn is completed if you place your right toe properly behind your left heel.

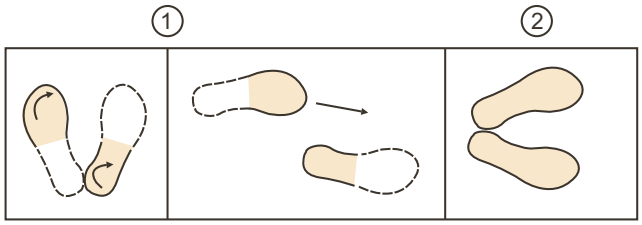


**Figure 10-24.—Right Face.**

## FALLING INTO FORMATION

Up to this point, you have learned about movements that can be made by one person or by a group. In a sharp military formation, each member must correctly respond to commands as a team. Always listen carefully to the person in charge since formation movements are usually made up of both preparatory and execution commands. In the following movements, you must pay special attention to the duties of the left and right flank members since their response to a command is slightly different from the other members in formation.

FALL IN. On the command FALL IN, the squad forms in line on the left of the right flank member (squad leader). Each member of the squad, except the left flank member, raises the left arm shoulder high in line with the body. Fingers are straight and touching each other palm down. Each member (except the right flank member) turns their head and looks to the right. To obtain a normal interval (fig. 10-26), move in line so that your right shoulder touches the fingertips of the person to the right. As soon as you are in line with the person to your right and the person on your left has obtained normal interval, return smartly and quickly to the position of attention.

Close interval (fig. 10-27) is the horizontal distance between the shoulder and elbow when the left hand is

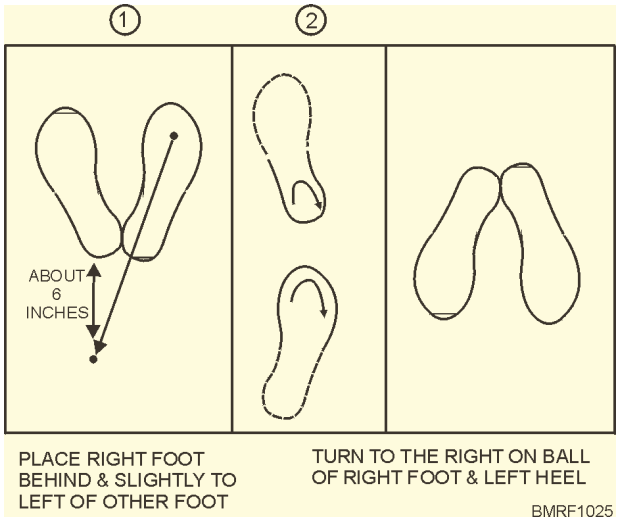


**Figure 10-25.—About Face.**

***Student Notes:***

**Figure 10-26.—Normal interval.**

placed on the left hip. The command **At Close Interval** requires the same movements as for normal interval. The only exception is that each member places the left hand on the beltline above the left hip with the elbow in line with the body. The heel of the hand rests on the hip with fingers straight, touching each other, and pointing down. The left flank member makes the adjustment without moving the arms.

TO ALIGN THE SQUAD. On the commands **Dress Right**, DRESS (normal interval) or **At Close Interval Dress Right**, DRESS (close interval), members of the squad align themselves with each other.

On the command DRESS, all members, except the right flank member, smartly turn their heads, look, and align themselves to the right. At the same time, all members, except the left flank member, smartly raise their left arm shoulder high (normal interval) or place their left hand on their hip (close interval). The right flank member stands fast and looks to the front. Using the right flank member as a guide and taking short steps, the other members align themselves and obtain the proper interval. Whether commanded to dress to the right or to the left, use only the left arm to obtain the interval, and hold that position until the next command is given.

**Figure 10-27.—Close interval.**

***Student Notes:***

When the alignment is correct, the commands **Ready**, FRONT are given. On FRONT, heads snap to the front and arms drop to the side.

TO COVER OFF. This command is given when the formation is in column or in two or more ranks. On the command COVER, the forward member or forward rank stands fast. You will then move, left or right, to position yourself directly behind the person in front of you while maintaining a 40-inch distance.

FROM NORMAL TO CLOSE INTERVAL. The commands **Close**, MARCH tell members to move from normal interval to close interval while in line. On MARCH, all members, except the right flank member, pivot to the right on the ball of the right foot and step off on the left foot (one count). They march forward until they obtain an approximate close interval, halt, and face to the left. They then form at close interval, as already described. All members lower their arms when the member on their left has obtained the proper interval.

FROM CLOSE TO NORMAL INTERVAL. The commands **Extend**, MARCH tell members to change from close interval to normal interval while in line. On MARCH, all members, except the right flank member, pivot to the left on the ball of the right foot and step off on the left foot (one count). They march forward until they obtain an approximate normal interval, halt, and face to the right. Then they form at normal interval, as previously described . Each member drops the left arm when the member to the left has obtained the proper interval.

DOUBLE-ARM INTERVAL. The commands **Take Interval To The Left** MARCH, tell members at either close or normal interval to form a double-arm interval. At the command MARCH, members move as when extending ranks, except that each member raises both arms and touches the fingertips of the members on either side to obtain the double-arm interval. (The right flank member raises only the left arm, and the left flank member raises only the right arm.) Each member smartly lowers the right arm after obtaining proper interval to the right and lowers the left arm when the member on the left lowers the right arm.

FROM DOUBLE-ARM TO NORMAL INTERVAL. The commands **Assemble To The Right** MARCH, instruct members to obtain normal interval from double-arm interval. Execute this movement as you would in closing, but form at normal interval.

TO COUNT OFF. The commands **Count** OFF instruct members to count off while in a rank or line. On the command OFF, all members, except the right flank member, smartly turn their heads and look to the right. The right flank member shouts ONE, the next member in rank or line shouts TWO, and so on, in quick cadence on down the line through the left flank member. As each member shouts the appropriate number, he or she turns the head smartly to the front.

Members in a file or column count off when given the commands **From Front To Rear Count** OFF. Each member, starting with the squad leader, turns the head to the right and shouts the appropriate number while turning the head back to the front.

The commands **Open Ranks** MARCH are given when more distance between ranks is required; for example, for a personnel inspection. On the command MARCH, the front rank takes two paces forward, the second rank takes one pace (30 inches) forward, and the third rank stands fast. Each succeeding rank takes two, four, or six (15-inch) steps backward. Each rank automatically dresses right as soon as it halts. When the alignment is completed, the commands **Ready** FRONT are given.

TO CLOSE RANKS. The commands **Close Ranks** MARCH tell members to close ranks. On the command MARCH, the front rank stands fast, the second rank takes one pace forward, the third rank takes two paces forward, the fourth rank takes three paces forward, and so on. You will halt and cover without command.

HAND SALUTE. Begin a salute on the commands **Hand** SALUTE, and complete the salute on the command TWO. On the command SALUTE, raise your right hand smartly. At the command TWO, return to attention by moving your hand smartly in the most direct manner back to its normal position at your side. (If you are in formation, the preparatory command Ready will be given before the command of execution, TWO.)

UNCOVER. Many religious ceremonies, and usually inspections, require you to remove your hat

***Student Notes:***

when given the commands **Uncover** TWO. On the command **Uncover**, raise your right hand as in the hand salute, but grasp the brim of your hat with your fingers instead of touching your forehead. Hold this position until the command TWO is given (you may lift your hat slightly so as not to muss your hair); then return your hand and your hat to your side in the most direct manner, but do not remove it with an exaggerated or sweeping motion. On the command **Cover**, grasp your hat with both hands and place it squarely on your head. Drop your left hand holding the hat brim. On the command TWO, drop your right hand to your side.

DISMISSED. The single command DISMISSED is used to secure an individual or an entire formation.

### REVIEW 7 QUESTIONS

Q1. List three reasons for military formations.

a.

b.

c.

Q2. What is the meaning of the term *rank* or *line* with reference to military formations?

Q3. List the two parts of a facing command.

a.

b.

Q4. When in a formation, what are the four commands for rest?

a.

b.

c.

d.

Q5. What command tells you to smartly turn your head 45° to the right?

### SUMMARY

All branches of the military establishment take pride in the appearance and sharpness of their personnel during ceremonies. The Navy is no exception. During your naval career, you will probably receive some type of award in recognition of an accomplishment. The recognition will probably take place at a command function, such as an inspection or awards ceremony. Ship's company or command personnel standing at attention in formation during such ceremonies makes the award more meaningful and the ceremony more impressive.

### REVIEW 1 ANSWERS

A1. The men's dress blue jumper should **hang straight and cover all but the lowest button of the 13-button front of the trouser**.

A2. Enlisted women E-1 through E-6 **wear the dress white jumper with the black silk neckerchief**.

A3. When the peacoat is worn over the dress blue jumper, **the uniform's collar is worn inside the outergarment (peacoat)**.

A4. When **large medals are worn with a service dress white uniform, the uniform is considered a full dress uniform**.

***Student Notes:***

## REVIEW 2 ANSWERS

A1. DELETE.

A2. Both men and women Sailors **stencil the dress white jumper in the same way**.

A3. The **commanding officer** can authorize the transfer of enlisted person's uniform clothing to another individual.

A4. You are required to have **four dungaree shirts and four pairs of dungaree trousers/slacks in your seabag**.

A5. You may wear any of the following with civilian clothes:

a. **All-weather raincoat**

b. **Underwear**

c. **Shoes**

d. **Belt with civilian buckle**

e. **Socks/hosiery**

f. **Sweaters**

g. **Neckties**

## REVIEW 3 ANSWERS

A1. A striker mark is **a specialty mark of a rating** worn by qualified E-1 through E-3 personnel.

A2. To be eligible to wear a service stripe, you must have **served 4 full years of active or reserve service in any branch of the U.S. Armed Forces**.

A3. A **rear admiral (lower half)** wears one silver star metal grade insignia on the uniform collar.

A4. A line officer wears **a five-pointed gold star on the sleeve insignia**.

A5. Personnel qualified in underwater and beach reconnaissance and demolition wear the **Special Warfare insignia**.

## REVIEW 4 ANSWERS

A1. If a person has four or more ribbons, that person **must wear three on the uniform**.

A2. Military decorations include the following:

a. **Medal of Honor**

b. **Navy Cross**

c. **Distinguished Service Medal**

d. **Purple Heart**

A3. Nonmilitary decorations include the following:

a. **Presidential Medal of Freedom**

b. **Gold and Silver Life Saving Medals**

c. **National Sciences Medal**

A4. The person wears the medals from **top to bottom inboard to outboard, within rows**.

## REVIEW 5 ANSWERS

A1. A person shouldn't take any of the following actions with regard to their ID card:

a. **Alter it**

b. **Intentionally damage it**

c. **Lend it to someone**

d. **Counterfeit it**

e. **Use it in an unauthorized manner**

A2. The military ID card **identifies you to the capturing authorities** if held as a prisoner of war. The ID tags (dog tags) are designed for **identification purposes in casualty reporting and for grave registration** of members who die in combat.

A3. The following information is embossed on the dog tags:

a. **Full name**

b. **Social security number (SSN) and the letters USN**

c. **Blood type and Rh factor**

d. **Religious preference of the wearer**

## REVIEW 6 ANSWERS

A1. While in uniform, you may wear—

a. **One wristwatch**

b. **One bracelet**

A2. To find an explanation of grooming standards, you should refer to the ***U.S. Navy Uniform Regulations Manual***.

A3. When in uniform, female Sailors may wear **6mm ball-type earrings (either post or screw on) with a brushed matte finish.** The following information applies:

a. E-6 and below **wear silver earrings.**

b. CPOs and officers **wear gold earrings**.

## REVIEW 7 ANSWERS

A1. Military formations have the following purposes:

a. **To move a large number of personnel from one place to another in an orderly fashion.**

b. **To make personnel alert and to pay attention to information or instructions being put out.**

c. **To teach a group of individuals to act as a team.**

A2. With reference to military formations **rank or line is a formation of elements or persons abreast of each other or side by side.**

A3. The two parts of a position and facing command are—

a. **Preparatory command**

c. **Execution Command**

A4. The four positions of rest for a formation are—

a. **Parade rest**

b. **At ease**

c. **Rest**

d. **Fall out**

A5. The command given to turn your head 45° to the right is **Eyes** RIGHT.

# CHAPTER 11

# SMALL ARMS

*A good Navy is not a provocation to war. It is the surest guarantee of peace.*

—Theodore Roosevelt

A number of duty assignments in the Navy may require you to be armed with a rifle or pistol. Examples of shipboard duty assignments include the forecastle, fantail, and pier sentry watches, quarterdeck, and magazine security watches. Examples of ashore duty assignments include base security forces and duties of Seabee personnel. Although none of these assignments may be your normal watch-standing duties, you may be required to support these or other security forces at any time. For this reason, you must be familiar with the proper use and care of small arms.

Strictly defined, the term *small arm* means any firearm of .60-caliber, 15-mm, or smaller bore. However, the term is generally considered to mean a weapon intended to be fired from the hand or shoulder, such as a rifle or a pistol.

At most naval commands, the small arms carried by security watches are maintained by armory personnel. Armory personnel should give you instructions on the proper use and handling of small arms.

## SMALL ARMS SAFETY PRECAUTIONS

**Learning Objective**: When you finish this chapter, you will be able to—

- Recognize the purpose for and identify the safety precautions to follow when using small arms.

Before you learn to use any firearm, you must learn to handle it safely. **Remember, firearms are dangerous**. Their purpose is to kill or to cause injury.

**NOTE**

When at the firing range, follow all safety precautions.

Every firearm used by Navy personnel has some type of built-in safety device, and some have more than one. The safety device guards against accidental discharge of a firearm. In almost every case of accidental shooting, negligence or carelessness is the prime cause. A weapon is only as safe as the person using it. Learn to respect each firearm as a deadly weapon.

You should observe the following general precautions when handling any type of firearm:

1. Treat every weapon with respect. Consider it loaded.
2. Never point a weapon at anything or anyone you do not intend to shoot.
3. Always make sure that the bore is clear and that all oil and grease have been removed from the barrel and chamber before firing.
4. Use only the proper size of ammunition.
5. Unload firearms before transporting them to and from a shooting area.
6. Always carry the firearm so as to control the direction of the muzzle. Keep the muzzle pointed in a safe direction until ready to fire.
7. Keep the safety on until you are ready to shoot.
8. Never shoot until you have positively identified the target.
9. Unload unattended weapons. At home, store firearms (with trigger locks installed) and ammunition out of the reach of children.
10. Do not climb trees or fences with a loaded firearm.
11. Do not pull a firearm toward you by the muzzle.
12. Avoid shooting a rifle over a hard, flat surface or body of water because of possible erratic and lengthy bullet ricochets.
13. Like oil and water, firearms and alcohol do not mix. Do not drink alcoholic beverages or partake of any narcotic or drug before or during shooting activities.

14. Know your weapon—its shooting characteristics, its safeties, and its loading and unloading procedures.

15. Never indulge in horseplay when carrying a firearm.

In addition to observing these safety precautions when handling and using firearms, you should take steps to protect your hearing and sight, particularly when you are exposed to repeated small arms fire such as that on a rifle or pistol range. Blast noise from small arms fire may cause a temporary or permanent hearing loss. The extent of injury depends on a number of factors, such as intensity of the noise, length of exposure, and your own sensitivity to noise hazards.

Two general types of personal ear protective devices are used to reduce noise and thus protect the ear. These are the insert type (earplug) and the circumaural type (covers the entire outer ear). The circumaural type is sometimes referred to as *Mickey Mouse ears*.

If you work in a noise hazard area, you may be fitted with a pair of earplugs. It's important to have the plugs fitted by a qualified member of the medical department because each person's auditory canals are a different size and structure.

The Mickey Mouse ears (fig. 11-1) are made with rigid plastic ear cups lined with foam, plastic, or rubber to provide a comfortable seal around the outer ear. The cups are connected over the head with an adjustable spring type of headband for a snug fit.

**Figure 11-1.—Circumaural (Mickey Mouse) type of ear protector.**

Protecting your sight is as important as protecting your hearing. The Navy has several types of safety glasses and goggles that provide adequate protection from the danger of small arms. They range from the standard safety goggles used in everyday work to prescription safety glasses.

When you are on the range, use these protective devices so that you will always be able to see and hear the full spectrum of sounds and sights you see and hear today.

### REVIEW 1 QUESTIONS

Q1. When handling a firearm, you should NOT take which of the following actions?

a. Always treat a weapon a if it were loaded

b. Never point a weapon at anything or anyone you don't intend to shoot

c. Carry the weapon by the muzzle as long as the safety is on

d. Never engage in horseplay when carrying a firearm

Q2. List the protective equipment you should wear when firing a weapon.

a.

b.

### THE M14 RIFLE

Learning Objective**:** When you finish this chapter, you will be able to—

- Identify the M14 rifle.

The 7.62-mm M14 (fig. 11-2) rifle is a lightweight, air-cooled, gas-operated, magazine-fed shoulder weapon. It was widely used during Vietnam. Since then, it has since been replaced by the M16. It is designed for semiautomatic or automatic fire at the rate of 750 rounds per minute. The rifle is chambered for the 7.62-mm NATO cartridge and is

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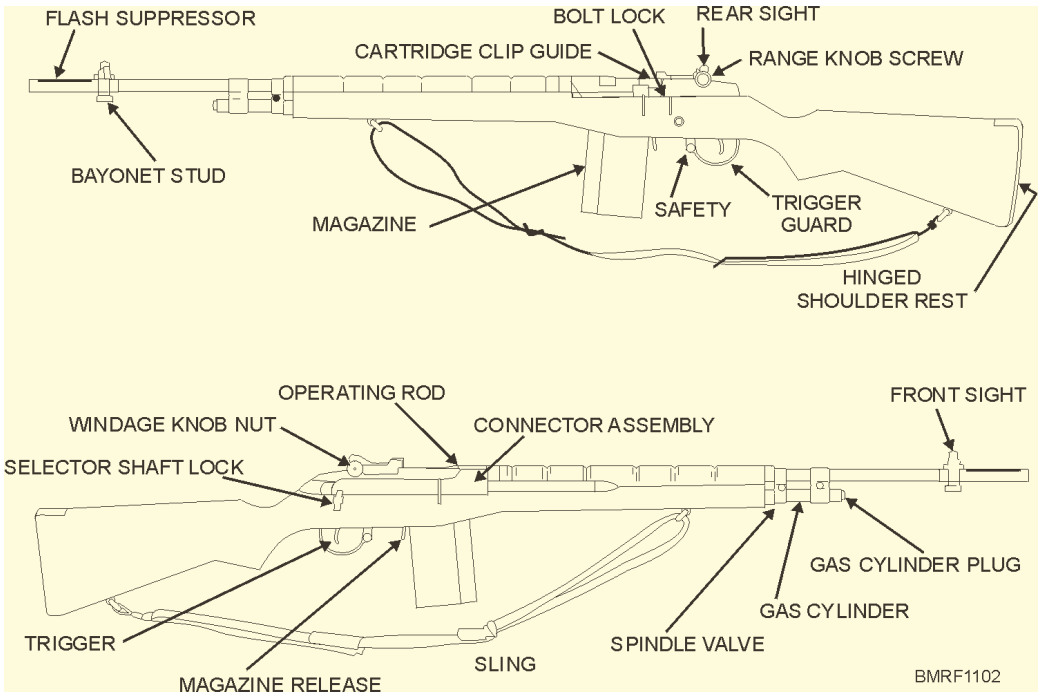


**Figure 11-2.—The 7.62-mm M14 rifle.**

designed to accommodate a 20-round magazine, the M76 grenade launcher, and the M6 bayonet.

The overall length of the rifle (with a flash suppressor) is 41.31 inches. The weapon has a muzzle velocity of 2,800 feet per second and a maximum range of 4,075 yards. Empty, the rifle weighs about 9 pounds. Fully loaded and ready to fire, the rifle weighs about 11 pounds.

## THE M16A1/A2 RIFLE

Learning Objectives: When you finish this chapter, you will be able to—

- Identify the differences between the M16A1 and M16A2 rifles.
- Recognize procedures to load and unload the magazine.
- Identify procedures for cleaning and maintaining the M16A1 and M16A2 rifles.

The M16A1 and the M16A2 rifles (fig. 11-3 and fig. 11-4) are magazine-fed, gas-operated shoulder weapons. They are chambered for a 5.56-mm (about .22-caliber) cartridge. The magazine has a capacity of 20 or 30 rounds and may be loaded with any amount, up to capacity. The caliber may seem small, but the bullet has a muzzle velocity of more than 3,000 feet per second and a muzzle energy of more than 13,000 foot-pounds. A forward assist assembly, located on the right rear of the upper receiver, permits the operator to ensure the bolt is locked in the forward position. They have a maximum effective range of 460 meters.

### DIFFERENCE BETWEEN THE M16A1 AND THE M16A2

The steps you take when field-stripping and cleaning the M16A1 and M16A2 weapons are basically the same. However, there are some major differences between the two weapons. These differences include the barrel, sights, selector assembly, ammunition, and hand guards of the two rifles.

**WARNING**

Ensure you are using the proper ammunition for the M16A1 and the M16A2. Improper use may cause serious damage.

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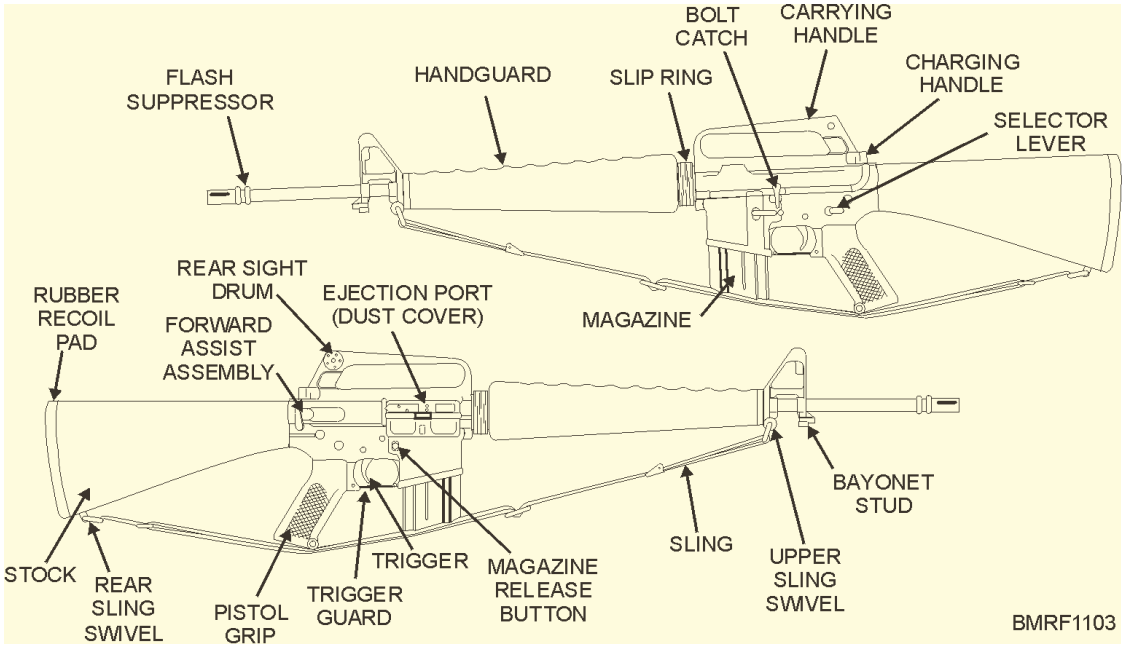


**Figure 11-3.—M16A1 service rifle, 5.56 mm, left and right side views.**

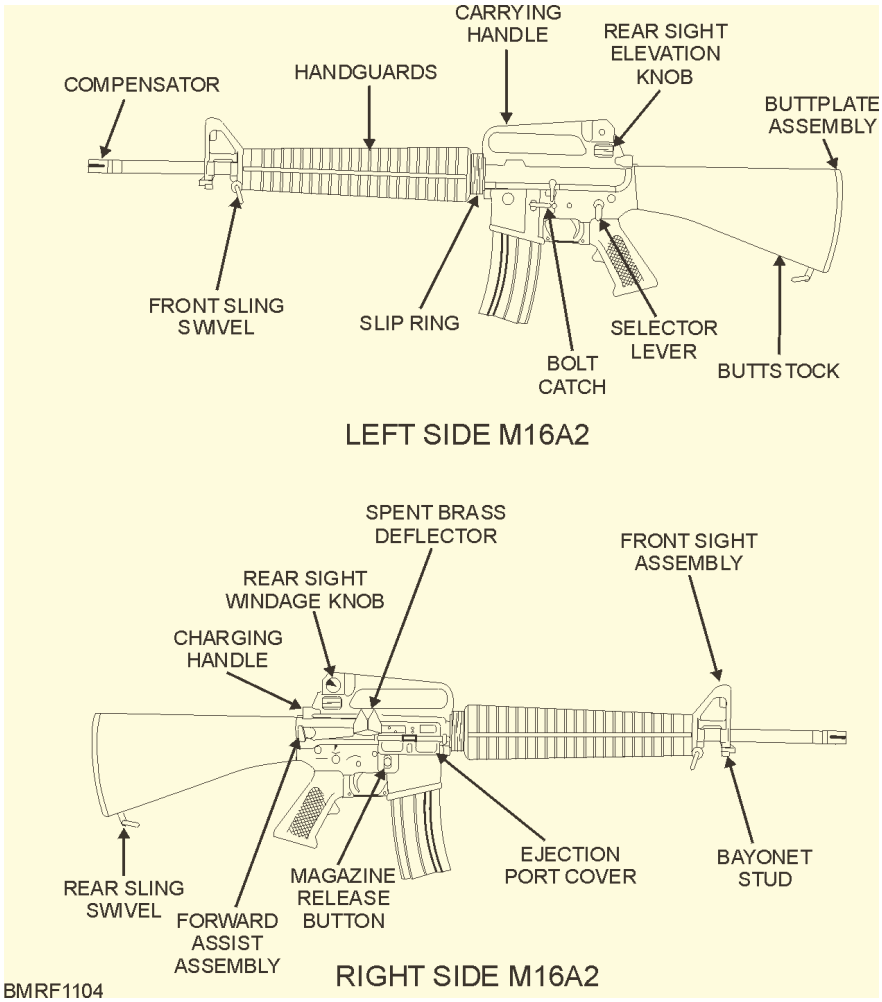


**Figure 11-4.—M16A2 service rifle, 5.56 mm, left and right side views.**

| COMPONENT | M16A1 | M16A2 |
|---|---|---|
| Barrel | Lighter barrel because of ammunition fired | Heavier barrel because of ammunition fired |
| Sights | Rear sight uses a windage drum for windage (fig. 11-5)<br>Front sight is same as the M16A2 (fig.11-6) | Rear sight is adjusted by means of a windage knob for windage and an elevation knob for elevation (fig.11-7) |
| Selector assembly | Has semiautomatic or fully automatic features | Has a semiautomatic or burst (three rounds) feature |
| Ammunition | Fires a 5.56-mm round and a 62-grain NATO round | Fires a 5.56-mm round and a 62-grain NATO round |
| Hand guards | | Round and ridged, making them stronger and easier to grip than the M16A1 hand guards. They are also interchangeable. |

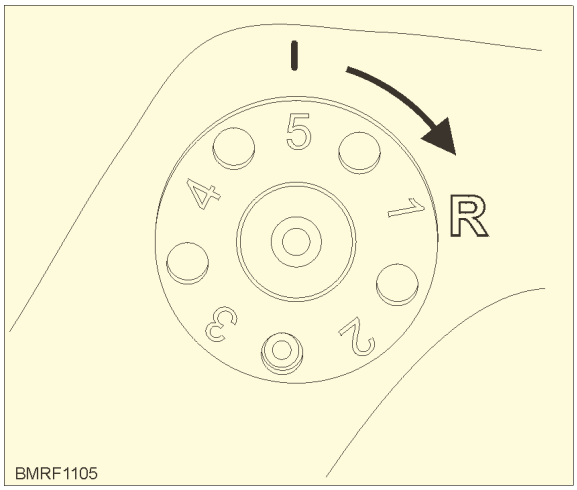

**Figure 11-5.—M16A1 windage drum.**

## CLEARING THE RIFLE

The following maintenance procedures (clearing, field-stripping, assembling, etc.) for the M16 service rifles are written for the right-handed Sailor. The left-handed Sailor can reverse the hand directions for these procedures for the M16

**NOTE**

Unless specifically stated otherwise, the following discussion of the M16 rifle applies equally to both the M16A1 and M16A2.

The first precaution you should take in handling any weapon is to make it safe by clearing it. To clear the M16 rifle, place the butt against the right thigh and proceed as follows:

1. Point the selector lever toward SAFE (fig. 11-8, view A). If the weapon is not cocked, the selector lever cannot be pointed toward SAFE. If that is the case, do

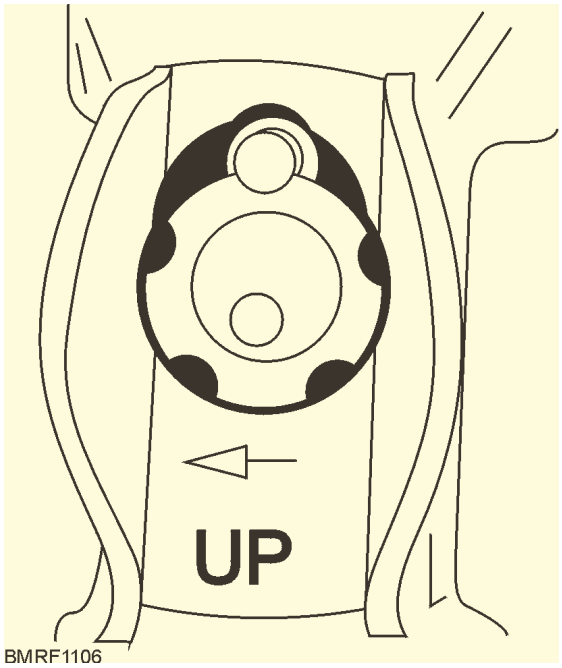

**Figure 11-6.—Front sight for the M16A1 and the M16A2 rifle.**

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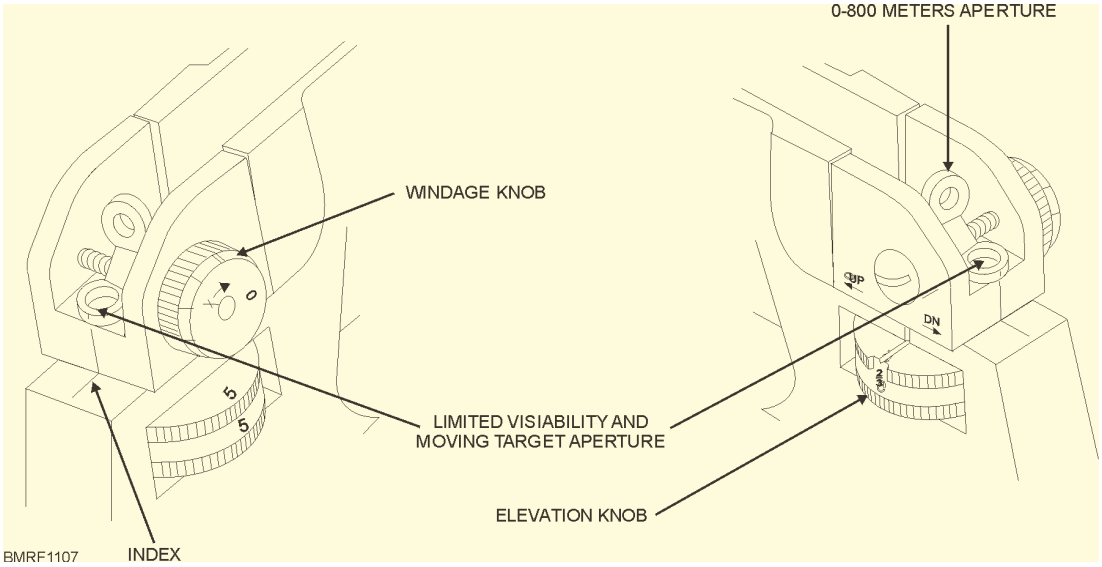


**Figure 11-7.—M16A2 rear sight.**

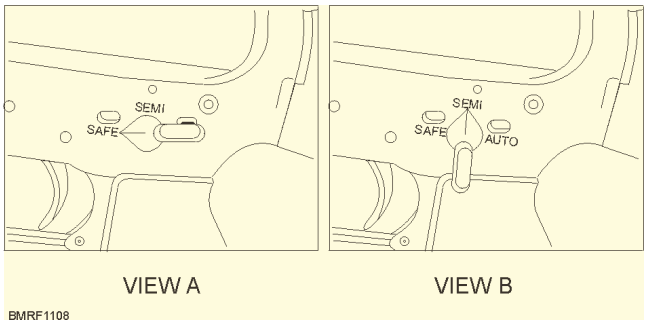


**Figure 11-8.—Selector lever pointing to SAFE.**

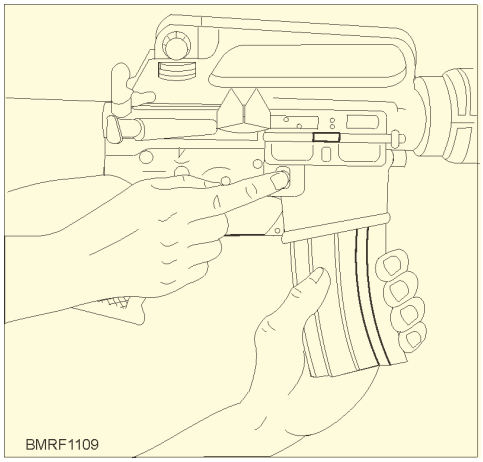


**Figure 11-9.—Removing the magazine.**

not cock the weapon at this time; instead, go on to the next step in clearing.

2. Remove the magazine (fig. 11-9). Grasp the magazine with the left hand (fingers curled around the front of the magazine, thumb placed on the magazine catch button). Use your right hand and apply pressure on the magazine catch button with the thumb and pull the magazine straight out of the weapon.

3. Lock the bolt open (figs. 11-10 and 11-11). Grasp the charging handle with the thumb and forefinger of the right hand, depress the charging handle, latch it with the right thumb, and pull to the rear (fig. 11-10). When the bolt is fully rearward, press the bottom of the bolt catch with the thumb or forefinger of the left hand (fig. 11-11). Allow the bolt to move slowly

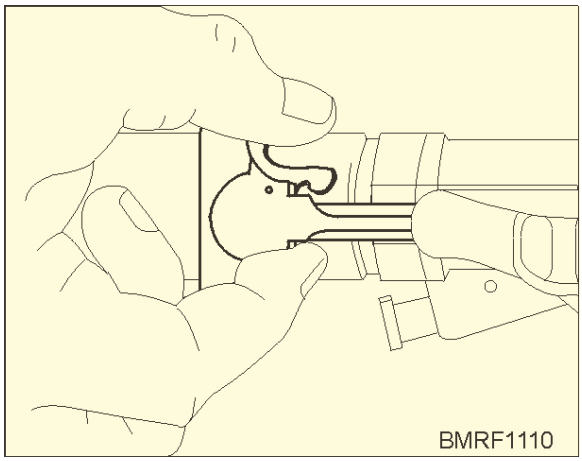


**Figure 11-10.—Pulling the charging handle rearward.**

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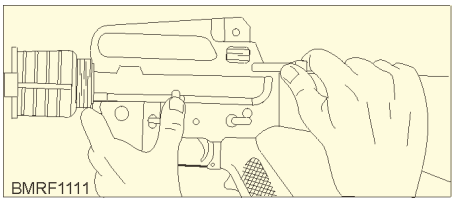


**Figure 11-11.—Locking the bolt open.**

forward until it engages the bolt catch, and return the charging handle to its forward position.

4. Inspect the receiver and chamber of the weapon by looking through the ejection port to ensure these spaces contain no ammunition.

5. Check the selector lever to ensure it points toward SAFE; then allow the bolt to go forward by depressing the upper portion of the bolt catch.

**CAUTION**

The selector must be on SAFE to prevent damage to the automatic sear during assembly and disassembly.

## FIELD-STRIPPING THE RIFLE

Before you can field-strip a rifle, you must be qualified to do so. **You will use instructions when you actually field-strip a rifle**. Follow the procedures in the instruction that deals with the weapon that you are field stripping.

## LOADING THE MAGAZINE

A magazine can come in either a 20- or 30-round capacity and may be loaded with any amount up to that capacity. The magazine follower has a raised portion generally resembling the outline of a cartridge. Cartridges are loaded into the magazine so the tips of the bullets point in the same direction as the raised portion of the follower (fig. 11-12).

**CAUTION**

Do not load or attempt to load more rounds than what the magazine was designed for. Overloading deforms the lips of the magazine and can cause malfunctions.

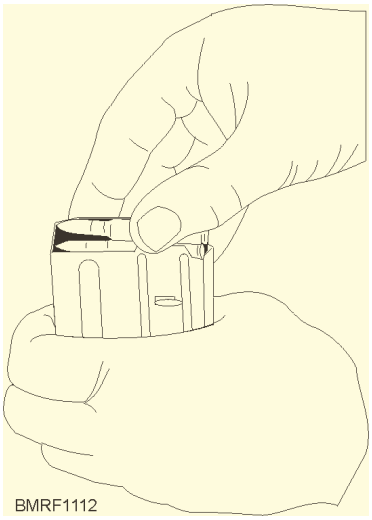


**Figure 11-12.—Loading cartridges into the magazine, 20 -round capacity.**

## UNLOADING THE MAGAZINE

To prevent damage to the lips of the magazine, you should remove the ammunition in the following manner:

1. Hold the magazine in your left hand with the open end away from your body and with the nose of the cartridge down (fig. 11-13, view A).

2. Depress the center of the second round in the magazine using the nose of the cartridge, allowing the first round to drop out of the magazine (fig. 11-13, view B). Repeat this procedure until you remove all the rounds from the magazine except the last one.

3. Use the nose of the cartridge to depress the follower to remove the last round, allowing the last round to drop out of the magazine (fig. 11-13, view C).

## LOADING THE RIFLE

With the hammer cocked, place the selector lever on SAFE. (Refer to figure 11-8, view A.) Notice that you can't place the selector lever on SAFE unless the rifle is cocked. You may insert the magazine with the bolt and bolt carrier open or closed; however, you should learn to load with the bolt open. Loading with the bolt open reduces the possibility of first round stoppage and saves the time needed to pull the charging handle to the rear.

Hold the stock of the rifle under your right arm with your right hand. Grasp the pistol grip; then point the

***Student Notes:***

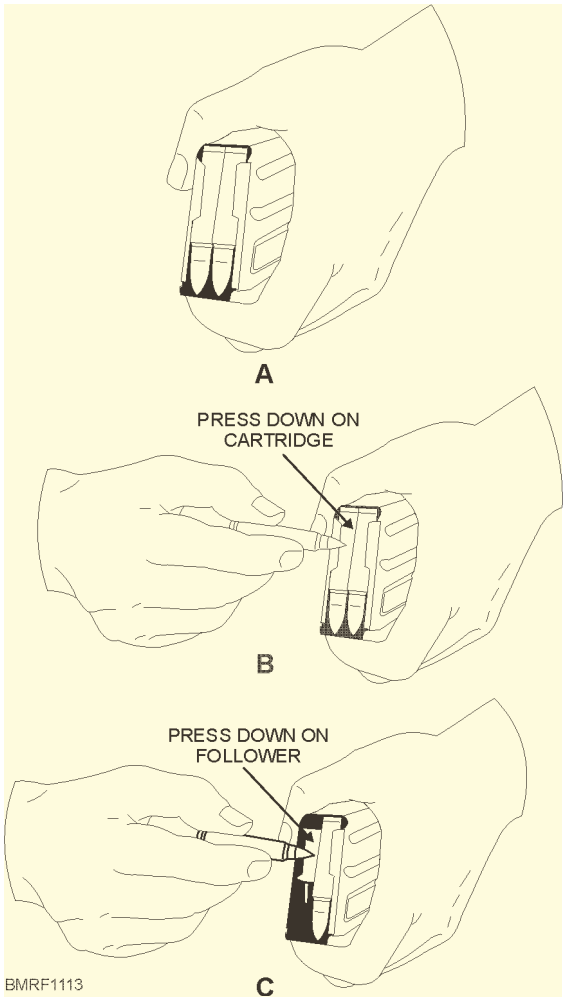


**Figure 11-13.—Unloading the magazine with the nose of a cartridge.**

muzzle in a safe direction. With your left hand, insert the loaded magazine into the magazine housing. Push upward until the magazine catch engages and holds the magazine. Rap the base of the magazine sharply with the heel of your hand to ensure positive retention. If the action is open, release the bolt by depressing the upper portion of the bolt catch with the thumb of your left hand, allowing the action to close, chambering the round. If the action is closed when the magazine is inserted, pull the charging handle fully to the rear with your right hand and release it. (Refer to figure 11-10.)

**WARNING**

Don't *ride* the charging handle forward with the right hand. If the charging handle is eased forward from the open position, the bolt may fail to lock. If the bolt fails to go fully forward, use the bolt closure forward assist assembly (fig. 11-4) with the heel of your right hand. The rifle is now loaded and is ready to fire when you place the selector lever in the automatic or semiautomatic position. If it is not ready to fire, make sure the selector lever is on SAFE.

After the last round has been fired, the bolt catch holds the bolt carrier to the rear. To change the magazine for reloading, press the magazine catch button and remove the empty magazine from the weapon.

## FIRING THE RIFLE

The rifle fires semiautomatic or burst (automatic for the M16A1) when you move the selector lever to the desired position. (Refer to figure 11-8.) With the selector lever in the semiautomatic position, the rifle fires one round each time you pull the trigger. With the selector lever in the burst position, the M16A2 fires in short bursts of three rounds. (**NOTE**: The M16A1 rifle fires fully automatically and will continue to fire until the magazine is empty or you release the trigger.) When the rifle is fired in either SEMI or BURST or AUTOMATIC, the bolt locks in the open position when the last round from the magazine has been fired.

## UNLOADING AND CLEARING THE RIFLE

As you read this section, refer back to figures 11-8, 11-9, 11-10, and 11-11. To unload the rifle and make it safe, place the selector lever on the SAFE position (fig. 11-8); and remove the magazine by pressing the magazine release button (fig. 11-9). Pull the charging handle to the rear (fig. 11-10), ejecting any round from the chamber. Inspect the chamber and receiver to ensure that it is clear. Releasing the charging handle will allow the bolt to close. To keep the bolt open, depress the lower portion of the bolt catch before returning the charging handle forward (fig. 11-11). The rifle is clear only when the following conditions exist:

- No case or round is in the chamber.
- The magazine is out.

***Student Notes:***

- The bolt carrier is to the rear.
- The selector lever is on the SAFE position.

## CARING AND CLEANING OF THE RIFLE AND AMMUNITION

A clean, properly lubricated and maintained rifle that is loaded with clean ammunition will fire when needed. To keep the rifle in good condition, you need to take care of it and clean it. Under bad weather conditions, some key parts may need care and cleaning several times a day. The cleaning material (fig. 11-14) used for the care of the rifle is carried in the rifle stock. Special attention must be given to the barrel bore and chamber, bolt carrier group, upper receiver group, lower receiver group, and the ammunition magazines.

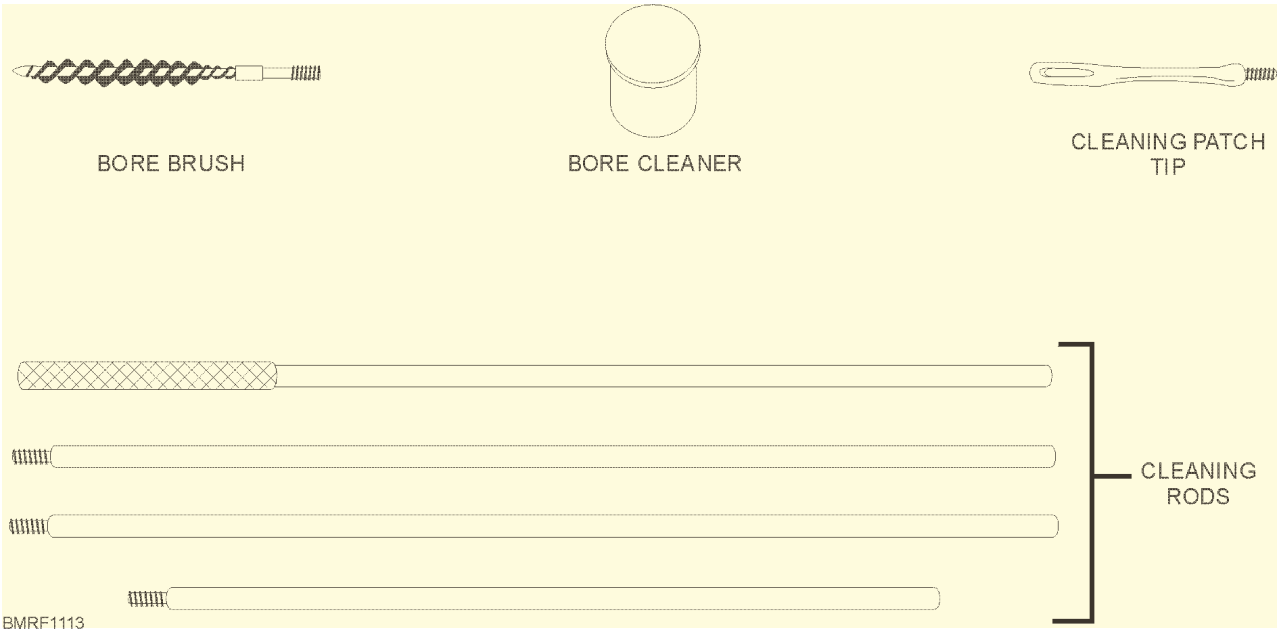


**Figure 11-14.—M16Al and M16A2 rifle cleaning material.**

| PART | ACTION |
|---|---|
| Barrel bore and chamber | 1. Dip a bore brush in the bore cleaner; then brush from the chamber to the muzzle, using straight-through strokes. **Don't reverse the brush while it is in the bore: it may jam**. A jammed brush is hard to remove, and removing the brush might damage the bore.<br>2. Dip the brush in bore cleaner; then clean the chamber with the bore brush.<br>3. Replace the bore brush with a slotted cleaning patch tip, and push the dry patches through the bore and chamber until they come out clean.<br>4. After you clean the bore, lightly lubricate the bore and chamber to prevent corrosion and pitting. Use the recommended lubricant on a patch.<br>5. Lightly lubricate the lugs in the barrel extension. |

***Student Notes:***

| PART | ACTION |
|---|---|
| Bolt carrier group | 1. Dip the bore brush in the bore cleaner, and clean the inside of the carrier key.<br>2. Dry with a pipe cleaner<br>3. Clean the locking lugs, bolt, extractor ejector, and bolt rings with the bore brush.<br>4. Remove any accumulation of dirt, carbon, or oil from the firing pin and the external and internal surfaces of the bolt and bolt carrier.<br>5. Wipe all parts dry; then lubricate them with the recommended lubricant. |
| Upper receiver group | 1. Coat the bore brush or a swab with bore cleaner; then remove the powder fouling collected on the group.<br>2. Clean the protruding gas tube inside and outside.<br>3. After cleaning these components, wipe them dry.<br>4. Apply a light coat of the recommended lubricant. |
| Lower receiver group | 1. Coat the bore brush or a swab with bore cleaner; then remove dirt, carbon, and sand from the lower receiver group.<br>2. Dry and apply a light coat of the recommended lubricant. |
| Ammunition magazines | 1. After removing all cartridges from the magazine, depress the spring steel lock band on the bottom of the magazine, using the nose of a cartridge.<br>2. Slide the base until it is free of the tabs, and remove it from the magazine body.<br>3. Remove the magazine spring and follower, but do not remove the follower from the spring.<br>4. Clean the exterior and interior of the magazine with a dry rag or swab.<br>5. Apply a light coat of the recommended lubricant to the magazine spring only; otherwise, keep the magazine dry.<br>• Assemble the magazine in reverse order and test it to ensure that the follower is free to move without binding.<br>• If the magazine and the ammunition in it gets wet, be sure to wipe them dry as soon as possible.<br>• When left wet, both the magazine and the ammunition can become corroded and are dangerous to use.<br>• Remember not to use oil or grease on any cartridge. If you do this, injurious abrasives can collect in the weapon or produce excessive and hazardous chamber pressures when the weapon is fired. Whenever practical, ammunition should be stored under cover. This applies particularly to tracer ammunition. |

***Student Notes:***

## REVIEW 2 QUESTIONS

Q1. What type of ammo is the M-14 rifle chambered to fire?

Q2. When fully loaded, the M-14 weighs _____.

Q3. Identify the following rifle components as either M16A1 or M16A2.

| Component | Rifle |
|---|---|
| a. Has a lighter barrel because of the ammunition fired | |
| b. Rear sights are adjusted by means of a windage knob and elevation knob | |
| c. Has a semiautomatic or burst feature | |
| d. Fires a 5.56-mm round and a 62-grain round | |

Q4. What is the first step in cleaning the M16 rifle?

Q5. How many rounds does an M16 rifle carry?

Q6. When loading the M16 rifle, why shouldn't you ride the charging handle forward?

Q7. When the selector is set for burst, how many rounds will the M16A2 fire?

Q8. List the conditions that must exist to consider the M16 rifle clear.

a.

b.

c.

d.

Q9. Where are the cleaning materials for the M16 stored?

## REVOLVERS AND SERVICE PISTOLS

Learning Objectives: When you finish this chapter, you will be able to—

- Recognize the operating characteristics of the .38-caliber revolver.
- Recognize the procedures to follow when loading and unloading the magazine, and unloading and cleaning the .45-caliber pistol.
- Identify the procedures for cleaning and maintaining the .45-caliber pistol.
- Identify the safety devices of the 9mm caliber pistol.
- Recognize the procedures to follow when loading and unloading the 9mm pistol.

### NOTE

The .38-caliber revolver and the .45-caliber service pistol have been replaced by the 9mm pistol. However, small units may still carry these revolvers and pistols in their allowance.

***Student Notes:***

## THE .38-CALIBER REVOLVER

The .38-caliber revolver is a cylinder-loading, single- or a double-action, manually operated hand weapon (fig. 11-15). Several barrel lengths and weights are available.

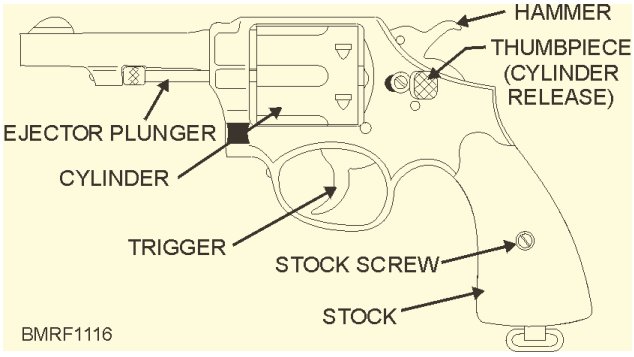


**Figure 11-15.—The .38-caliber revolver.**

## THE .45-CALIBER SERVICE PISTOL

The .45-caliber service pistol (fig. 11-16) is an individual weapon intended for use in close combat. The .45-caliber pistol is a semiautomatic, recoil-operated, magazine-fed hand weapon. The pistol fires one round each time the trigger is squeezed. The pistol can be carried in either a hip or shoulder holster.

The magazine holds seven cartridges. The forward movement of the slide strips the upper cartridge from the magazine into the chamber. After the last cartridge from the magazine has been fired, the slide remains in the rear.

Only your ability to change magazines, aim, and squeeze the trigger rapidly limits the rate of fire of the .45-caliber service pistol.

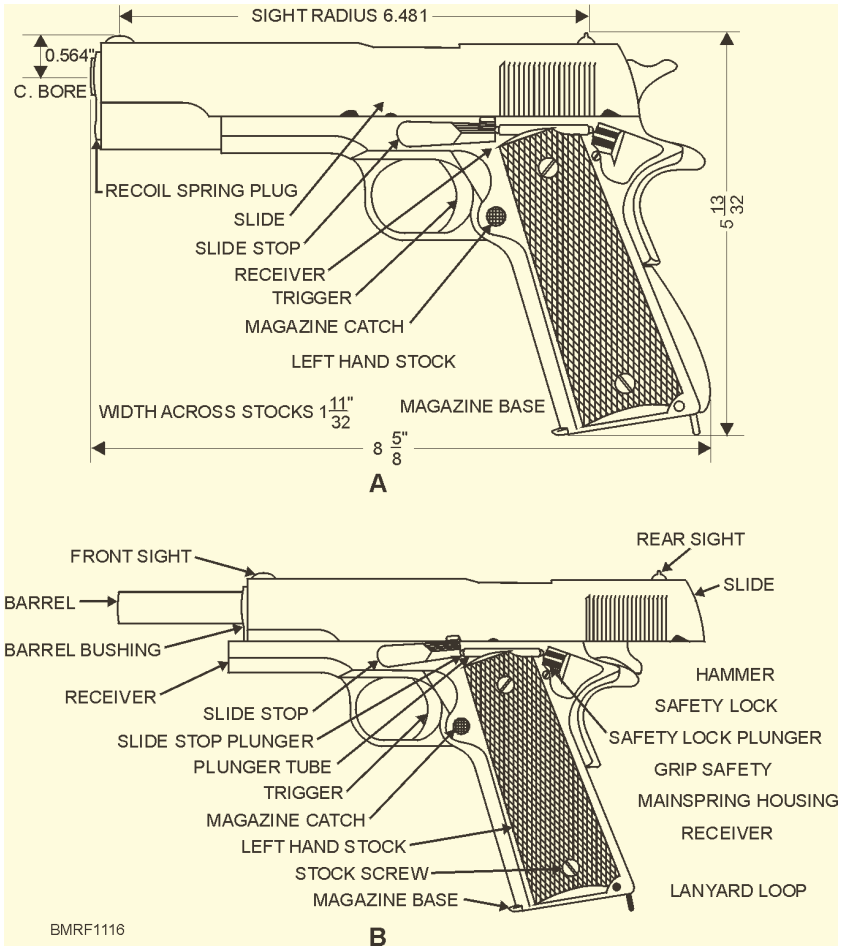


**Figure 11-16.—.45-caliber semiautomatic service pistol. (A) Assembled; (B) Sectional view in recoil position.**

***Student Notes:***

The pistol is 8 5/8 inches in length and weighs 3 pounds fully loaded, with a maximum range of 1,500 yards, and a maximum effective range of 50 yards.

## THE 9MM SERVICE PISTOL

In 1985, the armed forces selected a 9mm pistol to replace the .45-caliber pistol. The pistol selected is a single- or double-action semiautomatic hand weapon. As soon as the pistol is fired, either in single or double action, the slide automatically comes back and cocks the hammer. To fire the pistol again, all you have to do is pull the trigger. The 9mm pistol has a large magazine capacity—it can hold 15 rounds in the magazine. Slots in the magazine help the user know the number of rounds that remain.

### Description and Technical Data

As you know, the 9mm service pistol is a semi-automatic, magazine-fed, recoil operated, double-action pistol. The pistol fires one round each time the trigger is pulled. The energy needed to operate the pistol comes from the recoil, which is created by the rearward force of expanding gases of a fired round. The double-action feature lets you fire a weapon when the hammer is in the forward position, the safety is in the fire position, and the trigger is pulled. The magazine holds 15 cartridges. When the last cartridge from the magazine is fired, the slide remains locked to the rear. Look at the following chart for the technical data of the 9MM service pistol.

### Safety Devices

The 9mm service pistol is equipped with three types of safety features—the ambidextrous slide safety, the firing pin block, and the half cock notch.

**AMBIDEXTROUS SAFETY**.—This safety allows for safe operation of the pistol by both right- and left-handed users. It lowers the hammer safely without causing an accidental discharge. When the hammer is cocked, it may be safely lowered by moving the safety to the safe (down) position. When the safety is in the fire (up) position, a red dot will be visible indicating that the pistol should be handled with caution (**red you're dead**).

| COMPONENT | TECHNICAL DATA |
|---|---|
| Caliber | 9 x 9mm (9mm NATO) |
| Diameter of bore | .356 in. |
| Length | 217 mm (8.54 in.) |
| Width | 38 mm (1.50 in.) |
| Height | 140 mm (5.51 in.) |
| Weight with 15-round magazine | 1,134 g (2.50 lb.) |
| Weight with empty magazine | 960 g (2.12 lb.) |
| Barrel length | 125 mm (4.92 in.) |
| Muzzle velocity | 375 m/sec (1,230 ft/sec) |
| Maximum effective range | 50 mm (45.7 yd) |
| Cyclic rate of fire | 1,100 rpm |
| Trigger pull | 4 to 6.5 lb single action and7.5 to 16.6 lb double action |

**FIRING PIN BLOCK**.—This safety prevents any motion of the firing pin and is only overcome by pulling on the trigger. Both the firing pin and the firing pin block have a notch cut into them. The firing pin block remains in the firing pin notch and prevents any motion of the firing pin. When you pull the trigger, the firing pin block is pushed upward and aligns its notch with the firing pin so that the firing pin can move forward to strike the primer of a round.

**HALF COCK NOTCH**.—This safety prevents accidental discharge. The half cock notch is located on the hammer. If a cocked hammer should fall forward because of a mechanical failure, the half cock notch would catch on the sear before the hammer strikes the firing pin and prevent an accidental discharge of the pistol.

### Loading

The 9mm service pistol incorporates single- and double-action modes of fire. With the safety in the **FIRE** position, in the double-action mode, squeezing

***Student Notes:***

the trigger will automatically cock and fire the pistol. Always keep your finger away from the trigger unless you intend to fire. The safety should be in the down position (the red dot not visible), which indicates that the pistol is in a safe condition before loading. With the pistol pointing in a safe direction and the slide in its forward position, follow the steps listed below.

| STEP | ACTION |
|---|---|
| 1 | Insert a loaded magazine into the magazine well of the pistol until you hear a click. This ensures a proper catch engagement. |
| 2 | Grasp the serrated portion of the slide with the nonshooting hand (fig. 11-17). |
| 3 | Pull the slide all the way to the rear (fig. 11-18). |
| 4 | Release the slide. This will strip a cartridge from the magazine and chamber a round (fig. 11-19). |

**WARNING**

Although rare, it is possible that the safety may become disengaged during the loading procedure. Make sure the safety is on after loading.

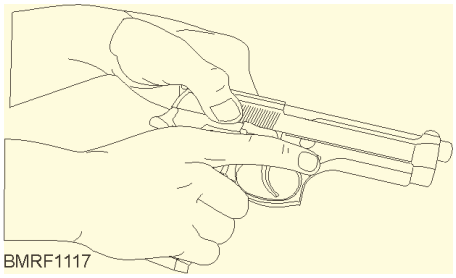


**Figure 11-17.—Grasping the serrations of the slide.**

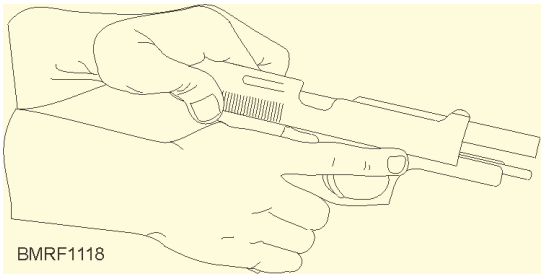


**Figure 11-18.—Pulling the slide to the rear.**

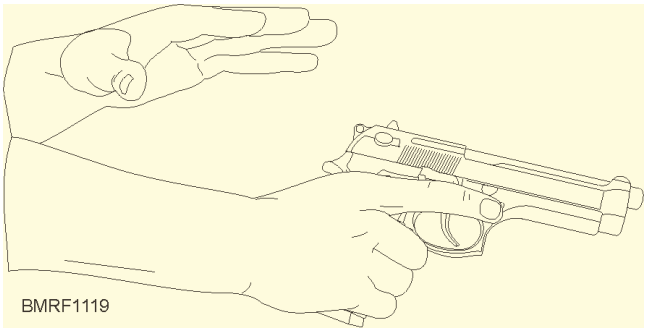


**Figure 11-19.—Releasing the slide.**

### Unloading

To unload the 9MM service pistol, follow the steps listed below.

| STEP | ACTION |
|---|---|
| 1 | Place the safety in the **safe** position. |
| 2 | Depress the magazine release button to remove the magazine from the pistol. |
| 3 | With the pistol pointing in a safe direction, grasp the slide serrations and fully retract the slide to remove the chambered cartridge. |
| 4 | Use the right thumb and push upward on the slide stop to lock the slide to the rear, and visually inspect the chamber to ensure that it is empty. |

### Unloading the Magazine

To unload the magazine, hold the magazine using one hand, with the front end forward. With your thumb, press firmly on the cartridge rim and push forward. Repeat this procedure until the magazine is empty.

**REVIEW 3 QUESTIONS**

Q1. How many rounds will a .45-caliber pistol magazine hold?

***Student Notes:***

Q2. The .45 caliber pistol was designed to be used as

_____.

Q3. List the three safety features of the 9mm service pistol.

a.

b.

c.

Q4. You are loading your pistol. The safety should be in what position?

## SHOTGUNS

**Learning Objective**: When you finish this chapter, you will be able to—

- Identify the safety practices to follow when using shotguns.

Shotguns (fig. 11-20) are being used by the Navy in security guard work. Shotguns are the weapons of choice for short-range work, which includes the requirement to protect vital nuclear propulsion systems and nuclear weapons. The advantage of shotguns over pistols/revolvers is that sight alignment is not so critical. Each trigger pull of a shotgun expels anywhere from nine to hundreds of projectiles (shot). These projectiles cover a wide area. The characteristics of the M870 shotgun are shown in the following chart:

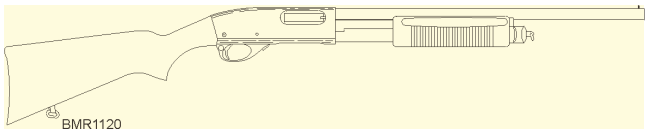


**Figure 11-20.—M870 shotgun.**

### NOTE

Make certain you load the M870 with the proper ammunition. For example, many people have been injured by a shotgun loaded with a smaller gauge shell. This smaller shell goes part way down the barrel and cannot be fired. The user thinks a misfire has occurred and chambers the proper size shell. Firing the weapon causes the gun to explode because the smaller shell is an obstruction. Serious injury or death could occur.

| COMPONENT | CHARACTERISTIC |
|---|---|
| M870 shotgun | A manually operated, magazine-fed (tubular), pump-action shoulder weapon. |
| Length–Overall | 39 inches |
| Barrel | 20 inches |
| Ammunition | Four rounds of 12-gauge , 2 ¾ inch in the magazine. Normal ammunition issue is 12 gauge, 00 buck |
| Crossbolt Safety | |

### REVIEW 4 QUESTION

Q1. What advantage does a shotgun have over other firearms?

## MARKSMANSHIP

**Learning Objective**: When you finish this chapter, you will be able to—

- Recognize the firing techniques for rifles and pistols.
- Identify the shooting positions.

Marksmanship training gives you proper information and instruction on how to be a safe and effective shooter. Good shooting, whether on the firing range or in combat, depends on your knowledge and use of basic marksmanship principles. These principles are interrelated and must be practiced each time you fire a shot.

***Student Notes:***

## FIRING TECHNIQUES—RIFLE

The most important factors for you to remember about firing a rifle are sight alignment and achieving a correct aiming point. Together they make up the sight picture.

### Sight Alignment

Sight alignment involves looking through the rear sight aperture, focusing the eye on the front sight post (or blade), and centering the front sight post exactly in the rear sight aperture, both vertically and horizontally. The top of the front sight is level with the horizontal center line of the rear sight, and the body of the front sight is centered between the rear sight aperture (fig. 11-21).

**REAR SIGHT**.—When you are in different firing positions (standing, kneeling, or sitting), your aiming eye is at a slightly different distance from the rear sight. This distance is referred to as *eye relief*. Eye relief makes the opening (peep) of the rear sight appear larger or smaller, depending on the firing position. **Regardless of the apparent size of the rear sight opening, you must align the front sight in the center of the opening.**

It is important to keep your eye the same distance from the peep sight in any particular firing position. To ensure this distance is always the same, you must hold the rifle in the same exact location for each shot. This location is commonly called the *spot weld or anchor*. There are several tricks shooters use to help maintain this distance. For example, you can place a small piece of tape on the stock of the rifle where it touches the cheek. In this way, you can feel whether your cheek has the proper *eye* relief.

**FRONT SIGHT**.—The front sight always appears to be the same size. However, depending on the distance your eye is from the rear sight, more or less of the front sight may be visible in the sight picture. The front sight, not the target, is the point of focus for the eye. As such, the front sight will be sharp and distinct in outline. For this reason, keep the front sight square, level, and blackened.

**AIMING POINT**.—The aiming point is the point on the target where the sights of the weapon are brought to bear. The correct aiming point is at 6 o'clock; that is, the bottom of the bull's-eye of a type "A" target (fig. 11-22) or the silhouette of a type "D" target (fig. 11-23). Any location on the target face is always given relative to a similar position on a clock face regardless of the target shape. Therefore, a vertical line in the exact center of the target would be described as running from 12 o'clock (top) to 6 o'clock (bottom).

**SIGHT PICTURE**.—To obtain the correct sight picture, you need to align the rear sight, the front sight, and the bull's-eye (figs. 11-22 and 11-23). Each of these three elements affects the sight picture. As you can see from figure 11-24, any error in sight alignment will increase as the range increases. An error in the aiming point remains constant as the range increases.

At close ranges, the bull's-eye or silhouette appears larger in relation to the front sight than it will at longer

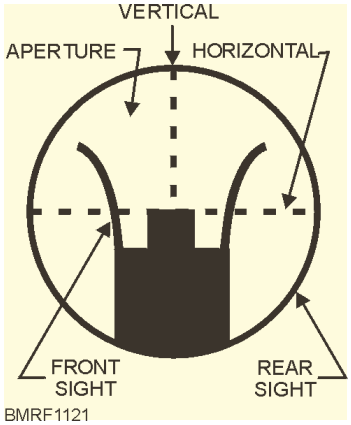

**Figure 11-21.—Proper sight alignment.**

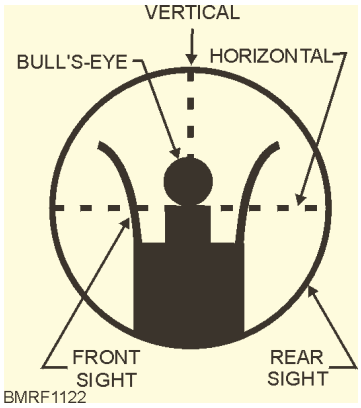

**Figure 11-22.—6 o'clock sight picture held on "A" target at a range of 200 yards.**

***Student Notes:***

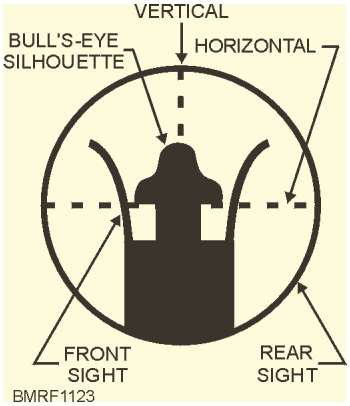


**Figure 11-23.—6 o'clock sight picture held on a "D" target at a range of 200 yards.**

ranges. This means that the sight picture will vary not only from one firing position to another but also from one firing line to another (fig. 11-25).

**TRAINING**.—You will receive training in aiming along with the position and trigger squeeze before actually firing on the rifle range. You do this by aiming at a series of small bull's-eyes at least 20 feet away on a *dry firing range*; this training is known as *snapping in*.

**BLACKENING SIGHTS**.—You should blacken the sights during sighting and aiming exercises to help eliminate light reflection or glare. Blacken all sights, both front and rear, on the base of the receiver and the top of the barrel. Usually, sights are blackened by using a smudge pot, carbide lamp, oily patch, candle, cigarette lighter, or ordinary match. Be sure to remove all oil from the sight before blackening it.

### Shooting Positions

For the best results in rifle shooting, you need to shoot in the correct shooting position. The better the position, the easier it is to hold the rifle and squeeze the trigger while the sights are properly aligned on the target. However, shooting position **won't** compensate for lack of practice. You may have difficulty in assuming a correct position until sufficient practice has limbered up your muscles. Once your muscles are limber, you will find the positions both comfortable and steady.

A standard qualification course requires you to learn and use three standard positions while shooting—standing, kneeling, and sitting. Experience has proved that these positions produce excellent results with men and women of all physical types.

Once you master the correct positions, you must combine sighting and aiming with your practice. Learn to get into the correct position and align the sights without moving the rifle. If the target isn't properly aligned with the sights, you must move your body

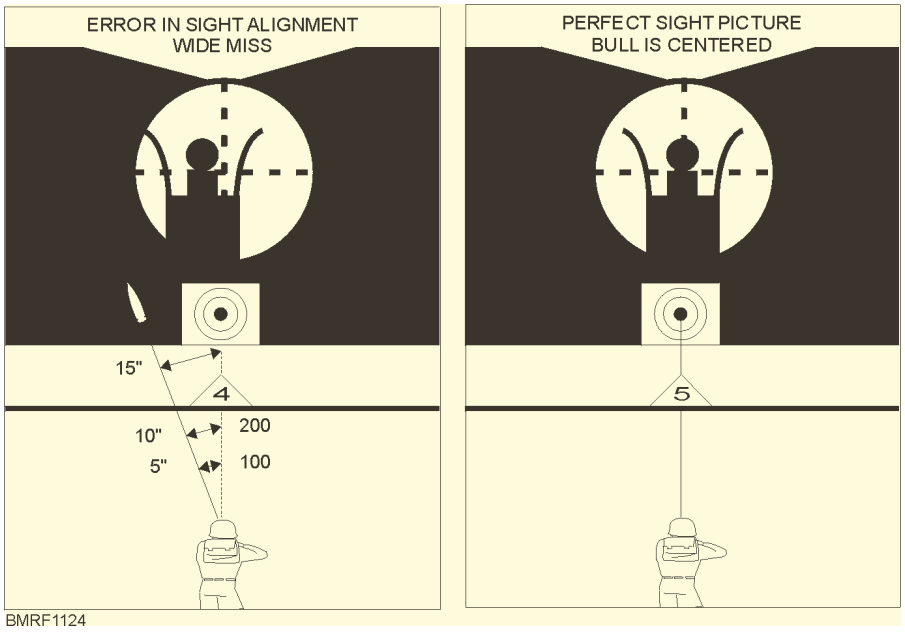


**Figure 11-24.—Error in sight alignment increases as range increases.**

## *Student Notes:*

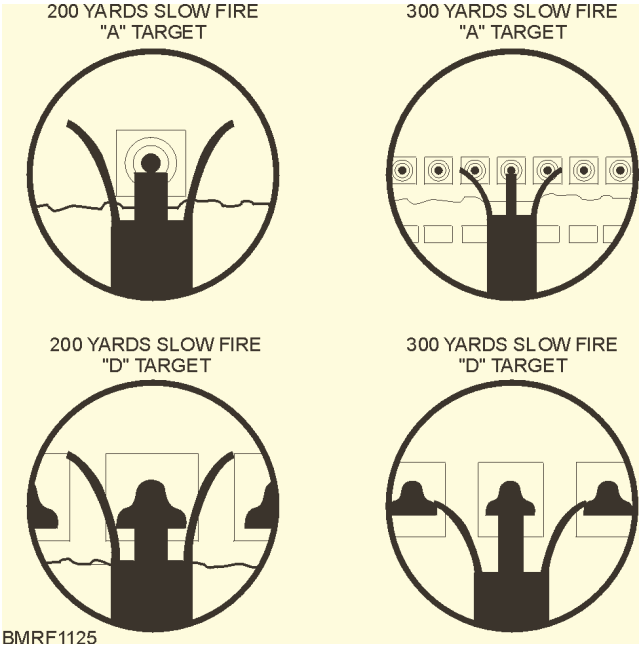


**Figure 11-25.—Variation in sight picture for each range of fire.**

instead of the rifle until you obtain the proper sight picture.

**STANDING (OFF-HAND) POSITION**.—The standing position (fig. 11-26) is used to engage surprise targets that appear at close ranges. Normally, you use this position when engaging targets less than 100 yards in range and when you are constantly firing and moving.

**Figure 11-26.—Standing position.**

**Figure 11-27.—Kneeling position.**

## *Student Notes:*

**KNEELING POSITION**.—The kneeling position (fig. 11-27) is a natural position that can be assumed quickly. It is suitable for use on level ground or on ground that slopes upward.

**SITTING POSITION**.—There are three variations of the sitting position:

1. Open leg
2. Cross leg
3. Cross ankle

The position used depends entirely on the shooter. The open-leg position (fig. 11-28) is especially suited for use on ground that slopes downward. The other two alternate sitting positions are the cross-leg position (fig. 11-29) and the cross-ankle position (fig. 11-30).

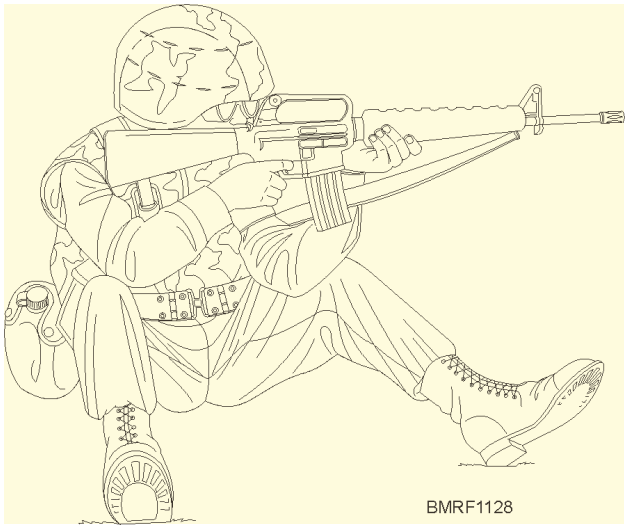


**Figure 11-28.—Open-leg position.**

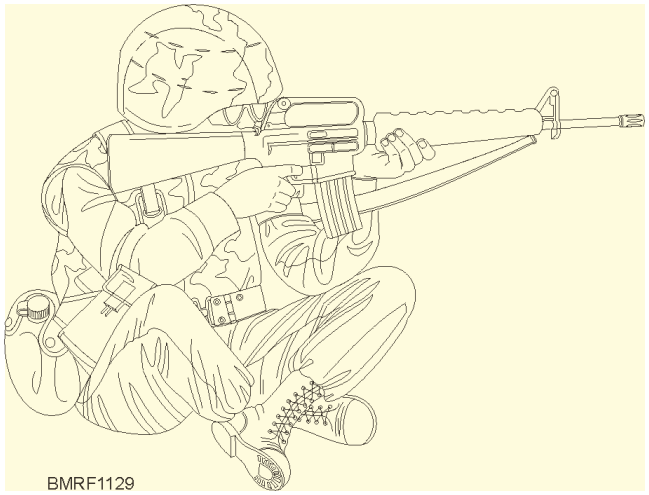


**Figure 11-29.—Cross-leg position.**

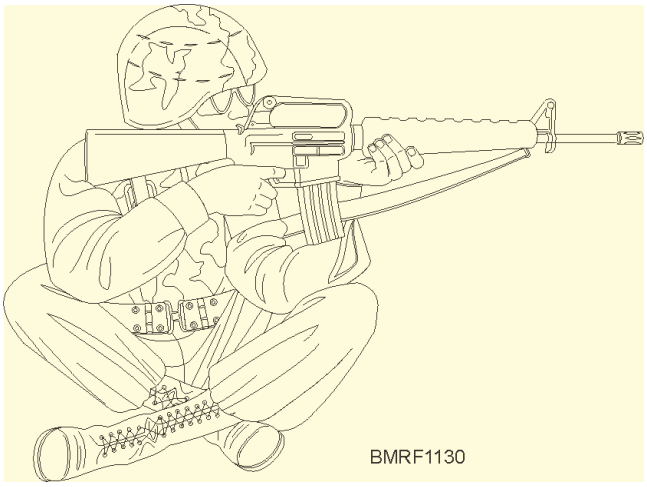


**Figure 11-30.—Cross-ankle position.**

### Trigger Control

The most important single factor in marksmanship is trigger control. Everything about your position and aim may be perfect; but if you do not squeeze the trigger properly, your shot will not go where you aimed it.

The key to trigger control is that the trigger must be squeezed smoothly, gradually, and evenly straight to the rear. Any sideward pressure, however slight, applied to the trigger during its rearward movement will likely result in a wide shot. Similarly, upward or downward pressure on the trigger will result in high or low shots. Trigger control can be done as shown in the chart on the following page:

When you fire from the standing position, coordinating the trigger squeeze and proper aim is critical. You must start and continue the squeeze **only** when the front sight is momentarily at rest or is slowly moving in the smallest area of the bull's-eye. Inexperienced shooters usually tend to *snap shoot* in this position; that is, they attempt to complete the trigger action instantly as the front sight moves across the aiming point. This invariably results in jerking the rifle and producing a wild shot.

***Student Notes:***

| | |
|---|---|
| Trigger hand | Grasp the stock or pistol grip firmly, but without strain, so the trigger finger has the proper support to overcome trigger weight. An unnatural, straining grasp causes excessive muscle tension in the hand, which results in a tremor that is transmitted to the weapon. |
| Trigger (index) finger | Make contact with the trigger where the contact produces a movement straight to the rear (usually between the first joint and the tip). (**NOTE**: The trigger finger must not touch the receiver or rifle.) |
| Line up the sights and apply pressure on the trigger | Gradually increase the pressure until the hammer releases and the shot fires. (**NOTE**: If, during this process, the sights drift off the target, interrupt the trigger squeeze but maintain the pressure. When the sight picture is correct, continue the squeeze until you fire the shot.) |

| | | |
|---|---|---|
| **B** | **BREATH** | Proper breathing is essential. It helps you relax, steadies your aim, and clears your vision. First, take a normal breath; then release part of it (enough to be comfortable); and hold the remainder. **Do not hold your breath for more than 10 seconds before shooting**. This may tense your muscles and blur your vision. If you do not shoot during this breathing period, take another normal breath and repeat the procedure. |
| **R** | **RELAX** | You must relax. The more relaxed you are, the better your shot will be. |
| **A** | **AIM** | Concentrate on the proper sight alignment of the correct sight picture. Focus your eye on the front sight post (blade). |
| **S** | **SLACK** | Some rifles have a certain amount of slack in the trigger. Take up this slack before starting your squeeze to the rear to fire. The M16 trigger slack is insignificant, and this step is generally omitted when firing that weapon. Knowing your weapon is important. |
| **S** | **SQUEEZE** | Squeeze the trigger as previously described. If you squeeze it properly, you will not know when the round will fire. This will prevent flinching, caused by anticipation of the shock, or recoil, from the exploding cartridge. |

Squeezing the trigger correctly is not as easy as it may appear; the technique must be fully mastered. To help you remember the correct technique, the acronym BRASS was developed (see chart above).

**FIRING TECHNIQUES—PISTOL**

Good pistol shooting, like rifle shooting, depends on your ability to master and apply certain basic marksmanship skills. You must practice these skills—aiming, position, and trigger squeeze—often. Apply these fundamentals of marksmanship! If your life ever depends on how well and accurately you shoot the pistol, you might walk away alive.

**Aiming the Pistol**

Aiming the pistol consists of combining proper sight alignment with the correct aiming point to obtain a correct sight picture.

**SIGHT ALIGNMENT**.—Sight alignment is best defined as placing the front and rear sights into correct alignment with the eye. The top of the front sight is level with the top of the rear sight, and the body of the front sight is centered between the rear sight aperture (fig. 11-31). Correct sight alignment is essential for accuracy because of the short sight radius (about 6 1/2 inches). For example, if a 1/10-inch error is made in aligning the

***Student Notes:***

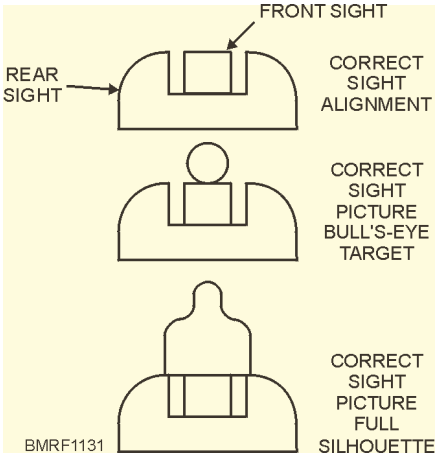


**Figure 11-31.—Correct sight alignment and sight picture.**

front sight in the rear sight, the bullet will miss the point of aim by almost 15 inches at 25 yards of range.

**AIMING POINT**.—The correct aiming point, when you fire at a bull's-eye target at 25 yards, is a 6 o'clock sight picture. At 15 yards, bring the aiming point well up into the black. When you fire at an "E" type of silhouette target, the aiming point is in the center of the target.

**CORRECT SIGHT PICTURE**.—A sight picture is the pattern of the pistol sights in relation to the target as you aim the pistol. A correct sight picture combines correct sight alignment and correct aiming point (fig. 11-31). When you are aiming, your eye cannot focus simultaneously on three objects (rear sight, front sight, and bull's-eye) at different ranges. Therefore, the last focus of the eye should always be on the front sight. You will see the front and rear sights sharp and clear, but the bull's-eye will appear to be a bit hazy.

**NOTE**

If sight alignment is correct, the bullet will strike the bull's-eye even if the sight picture is partially off center but still touching the bull's-eye.

Since it is physically impossible to hold the weapon perfectly still, you must learn to apply trigger squeeze and to maintain correct sight alignment while the weapon is moving around the bull's-eye. This movement is referred to as the *wobble area*. You must accept this wobble area, or movement, trying to keep it to a minimum.

**Position**

To position yourself properly for firing the pistol, you need to know how to grip the pistol correctly and how to position your body in relation to the target. Only the standing position will be covered in this section because it is the one used in qualification. However, the pistol can also be fired accurately from the kneeling, standing, and sitting positions. The pistol may be gripped with either a one-hand grip or a two-hand grip.

**STANDING POSITION ONE-HAND GRIP**.—To assume the standing position using the one-hand grip (fig. 11-32), face the target squarely and then execute an exaggerated half-left face (about 50°). Spread your feet about shoulder width apart until you're standing comfortably. Your legs should be straight, but not stiff, and your hips should be level. Extend the index finger of your shooting hand and point it at the target, forming a V with the thumb and forefinger. Adjust your stance until your finger points naturally, without muscle tension, at the center of the target. Pick the pistol up with your other hand and place it in the V of your shooting hand.

**Figure 11-32.—Standing position (pistol).**

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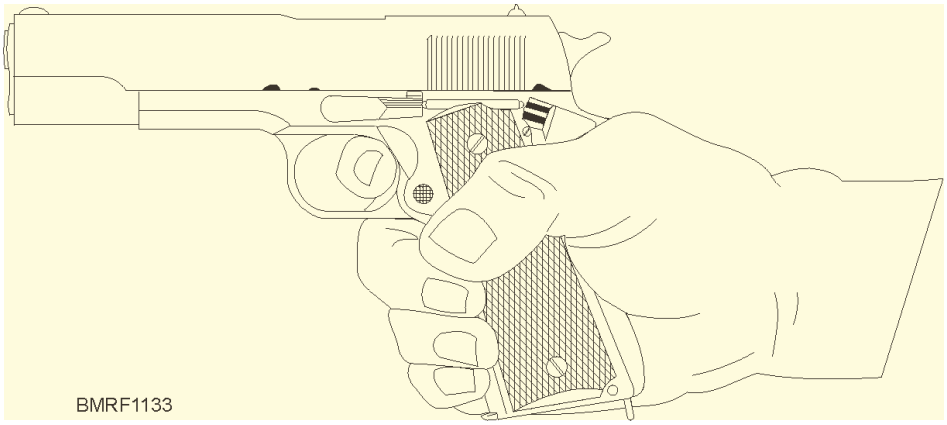



**Figure 11-33.—Gripping the pistol (one hand).**

As you read this paragraph, refer to figure 11-33. Grip the receiver firmly with the hand and fingers. Wrap the three lower fingers around the receiver (grip), and place the trigger finger on the trigger between the tip and second joint so that the trigger can be squeezed to the rear. Hold your thumb up and along the side of the pistol with enough pressure to steady the pistol and to equalize any pressure from the other side by the palm and forefinger. Once you have a firm grip, maintaining the same degree of firmness throughout firing is important. A change in your grip will change the location of the shot group on the target. A tight grip tends to cause the bullet to strike low and a loose grip to strike high.

With a proper grip on the pistol, the muscles of your arm should be firm, but not rigid. Your arm should be straight with your wrist and elbow locked. This will prevent excessive up-and-down movement of the weapon. When the weapon is fired, the recoil will be absorbed through the arm to the shoulder. If you are in the correct position, the pistol will return to approximately the same sight picture after each shot.

**STANDING POSITION TWO-HAND GRIP**.—In this position (fig. 11-34), you face the target squarely with your feet placed comfortably about shoulder width apart. Keep your legs straight without stiffness and your hips level and slightly forward. Relax the muscles of your diaphragm, and make no effort to hold in your abdomen.

Grasp the pistol in the same manner as if you were firing one-handed. Place the nonfiring hand under the firing hand, wrapping the nonfiring fingers around the back of the firing hand. Place the thumb over the middle finger of the firing hand. Lock the weapon firmly in both hands (fig. 11-35). Bring the weapon onto the center of the target by shifting your feet.

**Figure 11-34.—Standing position (pistol), two-handed grip.**

**MISCELLANEOUS**.—In both the one-hand and two-hand positions, position your head so that you are

***Student Notes:***

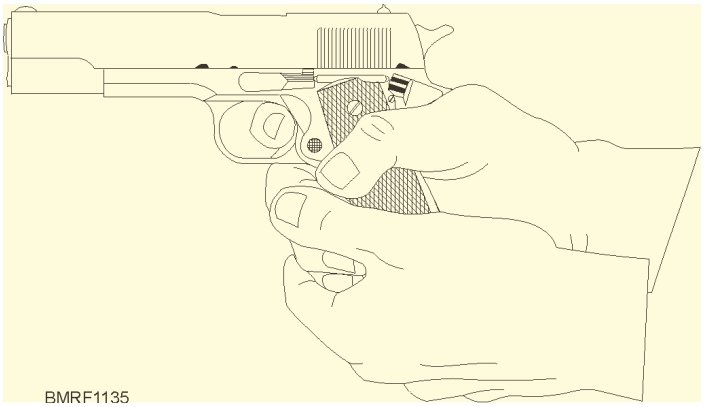



**Figure 11-35.—Two-hand grip.**

looking straight out through your shooting eye. Keep your shooting arm fully extended.

In the one-handed position, the shoulder of your shooting hand should be slightly raised. Turn your head in order to see the target through the sights. The ease with which your head can be turned is another determining factor in how far you must turn to the right or left. There should be no strain on the neck muscles with your head held upright. The whole position, with the exception of your shooting arm, is one that can be maintained with the least muscular effort. Your body is balanced, rather than held in position. The muscles of your shooting arm and shoulder should be tightened somewhat to sustain the weight of the pistol and to maintain a correct grip. Excessive tightening of the muscles of your shooting arm and hand should be avoided. The tension in the muscles of your shooting arm and hand should be maintained after the hammer falls. This will assist in getting off your second shot quicker.

Because of the differences in the body structure of individuals, the standing position will vary slightly. However, regardless of your size, your position should be relaxed and comfortable. The pistol should point at the center of the target or you will be tense while firing. If you are tense, there will be excessive muzzle movement.

**Trigger Squeeze**

Poor shooting is most often caused by disturbing your aim as the bullet is leaving the barrel. This is usually the result of jerking the trigger or flinching. The trigger does not have to be jerked violently to spoil your aim; even a slight off-center pressure of your finger while squeezing the trigger is enough to move the strike of the bullet several inches.

- Flinching is a subconscious reflex caused by anticipating the recoil from firing.
- Jerking results from attempting to fire the pistol at the precise time that you align the sights with the target.
- Heeling causes the bullet to strike the target high and to the right.

You can correct all these shooting errors by understanding and using the correct trigger squeeze. Both flinching and jerking will cause the bullet to strike the lower left section of the target. An attempt to correct flinching and jerking by tightening the large muscle in the heel of the hand may cause heeling. An improper trigger squeeze will cause more misses on the target than any other single step of preparatory marksmanship training.

You obtain a correct trigger squeeze by applying a uniformly increasing pressure on the trigger straight to the rear without disturbing the sight alignment until the pistol fires. The trigger slack, or free play, is taken up first, and the correct squeeze continues steadily until the hammer falls. If the trigger is squeezed properly, you will not know when the hammer will fall. This is the best way to prevent jerking, flinching, and heeling.

To help you squeeze the pistol trigger properly, use the acronym BRASS as you did with the rifle. You must also learn to call your shots. If you cannot call your shots

***Student Notes:***

correctly, you are not concentrating properly on sight alignment and trigger squeeze.

### REVIEW 5 QUESTIONS

Q1. When you have properly aligned your sights, what is the relationship between the front sight and the rear sight?

Q2. The distance between your eye and the rear sight is referred to as the _____.

Q3. Why is it sometimes necessary to blacken sights during sighting and aiming exercises?

Q4. List the three standard positions for shooting.

a.

b.

c

Q5. List the three sitting positions for shooting.

a.

b.

c.

Q6. What is the single most important factor in good marksmanship?

Q7. What does the acronym BRASS mean?

Q8. When sighting with a pistol, how should the top of the front sight align with the rear sight?

## SUMMARY

In this chapter, you have learned about various small arms used by the Navy. You may never have the occasion to use small arms; then again you may use them every day in your routine aboard a ship. It is imperative that when using small arms, you ALWAYS abide by all prescribed safety precautions. The use of safety equipment is also essential. Respect small arms, but don't be afraid of them. They can be your best source of personal defense in times of trouble if handled properly. All the small arms used by the U.S. Navy are manufactured to have a high degree of reliability if they are cared for and maintained properly. Proper maintenance could mean the difference between your small arm working properly or jamming at critical moments.

Take advantage of every opportunity you may have of going to a rifle or pistol range. The more familiar you become with small arms, the better you will be able to handle them safely. The more you shoot, the better you will become.

### REVIEW 1 ANSWERS

A1. When handling a firearm, you should never **carry the weapon by the muzzle**.

A2. The protective gear you should wear when firing a weapon includes—

a. **hearing protection and**

b. **safety goggles**.

***Student Notes:***

## REVIEW 2 ANSWERS

A1. The M-14 rifle is chambered to fire the **7.62-mm NATO cartridge**.

A2. Fully loaded, the M-14 weighs **11 pounds**.

A3. Identify the following rifle components as either M16A1 or M16A2:

| Component | Rifle |
|---|---|
| a. Has a lighter barrel because of the ammunition fired | **M16A1** |
| b. Rear sights are adjusted by means of a windage knob and elevation knob | **M16A2** |
| c. Has a semiautomatic or burst feature | **M16A2** |
| d. Fires a 5.56-mm round and a 62-grain round | **M16A1**<br>**M16A2** |

A4. The first step in cleaning the M16 rifle is to **point the selector lever toward SAFE**.

A5. The M16 rifle carries **20 or 30 rounds** of ammunition.

A6. When loading the M16 rifle, you shouldn't ride the charging handle forward because the **bolt may fail to lock.**

A7. When the selector is set for burst, the M16A2 fires **three rounds.**

A8. The conditions that must exist to consider the M16 rifle clear include—

a. **No case or rounds is/are in the chamber**

b. **The magazine is out**

c. **The bolt carrier is to the rear**

d. **The selector lever is on the SAFE position**

A9. The cleaning materials for the M16 are stored **in the rifle stock.**

## REVIEW 3 ANSWERS

A1. A .45-caliber pistol magazine will hold **seven cartridges.**

A2. The .45-caliber pistol was designed to be used as **an individual weapon for close use**.

A3. The three safety features of the 9mm service pistol are—

a. **Ambidextrous safety**

b. **Firing pin block**

c. **Half cock notch**

A4. When loading your pistol, you should make sure the safety is in the **down position**.

## REVIEW 4 ANSWER

A1. The shotgun has the advantage of being able to **expel anywhere from nine to hundreds of projectiles covering a wide area.**

## REVIEW 5 ANSWERS

A1. When you have properly aligned your sights, **the top of the front sight is level with the horizontal center line of the rear sight, and the body of the front sight is centered between the rear sight aperture.**

A2. The distance between your eye and the rear sight is referred to as ***eye relief***.

A3. At times, it's necessary to blacken sights during sighting and aiming exercises **to reduce reflection and glare.**

A4. The three standard positions for shooting are—

a. **Standing**

b. **Kneeling**

c. **Sitting**

A5. The three sitting positions for shooting are—

a. **Open leg**

b. **Cross leg**

c. **Cross ankle**

A6. The single most important factor in good marksmanship is **trigger control**.

A7. The acronym BRASS means **breath, relax, aim, slack, squeeze**.

A8. When sighting with a pistol, **the front sight is level with the top of the rear sight**.

# CHAPTER 12

# DAMAGE CONTROL

*…the events of 14-15 April 1988 have proven that solid damage control, good training, and sound leadership based on experience can save a ship that is on fire and sinking, to fight another day.*

—Paul X. Rinn, CAPT
CO, USS *Samuel B. Roberts* (FFG-58)

Damage control is the responsibility of ALL HANDS, from the commanding officer to the newest recruit. Without proper damage control training, your shipmates may be injured or killed, or perhaps your ship may sink. During World War II, many ships were saved because of the positive damage control practices.

For instance, the German battleship *Bismarck* was kept afloat and remained in a fighting status for an extended period in spite of the British pounding it with heavy gunfire. You can see that survivability through positive damage control is not only important for the United States, but on an international level.

Effective damage control (DC) requires the correct use of equipment and techniques to prevent or minimize the damage effects caused by battle, fire, collision, grounding, explosion, and so forth. DC also includes defensive measures used to reduce the effects of weapons of mass destruction, such as chemical, biological, and radiological (CBR) warfare. Remember, our Navy gives you the best damage control training in the world. As a ship's crew member, it's your responsibility to properly safeguard yourself and your ship. You learn how to do this through training.

You may feel the information in this chapter doesn't apply to you because of your chosen occupational field. Remember that as a Sailor, no matter what your rating, you may serve aboard ship at any point in your career. Therefore, as a crew member, you must know your damage control responsibility. For more in-depth information about the administration and organization of damage control, you should refer to the following manuals:

- *Surface Ship Survivability,* Naval Warfare Publication (NWP) 3-20.31
- *Naval Ship's Technical* Manual (*NSTM*), chapter 079, vol. 2, "Practical Damage Control"
- *Naval Ship's Technical* Manual (*NSTM*), chapter 555, vol. 1, "Surface Ship Firefighter"

Our Navy has a complete organization in place relating to damage control. This organization consists of the following two main parts:

1. The administrative organization, and
2. The battle organization.

## ADMINISTRATIVE ORGANIZATION

Learning Objectives: When you finish this chapter, you will be able to—

- Identify the chain of command within the damage control administrative organization.
- Recognize the functional purpose of each part of the organization and the interrelationships between the parts.

The damage control administrative organizational chain of command is shown in figure 12-1. As you can see, the responsibility for damage control begins with the commanding officer (CO) of a naval ship and runs to the most junior Sailor in the DC division and damage control petty officer community.

Look at figure 12-1. As you can see at the level of the ship's damage control assistant (DCA), other personnel report to the DCA. Each person has a different administrative responsibility and tasking. Each person reports back up the chain via the DCA.

### PURPOSE OF ADMINISTRATIVE ORGANIZATION

The administrative organization requires the efforts of all hands to establish and maintain material readiness conditions. Material readiness is

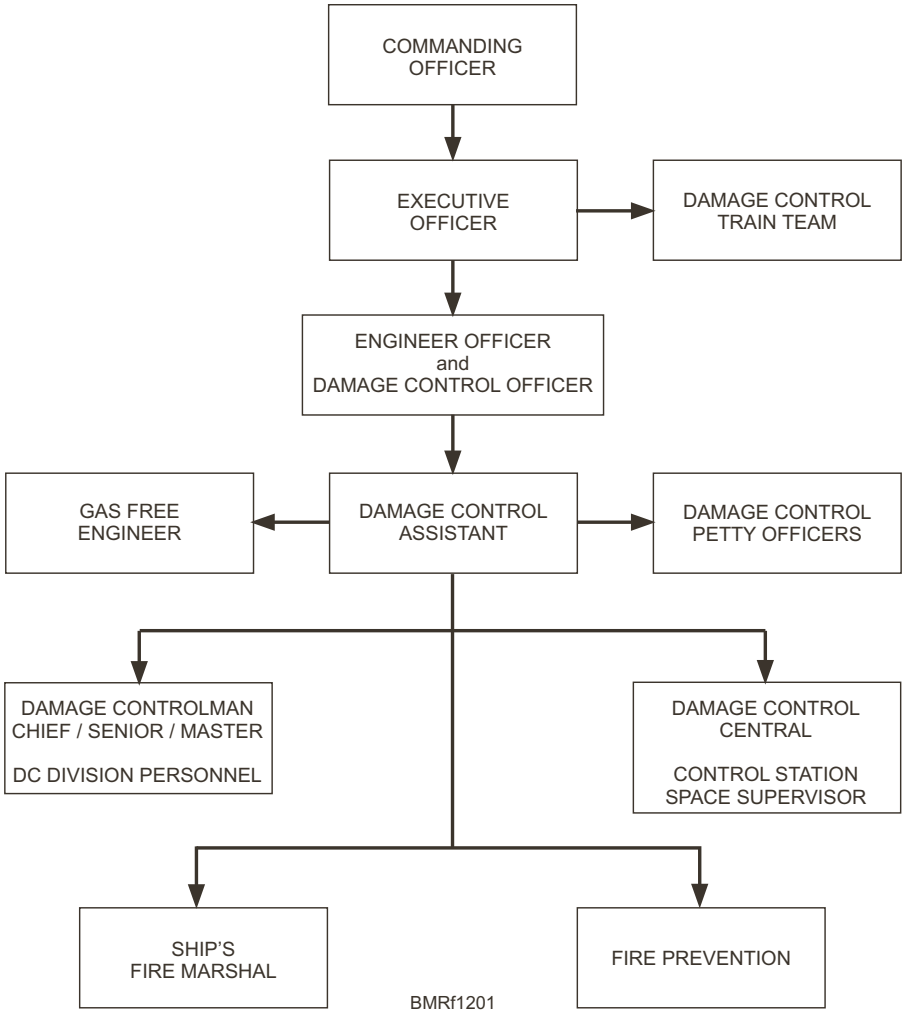



**Figure 12-1.—Administration organization chain of command.**

accomplished when DC fittings and equipment aboard ship are available and in proper working order to combat any emergency. Aboard ship, there is a damage control petty officer (DCPO) for each department or division. The DCPO makes sure that all emergency equipment and fittings are maintained and work properly. The DCPO also maintains the compartment checkoff list.

Each ship has a specified number of damage control lockers with a repair party assigned. Repair parties and repair locker personnel, along with the DCPOs, receive periodic training so they can perform their assigned duties. The engineer officer is responsible for maintaining properly trained DCPOs, repair parties, and repair locker personnel. Under the engineer officer, the DCA coordinates the efforts of the repair parties to control damage. Also, the DCA oversees all DC training. When properly maintained, the administrative organization reduces and confines any initial damage.

The survivability of a ship depends on the level of preparedness of its personnel. The condition of the equipment, shipboard systems, and the amount of training are factors that affect the ship's survivability. Ship's bills, records and schedules for maintenance, written doctrine, and procedures relating to damage control are all part of the administrative organization of damage control.

For the list of responsibilities for various ship's personnel, refer to OPNAVINST 3120.32, or ask your LPO or LCPO.

***Student Notes:***

## COMMANDING OFFICER

*United States Navy Regulations* states the various broad responsibilities of the commanding officer (CO). These regulations require the commanding officer to maintain his/her command in a state of maximum effectiveness for war. They also require that he/she repair as much damage as possible immediately after a battle or action.

To carry out this charge, the CO must ensure that the ship's officers and crew are trained and continually exercised in all aspects of survivability. The CO should be fully aware of the adequacy and operability of all survivability systems and equipment. Shortages and deficiencies must not be tolerated, and they should be immediately rectified (fixed) or reported as casualties in the ready reporting system.

## EXECUTIVE OFFICER

The executive officer (XO) keeps the command informed of the ship's survivability readiness. The XO carries out the requirements regarding the ship's survivability training, the readiness to manage casualties, and the readiness to control and recover from damage. As the team leader, the XO is the senior person assigned to the damage control training team (DCTT). The DCTT is responsible for all shipboard drills and exercises in the area of damage control.

## DAMAGE CONTROL TRAINING TEAM

Each ship has a DCTT. The DCTT trains the ship's DC organization in ship equipment, ship systems, and procedures and techniques relating to the ship's survivability. The DCTT is organized to train all types of DC-related exercises.

The DCTT evaluates and critiques the DC team's abilities as well as their own. The team is made up of a variety of ratings, which provides the ship with a wide range of experience. All team members are qualified, as a minimum, to at least the level of personnel they are training and/or evaluating.

## ENGINEER OFFICER

The engineer officer is designated as the ship's damage control officer. The ship's engineer officer fills the billet as the department head of the engineering department, and the DC division is one of the divisions in that department. The engineer officer has the following responsibilities:

- The operation, care, and maintenance of the main propulsion plant, auxiliary machinery, and piping systems
- The control of damage
- The operation and maintenance of electric power and distribution systems
- Repairs to the hull
- Repairs to material and equipment in other departments that require the attention of engineering department

Also the damage control officer (DCO), the engineer officer reviews all administrative items drafted by the DCA and DCA personnel. This is a primary administrative duty that occurs before items are routed to the CO for approval.

## DAMAGE CONTROL ASSISTANT (DCA)

The DCA is the primary assistant to the damage control officer in the areas of damage control; firefighting; and chemical, biological, and radiological defense. For the purpose of administrative organization, the DCA is in charge of many programs relating to damage control on the ship and monitors the effectiveness of other programs.

The DCA is responsible for the overall administration and training of the ship's DC organization. Under the guidance of the DCA, individual departments and divisions are responsible for administration and training as related to damage control for their personnel. All ships afloat must meet the minimum prescribed formal training requirements to include training for the following personnel:

***Student Notes:***

- All DCTT members
- In-port emergency teams (IETs)
- Rescue and assistance (R&A) detail
- Repair party personnel
- Damage control petty officer (DCPO) organization
- All hands

Shipboard training by the DCTT is scheduled, executed, and documented to meet the type commander's (TYCOM's) requirements. The DCA maintains records of all DC personnel qualification standards (PQS) accomplishment for all hands.

All ship's instructions relating to casualty prevention and response are either drafted by or drafted for and reviewed by the DCA. This review is made before seeking the approval and signature of the ship's CO. The DCA is the resident expert for the engineer officer and the command on instructions relating to casualty prevention and response. The DCA administers the following billets and programs: DCPO, gas free engineer (GFE), fire marshal and fire prevention, and the operation of damage control central (DCC) and supporting watches.

## DAMAGE CONTROL DIVISION

The damage control division is responsible for the damage control systems and equipment on board ship. The DCA is the senior member (division officer) of the DC division. As such, the DCA oversees all the paper work and the scheduling for maintenance of these systems and equipment.

### Damage Control Petty Officer (DCPO)

A petty officer, who has completed the PQS, is designated as the damage control petty officer (DCPO) based on TYCOM instructions. Each work center has a DCPO. Division officers nominate DCPOs for endorsement by the chain of command. The XO gives the final approval for the nomination, replacement, and rotation of all DCPOs. DCPOs normally serve for a period of 6 months; they check with the fire marshal and DCA when first assigned to or relieved from this duty. The DCPO is responsible for—

- Acquainting themselves with all phases of the ship's damage control, firefighting, and defense procedures
- Assisting with the instruction of division personnel in damage control
- Firefighting, egress, and CBR procedures
- Ensuring the preparation and maintenance of damage control checkoff lists for all spaces under their cognizance
- Supervising the setting of specified damage control material conditions within division spaces and making all required reports
- Weighing portable $CO_2$ bottles, inspecting and testing damage control and firefighting equipment, and preparing all required reports for approval of the division officer based on current ship's instructions and planned maintenance system (PMS) requirements
- 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 equipment are properly stenciled or identified by color codes based on *NSTM*, chapter 079, volume 2, and *General Specifications for Ships of the United States Navy*, NAVSEA S9QQO-AA-SPN-010/Gen-Spec, chapters 505, 507, and 602
- Ensuring the posting of safety precautions and operating instructions in required division spaces
- Assisting the division officer in inspection of division spaces for cleanliness and preservation and assisting in the preparation of required reports

***Student Notes:***

- Conducting daily inspections of division spaces for the elimination of fire hazards
- Performing any other actions in regard to damage control and maintenance of spaces that are directed by the division leading petty officer, division officer, fire marshall, DCA, and executive officer

**Gas Free Engineer (GFE)**

The gas free engineer (chief petty officer or above) decides when it's safe for personnel to enter closed or poorly ventilated spaces. The GFE makes sure that all necessary measures have been taken to eliminate the risk of fire, explosion, exposure to toxic substances, suffocation, or asphyxiation. The GFE has a working knowledge of all definitions, instruments, and equipment listed in the GFE program. The shipboard GFE meets the qualifications and is capable of performing the duties and responsibilities specified in *NSTM*, chapter 074, volume 3, "Gas Free Engineering." All Navy ships must be adequately staffed with personnel qualified to perform gas free engineering services for normal and emergency situations.

**Fire Marshal**

All ships designate a fire marshal to assist the engineer officer. The fire marshal helps the DCA train personnel to prevent and fight fires. The ship's fire marshal and duty fire marshals are qualified to ensure continuity of inspections for improperly stored or inoperative DC equipment. Fire marshals are free of duties that would not let them instantly respond to emergencies. The fire marshal conducts daily inspections throughout the ship, paying particular attention to the following areas:

- Housekeeping
- Firefighting equipment, both portable and fixed
- Safety precautions
- Flammable liquids
- Smoking
- Welding and burning
- Stowage of compressed gas
- Fume/spraytight light covers
- Grease filters/traps, Gaylord hoods
- Ventilation/air conditioning ducts/flammable stowage ventilation
- Material condition

The fire marshal has the following responsibilities:

- Submitting reports citing fire hazards and making recommendations for correction

**NOTE**

Immediate steps should be taken to eliminate hazards resulting from poor housekeeping, welding or burning, smoking, and equipment deficiencies. The fire marshal submits discrepancy reports to the DCA with copies to the XO and the appropriate department head(s) and conducts follow-up inspections to ensure compliance.

- Conducting training for fire teams, rescue and assistance teams, and departmental/divisional DCPOs stressing fire hazard consciousness
- Setting up a fire watch team before regular/interim overhauls or availabilities
- Training and assigning fire watches
- Being overall in charge at the fire scene until relieved by a general quarters (GQ) scene leader and keeping DCC and/or the OOD informed with an accurate status of the situation

***Student Notes:***

## REVIEW 1 QUESTIONS

Q1. The damage control organization is divided into what two main parts?

a.

b.

Q2. What is the purpose of the administrative phase of DC?

Q3. Who is responsible to maintain properly trained DCPOs, repair parties, and repair locker personnel?

Q4. Who is the senior person assigned as team leader on DCTT?

Q5. What person is responsible for making sure that all battle lanterns, dog wrenches, spanners, and other damage control equipment are in place and in a usable condition within their division?

Q6. Before anyone can enter a poorly ventilated space or void, who must certify the space as safe?

## BATTLE ORGANIZATION

**Learning Objectives**: When you finish this chapter, you will be able to—

- Recognize the battle organization of damage control parties.
- Recall the location and contents of shipboard damage control lockers.

The battle phase starts when the ship has received actual damage. The DCA coordinates the efforts of the repair parties from damage control central (DCC). These efforts may include fighting fires, flooding, controlling the ship's stability, and repairing battle damage. Repair party personnel also use CBR defense measures (CBR is covered in chapter 13).

### PURPOSE OF THE BATTLE ORGANIZATION

Once the ship has been damaged, the ship's damage control battle organization is responsible for restoring the ship to as near normal operation as possible. The organization varies somewhat from one ship to another, depending on the size, type, and mission of the ship. However, the same basic principles apply to all battle organizations.

The DCA is responsible, under the engineer officer, for the ship's survivability systems. The DCA's responsibilities include control of damage; control of stability, list, and trim; fighting fires; restoration from damage; medical casualty response; and CBR countermeasures. The battle station for the DCA is DCC. The primary damage control battle organization units are repair parties or teams. Battle dressing stations (satellite medical stations) should be located near the repair parties.

### DAMAGE CONTROL CENTRAL/CENTRAL CONTROL STATION

The primary purpose of damage control central (DCC) is to collect and compare reports from various repair stations to determine the ship's condition and the corrective action to be taken. DCC is the nerve center and directing force of the entire damage control organization. Personnel from various shipboard divisions man DCC. On newer class ships, the central point for reporting is the central control station (CCS). The CCS has the added capability of being able to control the closing of fire zone (FZ) doors and certain valves electronically. Also, CCS can remotely activate fire-fighting systems.

***Student Notes:***

Reports from the repair parties are carefully checked in DCC/CCS. This is done so that immediate action can be taken to isolate damaged systems and to make effective emergency repairs. As reports are received, graphic records of the damage are made on damage control diagrams and status boards under the direction of the DCA. For example, reports on flooding are used to update the status boards showing the liquid distribution (fuel and water) before the damage occurred. With this information, the stability and buoyancy of the ship can be estimated and necessary corrective measures taken.

In the unlikely event DCC/CCS is destroyed or is unable to retain control, a plan is in place to designate repair stations to take over the responsibilities of damage control central.

**REPAIR PARTIES**

The following chart shows a variety of repair lockers that are found on an aircraft carrier. All ships have a minimum of repair lockers 2, 3, and 5. Each locker has an officer or senior petty officer in charge. The makeup of each repair party in these lockers depends on the type of ship and the area they serve.

| Repair Locker | Location or Function |
|---|---|
| Repair 1 | Main deck repair |
| Repair 2 | Forward repair |
| Repair 3 | After repair |
| Repair 4 | Amidships repair |
| Repair 5 | Propulsion repair |
| Repair 6 | Ordnance |
| Repair 7 | Gallery deck and island structure |
| Repair 8 | Electronic casualty control |

**Repair Party Personnel**

For a repair party to control battle damage effectively, PQS-qualified personnel are assigned to specific functions and duties. Some personnel may have more than one assignment, depending on the number and qualifications of personnel available. Repair party personnel must know their own area of responsibility along with the areas of other repair parties. The following functions are common to all repair parties:

- Make repairs to electrical and communication circuits and rig casualty power.
- Give first aid and transport injured personnel to battle dressing stations without seriously reducing the party's damage control capabilities.
- Detect, identify, and measure radiation dose and dose rate intensities.
- Decontaminate the affected areas of nuclear, biological, and chemical attacks.
- Identify, control, and extinguish all types of fires.
- Control and remove flooding water.
- Evaluate and correctly report the extent of damage in the repair parties' area of responsibility, to include maintaining—
  - — Deck plans showing location of CBR contamination, location of battle dressing stations, casualty collection and decontamination stations, and safe routes to them.
  - — Graphic display boards showing damage and action taken to correct disrupted or damaged systems, using standard DC symbology and plotting techniques.
- Make emergency repairs to various piping systems.
- Be familiar with all damage control fittings in the assigned area, such as watertight doors, hatches, scuttles, ventilation systems, and various valves.
- Control and clean up hazardous material spills.

***Student Notes:***

### In-Port Emergency Team (IET)

In-port emergency teams are made up of duty section personnel. IET members are emergency team member qualified and stand ready to respond to any type of casualty.

At times, it may be necessary to provide additional personnel and material support to the IET. These additional personnel come from a pool of excess duty personnel and assemble at a designated location. They can assist in setting fire or flooding boundaries and are available to back up the primary IET, if needed.

### Rescue and Assistance (In Port/At Sea)

All ships are required to have a rescue and assistance detail in port and at sea. The primary missions of this detail are to rescue personnel at sea, assist another unit in distress, and assist persons or activities in distress ashore. All personnel assigned to the rescue and assistance detail must, as a minimum, be qualified as an emergency team member and in first aid.

### Rapid Response Team

When in port or under way, each ship has a designated rapid response team. This team proceeds directly to the scene when a fire or flooding is called away. The team attempts to quickly extinguish or contain the fire or minimize or stop a flooding. At a minimum, this team is made up of four personnel qualified as fire team members and the ship's fire marshal. Because immediate response is required, protective clothing or OBAs aren't donned. If they are unable to gain control of the casualty within a preset time frame, a full IET or GQ team relieves them and takes over.

### General Quarters (GQ)

General quarters is an all hands evolution. It is the highest state of readiness of the ship, and all repair lockers are manned and fully equipped to combat casualties. When responding to GQ, all hands adjust their clothing to battle dress and proceed to their GQ stations.

Battle dress—Bottom of pants tucked into boots or socks, long sleeves pulled down and buttoned, top button on shirt buttoned, and flash hood and gloves donned. All exposed skin covered.

GQ route—Move forward in passageways and up ladders on starboard side, move aft in passageways and down ladders on port side. Since all hands will be moving at the same time, you have to move with the flow of traffic.

## DAMAGE CONTROL LOCKERS

The equipment and materials required for making battle damage repairs vary according to the nature of the damage. Since many different kinds of damage can occur aboard ship, you must know how to use a variety of equipment and materials.

Checks should be made to see that all damage control equipment tools and materials on the allowance list are actually on board and in working order. Comparing the ship's allowance list with an accurate and up-to-date inventory of onboard damage control equipment does that.

Damage control equipment should be stowed or installed in its designated location and be readily accessible. Emergencies can be handled much more effectively if equipment is available than if you have to waste time looking for it.

Damage control equipment must not be used for any purpose other than damage control. Because damage control equipment is located throughout the ship, some people are tempted to use it merely because it is handy. That must not be allowed. It is important to make all hands realize their lives may literally depend on the ready availability of damage control equipment if an emergency should arise.

### REVIEW 2 QUESTIONS

Q1. When does the battle phase of damage control start?

***Student Notes:***

Q2. Where is the battle station for the DCA?

Q3. During GQ, DCC receives reports and casualty status from—

Q4. What is the minimum requirement to be a member of the in-port emergency team?

Q5. What are the primary missions of the rescue and assistance team?

Q6. What is the ship's highest state of readiness?

## COMMUNICATIONS

**Learning Objectives**: When you finish this chapter, you will be able to—

- Identify the communications devices used during damage control evolutions.
- Recognize the purpose of communications devices used during damage control evolutions.

Communications are vital to the damage control organization. Without good communications, the entire organization could break down and fail in its primary mission. The size and complexity of the surface ships govern the design of DC communications systems found aboard ship. Major shipboard DC communications systems are as follows:

**NOTE**

All the systems listed below are explained in detail in chapter 4 of this TRAMAN.

- Sound-powered telephones
- IVCS
- Ship's service telephones
- Announcing systems
- Intercommunications systems
- DC WIFCOM

### EMERGENCY COMMUNICATIONS

The X40J is an emergency damage control communication system. It's employed in the event of primary, auxiliary, and supplementary communications circuit failure. The X40J is composed of both portable ("salt and pepper" line) and permanently installed (risers) components.

### ALARMS

The general announcing system (1MC) is integrated with a system of alarm signals. The signals override the microphone control stations and are intended to notify the ship's crew of imminent danger. These alarms, in order of priority, are as follows:

1. Collision
2. Chemical attack
3. General
4. Flight crash

#### Collision Alarm

The OOD/conning station sounds this alarm signal when there is a possibility that the ship will run into a pier, run aground, or another waterborne unit will strike the ship. All hands should move away from the area of impact and brace for shock. After a collision, all hands set material condition ZEBRA and are prepared to control fires and flooding.

#### Chemical Attack Alarm

The chemical attack alarm signal is sounded by the OOD/conning station, DCC, and automatically by the chemical agent point detection system (CAPDS) on

***Student Notes:***

ships so equipped. This alarm is sounded when there has been a CBR attack on or in the vicinity of the ship. All hands must exercise protective measures and procedures to reduce exposure and personnel injuries.

### General Alarm

The general alarm signal is sounded by the OOD to notify the crew of a battle condition (GQ). Immediately after the alarm is sounded, some ships pass the word, "General quarters, general quarters, all hands man their battle stations." All hands report to preassigned stations following the correct GQ traffic routes and set material condition ZEBRA.

### Flight Crash Alarm

The flight crash alarm is sounded by the OOD or PreFly to notify ship's company of a pending or actual flight deck emergency.

## MESSENGERS

Messengers are used to deliver written messages between repair lockers and DCC as a matter of record. If all methods of communications have failed, messengers are used to relay orders and information. Messengers deliver messages between repair lockers and DCC, between DCC and the bridge, or between other locations. Messengers should be familiar with the ship to get from one place to the other without delay. Messengers must be able to deliver oral messages without error.

### REVIEW 3 QUESTIONS

Q1. The X40J circuit is commonly referred to as what kind of line?

Q2. List the names of the alarms that can override the microphone control of the 1MC.

a.

b.

c.

d.

Q3. When all communications systems fail, how are messages and orders relayed between repair lockers and DCC?

## SHIP'S INTEGRITY THROUGH SUBDIVISION

**Learning Objective**: When you finish this chapter, you will be able to—

- Identify material conditions of readiness and recognize their purpose.

Naval ships are subdivided into many small watertight rooms or as we say *watertight compartments*. This breaking up process of a very large area is called the "compartmentation process." It limits the spread of toxic or noxious gases, fire and flooding, and other battle damage when it occurs. This system when combined with material conditions of readiness (discussed below) increases a ship's ability to survive.

Each space or compartment on a ship is accessed through a door to a new space or passageway connecting other spaces on the same deck or to the weather deck area (outside). The space may have a hatch or scuttle that allows transit from one deck to another via a ladder. In some spaces you may have many doors, hatches, and scuttles. These accesses are either watertight, airtight, fumetight, oiltight, or nontight by design.

Piping and ventilation systems work on the same concept as compartment access fittings. They have valves at strategic points that will isolate sections of a system, limiting the spread of damage to smaller areas. Because of all the fittings and closures that are on a ship, you might be asking yourself the question, "How will I know which ones to close or leave open and when to do it?" Those answers are covered in the paragraphs to follow.

***Student Notes:***

## MATERIAL CONDITIONS OF READINESS

There are three material conditions of readiness. Those conditions are named XRAY, YOKE, and ZEBRA. When set, each condition affords the ship with a level of protection, with XRAY being the least and ZEBRA the most. Some fittings or closures on a ship may not be classified although the majority of them are classified. They are identified by a classification plate affixed to the closure or fitting, or sometimes the classification is painted on the bulkhead next to the item. Ship's instructions (and Navy instructions) specify what type of classification an item should hold, how it will be marked, and when that condition should be set. The commanding officer of the ship is authorized by instruction to alter this to a small extent if he/she desires but basically this system is standard Navywide.

**XRAY**. Provides the least watertight integrity and the greatest ease of access throughout the ship. It is set when the threat to the ship is minimal. Condition XRAY is set during working hours when the ship is in port, when there is no danger of attack, and when there is no threat from bad weather. All fittings marked with a black X and circle X are closed when condition XRAY is set.

**YOKE**. Provides a greater degree of watertight integrity than condition XRAY but to a lesser degree than the maximum condition. YOKE is normally set at sea and in port during wartime. All fittings marked with Xs and Ys, Circle X, and Circle Y are closed when condition YOKE is set.

**ZEBRA**. Provides the greatest degree of subdivision and watertight integrity to the ship. It is the maximum state of readiness for the ship's survivability system. Condition ZEBRA is set when the following situations occur:

1. Immediately when GQ is sounded
2. When entering or leaving port in wartime
3. To localize damage and control fire and flooding when the crew is not at GQ
4. At any time the CO deems the maximum condition of survivability should be set

All fittings marked with X or Y, Circle X, Circle Y, Z, Circle Z, and DOG Zs are closed when condition ZEBRA is set.

The setting of material conditions is normally carried out by the division or department responsible for the compartment and is accomplished by using the compartment checkoff lists (CCOLs). In an emergency the repair party personnel responding to the casualty assisted by those Sailors in the area will set the required condition to restrict the spread of damage. CCOLs are a tool used by repair party personnel to find the damage control fittings and closures in each compartment. The fittings and closures are identified by name (type) and a number that represent the location of the fitting by deck, the frame it is located at, and the side of the space similar to the compartment identification process. The CCOL list is posted in each space near the entrance and should be kept up to date by the division who owns the space. An example of a CCOL is shown in (fig. 12-2).

The normal setting of a material condition should be logged in the Damage Control Closure Log by each division or repair party completing the setting. Any exceptions to the setting should also be noted in the log so DCC/OOD are aware of the reduction in the ship's ability to restrict the spread of potential damage. This log and the Inoperative Fitting Log are maintained in either DCC or on the quarterdeck by the OOD. If you have a need to break (open) a fitting that should be normally set in a specific condition, you must first request it open and then log it in before opening the fitting. If you don't do this, you are in violation of the setting and have jeopardized your shipmate's survival. When you have completed work in a space that you needed a fitting/closure open, close it first, then log it closed. Now those who maintain the log will have a clear picture of what is open and closed in a given area of the ship. In addition to the closure log, a log for inoperative fittings and closures exists. As its name implies, this log lists all DC-related fittings and closures on the ship that don't work properly. It becomes a tracking tool for future maintenance.

A modified condition YOKE or modified condition ZEBRA is sometimes set, rather than the normal setting of XRAY, YOKE, or ZEBRA. These are settings of convenience at the discretion of the CO.

***Student Notes:***

**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 | 2-129-3 | Access to: 2-120-1-L | X | REPIII |
| 3 | WT HATCH | 2-108-1 | Access to: 3-108-1-L | X | S |
| | MISCELLANEOUS CLOSURES | | | | |
| 4 | ATC | 2-108-1 | In WITH 2-108-1 used to test: 3-108-1-L<br>3-103-3-A<br>3-115-1-A | X | E |
| 5 | ATC | 2-108-1 | In WTD 2-108-1 used to test: 2-95-1-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 1 MC | | |
| 14 | C.P. Riser Terminal | 2-114-1 | Casualty Power Outlet | | |
| 15 | 15 lb $CO_2$ | 2-119-1 | Portable fire extinguisher | | |
| 16 | One OBA | | In box at Fr. 110 stbd. | | |

**Figure 12-2.—Compartment checkoff list.**

## *Student Notes:*

A modified YOKE is sometimes used at sea when cruising independently in good weather and calm seas and in port in peacetime. In the modified condition, YOKE fi+ttings above the waterline are left open to improve ventilation and habitability. All other XRAY and YOKE fittings shipwide will be closed unless logged on a case-by-case basis as discussed earlier.

An alternative to the setting of ZEBRA shipwide is the setting of modified ZEBRA. An example of the setting of modified ZEBRA would be setting Zebra on the DC deck and below only if the area the ship was transiting was a known or suspected hazardous navigational area. This would provide a higher survivability stance than condition YOKE. At the same time modified ZEBRA is less restrictive in the rest of the ship and will more readily allow the accomplishment of other operational requirements. Modified ZEBRA may result as an upgrade from condition YOKE or as a downgrade from condition ZEBRA.

## SPECIAL CLASSIFICATIONS

**Circle XRAY and YOKE**. These fittings are access fittings to battle stations and compartments containing equipment that require periodic checks or fittings that must be opened for ammunition transfer, as well as some systems.

Circle XRAY and YOKE fittings are normally closed when condition XRAY or YOKE are set. They may be opened without special authority when going to or securing from general quarters, transferring ammunition, during periodic space or equipment checks, or during operation of damage control equipment. Circle XRAY and YOKE fittings are marked with a black X or Y in a black circle. They should be secured once passage is complete.

**Circle ZEBRA**. These fittings are closed when condition ZEBRA is set. They may be opened with the permission of the CO only. This would be during extended periods of general quarters for the preparation and distribution of battle messing, to provide access to sanitary facilities, to ventilate battle stations, to transit from squadron ready rooms to the flight deck, and to allow limited access throughout the ship as the CO prescribes.

Open Circle ZEBRA fittings must be guarded so they can be closed immediately because the ship is still in a battle station position when ZEBRA is set. Circle ZEBRA fittings are marked with a red Z surrounded by a red circle.

**DOG ZEBRA**. These fittings are secured when condition ZEBRA is set and whenever the ship is set for "darken ship," which is a night steaming condition, not a material condition. During darken ship these fittings and closures are closed to prevent light inside showing to the outside. DOG ZEBRA fittings are marked with a red Z surrounded by a black letter D.

**NOTE**

Darken ship is a night steaming condition, not a material condition.

**WILLIAM**. These fittings are vital sea suctions, ventilation fittings valves serving vital equipment, and valves that must be open to maintain mobility and fire protection. WILLIAM fittings are open during all material conditions. They are secured only to control damage, contamination, or to repair equipment served. WILLIAM fittings are marked with a black colored letter W.

**Circle WILLIAM.** These fittings, like WILLIAM fittings, are normally open but are secured for protection in CBR attack. Fittings that are marked with this classification are those that provide ventilation opening to the outside of the ship. Circle WILLIAM fittings are marked with a black W surrounded by a black circle.

## REVIEW 4 QUESTIONS

Q1. What is the most important feature of a ship to ensure its survivability?

***Student Notes:***

Q2. List the three basic material conditions of readiness.

a.

b.

c.

Q3. What material condition provides the least amount of watertightness?

Q4. When is YOKE normally set?

Q5. What material condition is set when GQ is sounded?

Q6. What fittings are closed to set darken ship?

Q7. To find a list of all DC fittings within a compartment, you should refer to—

## LIFE SUPPORT EQUIPMENT

**Learning Objective**: When you finish this chapter, you will be able to—

- Identify life support equipment used aboard ship.

All life support devices discussed in this chapter are designed to allow the wearers to breath (and thereby to escape), continue work, and assist in saving the ship and their fellow crew members. Remember that the crew must save the ship or no one will be saved. Therefore, the purpose of this section of the chapter is to provide you with information on the emergency escape breathing device (EEBD), supplemental emergency egress device (SEED), oxygen breathing apparatus (OBA), and self-contained breathing apparatus (SCBA).

### EMERGENCY ESCAPE BREATHING DEVICE (EEBD)

Studies of fire casualties have proven that most casualties are the result of smoke and toxic fumes and not from the fire itself. For this reason, the EEBD (fig. 12-3) was developed for emergency escape. It provides the wearer with 15 minutes of breathable air. It is to be worn until you can get topside during evacuation from below deck spaces. The EEBD is designed to provide respiratory and eye protection in an atmosphere that will not support life. With the proper training you should be able to activate and don an EEBD in less than 30 seconds.

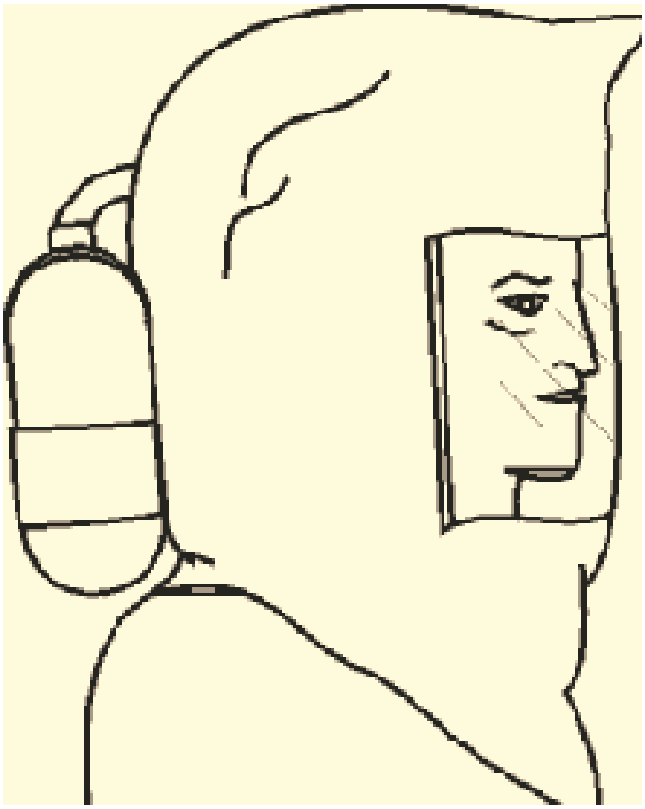


**Figure 12-3. —emergency escape breathing device (EEBD)**

***Student Notes:***

**WARNING**

EEBDs must not be used for firefighting purposes.

**WARNING**

Remember, when donning the EEBD, if you don't hear the hissing sound of oxygen being generated, discard the unit and get another.

**DANGER**

Don't smoke immediately after using the EEBD because your hair is saturated with oxygen and could catch on fire.

## SUPPLEMENTAL EMERGENCY EGRESS DEVICE (SEED)

Personnel working in engineering spaces wear supplemental emergency egress devices (SEEDs) on their belts for easy access. When a main space fire is called away, the watch stander should use the SEED (fig. 12-4) to proceed to an EEBD. The watch stander should obtain an EEBD and don it when not in danger of immediate harm from heat or flames. Because the SEED lacks protection for the eyes and nose and has a short operational time, it is a supplemental device. However, it is immediately available for the engineering watch standers and is easily operated on the run. Factors to consider when using these devices include the following:

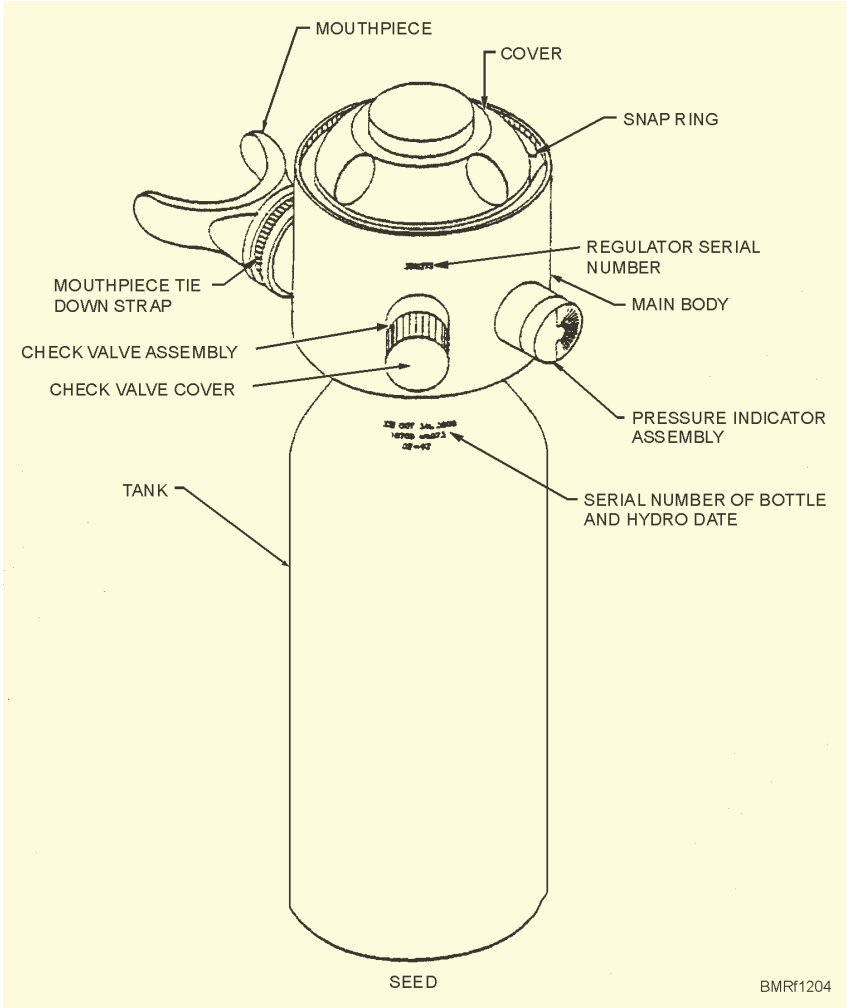



**Figure 12-4.—Supplemental emergency egress device (SEED).**

***Student Notes:***

- How quickly conditions are deteriorating
- Ease of egress, including travel time to a breathable atmosphere
- Operating times for each device
- Capabilities and limitations of each device

**WARNING**

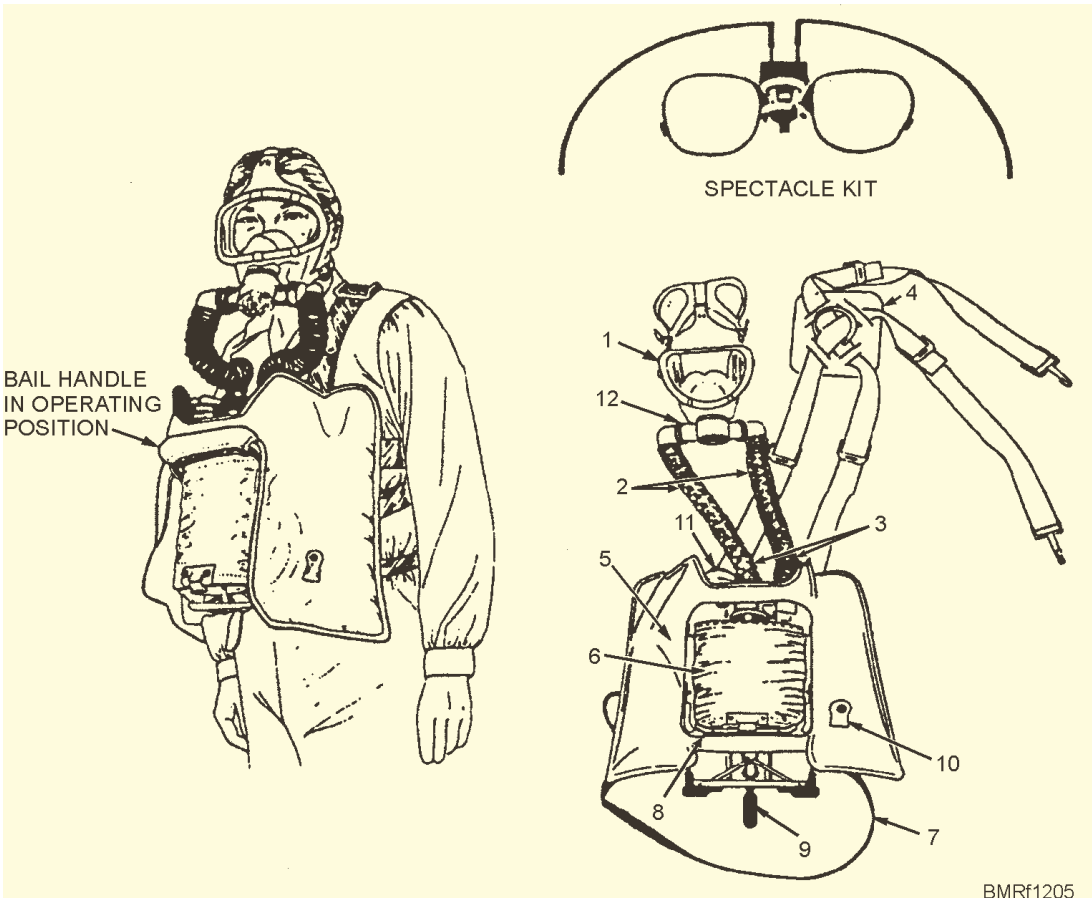
Don't breath through the nose—breath only through the mouth when using the SEED.

**WARNING**

SEEDs must not be used for firefighting purposes.

## OXYGEN BREATHING APPARATUS (OBA)

The oxygen breathing apparatus (OBA) (fig. 12-5) is a self-contained device that generates oxygen through a chemical process and lets the wearer breathe independently of the surrounding atmosphere. Currently, the OBA is the primary tool used by firefighting teams for respiratory protection. The effective time limit of the oxygen supply is in excess of




1. **Facepiece**
2. **Breathing tubes**
3. **Breathing tube couplings**
4. **Body harness and pad**
5. **Breathing bag**
6. **Breastplate**
7. **Waist strap**
8. **Bail assembly handle (standby position)**
9. **Canister release strap**
10. **Pressure relief valve and pull tab timer**
11. **Timer**
12. **Valve housing**

**Figure 12-5.—Navy oxygen breathing apparatus (OBA).**

***Student Notes:***

45 minutes. For your personnel protection you should set the timer on the OBA for 30 minutes, allowing 15 minutes to leave the area and return to fresh air.

When in operation, the air within the apparatus is continuously replenished with oxygen while the chemicals in the canister remove exhaled carbon dioxide ($CO_2$) and water vapor. As a result of this chemical action, the OBA wearer may survive and work in a toxic atmosphere, such as a smoke-filled compartment. With the facepiece and canister in place, using the OBA forms a closed self-sustaining system. For personnel having eyeglasses, a spectacle kit is available for the installation of prescription lenses in the facepiece.

**WARNING**

When removing the candle cover, do not remove the cotter pin while pulling the lanyard. Removal of the cotter pin fires the candle and starts generating oxygen. If that happens while the copper foil is intact, internal pressure in the canister will build up, causing the copper foil or canister seam to rupture. Do not pull the cotter pin until the canister is inserted in the OBA and the bail assembly is up and locked.

**CAUTION**

Do not pull the breathing bag tab during normal use because the oxygen in the bags will leak into the atmosphere, causing loss of your breathing oxygen.

**WARNING**

Never allow grease, oil, or water to enter the neck of the canister. Any of these liquids may cause a violent chemical reaction or explosion. The chemicals contained in the canister are injurious to skin and equipment.

## SELF-CONTAINED BREATHING APPARATUS (SCBA)

The self-contained breathing apparatus (SCBA) (fig. 12-6) is replacing the OBA throughout the Navy. The unit's main components consist of a harness, high-pressure bottle, pressure regulator, full-face mask, and the high- and low-pressure hoses as shown below High-pressure air cylinders are filled with compressed grade D breathing air and then stored until needed. The cylinders themselves are rechargeable, replacing the need for additional canisters in the OBA system.

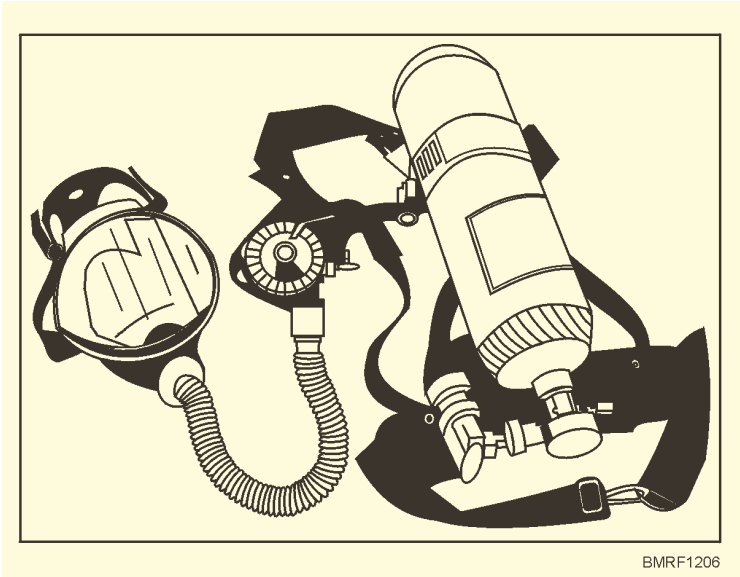



**Figure 12-6.—Self-contained breathing apparatus (SCBA).**

***Student Notes:***

Once the cylinder valve has been turned on, it provides a continuous air supply to the system regulator via the high-pressure hose. The pressure is reduced by the regulator for use by the wearer, and the low-pressure hose carries the breathable air into the facepiece. As a safety feature, these are positive pressure style regulators, which means that the air supply to the mask is just above any demand requirements eliminating any possibility of toxic fumes from entering the wearer's mask.

The time each cylinder lasts will be determined by a number of factors. The main factors will be the physical condition and size of the wearer and the work to be done. Generally, each bottle will last approximately 30 minutes from the time it is activated.

### REVIEW 5 QUESTIONS

Q1. How many minutes of air is the EEBD designed to provide?

Q2. Why should you stay away from open flames when you first remove an EEBD?

Q3. What should you listen for when donning an EEBD?

Q4. What device is worn by engineering watch standers?

Q5. What is the effective time of an OBA?

Q6. When do you pull the cotter pin on an OBA canister?

## FIREFIGHTING

**Learning Objectives**: When you finish this chapter, you will be able to—

- Recognize the properties of a fire triangle and fire tetrahedron.
- Identify the conditions necessary for spontaneous combustion.
- Identify the types of heat transfer.

Fire is a constant threat aboard ship. All possible measures must be taken to prevent a fire, or if one is started, to extinguish it quickly. Fires may start from several causes—spontaneous combustion, carelessness, hits by enemy shells, or collision. If the fire is not controlled quickly, it may cause more damage than the initial casualty and could cause the loss of the ship.

### FIRE AND FIREFIGHTING

You cannot win against a fire. You can fight the fire and you can hold down its damage; but some property will be destroyed and, all too often, people will be injured or killed. Time is always lost, productive work is stopped, and additional effort and materials are required to make repairs and to clean up the mess.

The objective of fire prevention, therefore, is to prevent fires from starting. Fire prevention is an all-hands, all-day, all-night, heads-up effort. A cigarette tossed in the wrong direction can cause as much damage as an enemy bomb. An oily wiping rag or a sparking tool can be as dangerous as an open flame in a gasoline depot.

Each ship is required to institute and maintain a fire prevention program. Your part in the fire prevention program is as follows:

- Ensure that all gear is stowed properly.

***Student Notes:***

- Practice good housekeeping procedures, such as the daily removal of trash from spaces.
- Practice safety precautions when working with flammable materials.
- Report all potential fire hazards.
- Keep firefighting equipment handy and in good working order.
- Ensure closures and fittings are working properly and report any discrepancies.

## FIRE TRIANGLE

The entire chemistry and physics of fire and burning, or combustion, can be simplified into a relationship between three components—fuel, heat (temperature), and oxygen (air). To have a fire in any combustible substance, each one of these components must be present to help each other. Picture these components in the form of a triangle, as shown in figure 12-7.

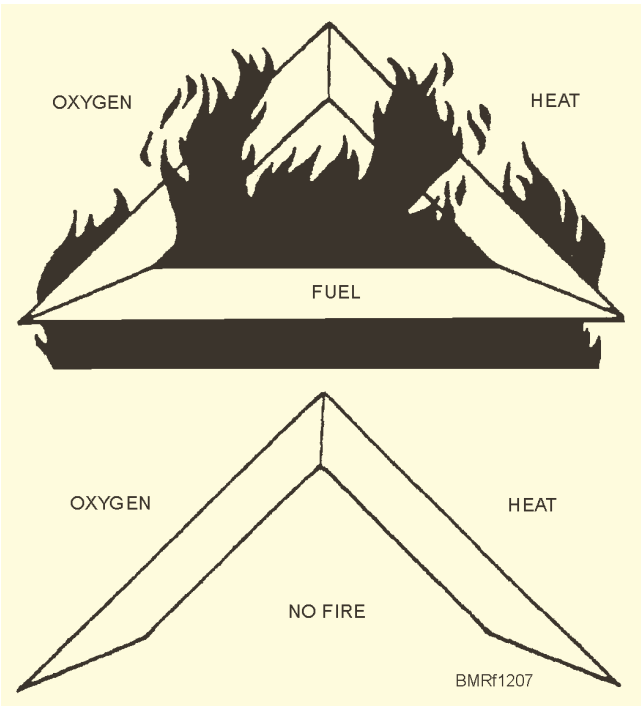



**Figure 12-7.—Requirements for combustion.**

Look at figure 12-7. Here, you can see that if the oxygen reacts with the fuel, it creates heat, which causes a draft or some other condition that takes in more oxygen and creates still more heat, and so on. Or the heat may cause more fuel to become available (such as causing gasoline to boil into vapor), which then takes more oxygen to burn and creates more heat, which then produces still more fuel, and so on. The burning reaction can go in many different directions.

The modern science of firefighting and fire extinguishment is based on the sides of the fire triangle and an uninhibited chain reaction of burning. Obviously, the firefighter can remove one or more of the components to cause the burning to stop. The type of firefighting agent the firefighter has at hand determines which component or components of the triangle will be removed.

Another way the firefighter can stop the fire (and the combustion) is to place a screen between any two components of the triangle. If the fighter uses an agent as a temporary screen that breaks the triangle, the fire goes out. Obviously, the fire can quickly start up again if this method is used because each of the three necessary components is still there waiting to start the fire again once the screen is gone.

## FIRE TETRAHEDRON

The fire triangle describes the requirements for surface glowing or smoldering, but it doesn't completely describe flaming combustion requirements. A fourth requirement, an uninhibited chain reaction, is needed for flames to exist. This is shown by the fire tetrahedron (fig. 12-8). A tetrahedron is a solid figure with four triangular faces. It is useful for illustrating the flaming combustion process because it provides for the chemical chain reaction requirement and each face touches the other three sides. As described for the fire triangle, flaming combustion stops when one of the four sides of the fire tetrahedron is removed.

## SPONTANEOUS COMBUSTION

Fire, also called *burning* or *combustion*, is a rapid chemical reaction that results in the release of energy in the form of light and heat. Most spontaneous combustion involves very rapid oxidation; that is, the

***Student Notes:***

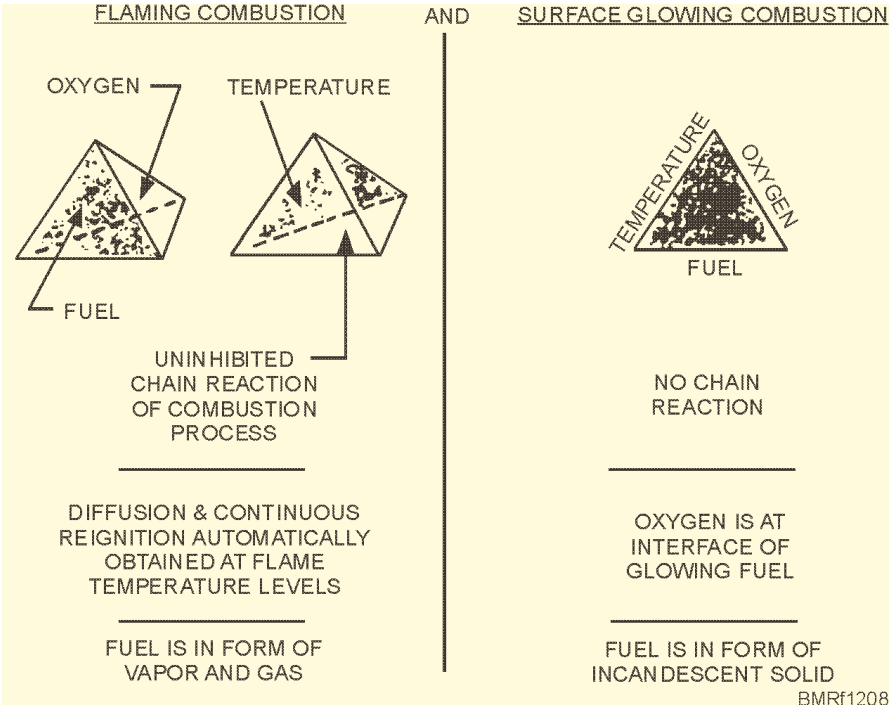



**Figure 12-8.—Tetrahedron and fire triangle.**

chemical reaction by which oxygen combines chemically with the burning material.

Such things as rags or paper soaked with oil or with paints or solvents are particularly subject to spontaneous combustion if they are stowed in confined spaces where the heat caused by oxidation cannot be dissipated rapidly enough.

A fire involving combustible fuel or other material must have an ignition source, and the material must be hot enough to burn. The lowest temperature at which a flammable material gives off vapors that will burn when a flame or spark is applied is called the *flash point*. The *fire point*, which is usually a few degrees higher than the flash point, is the temperature at which the fuel will continue to burn after it has been ignited. The *ignition* or *self-ignition point* is the lowest temperature to which a material must be heated to give off vapors that will burn without the aid of a spark or flame. In other words, the ignition point is the temperature at which spontaneous combustion occurs. The ignition point is usually at a much higher temperature than the fire point.

## METHODS OF HEAT TRANSFER

Heat from a fire is transferred by one or more of the following methods:

1. Conduction
2. Convection
3. Radiation

### Conduction

Conduction is the transfer of heat through a body or from one body to another by direct physical contact. For example, on a hot stove, heat is conducted through the pot to its contents. Wood is ordinarily a poor conductor of heat, but metals are good conductors. Since most ships are constructed of metal, heat transfer by conduction is a potential hazard. Fire can move from one fire zone to another, one deck to another, and one compartment to another by heat conduction.

Often, the skillful application of water, using fog patterns to rapidly coat and recoat surfaces with a film of water, will slow or halt the transmission of heat by conduction. Fog patterns coat surfaces more efficiently

***Student Notes:***

than solid streams, reducing run off and the effect on ship stability.

**Convection**

Convection is the transfer of heat through the motion of circulating gases or liquids. Heat is transferred by convection through the motion of smoke, hot air, and heated gases produced by a fire.

When heat is confined (as within a ship), convected heat moves in predictable patterns. The fire produces lighter than air gases that rise toward high parts of the ship. Heated air, which is lighter than cooler air, also rises. As these heated combustion products rise, cool air takes their place; the cool air is heated, in turn, and then rises to the highest point it can reach.

Hot smoke originating at a fire on a low deck will travel horizontally along passageways, and then upward by way of ladder and hatch openings, heating flammable materials in its path. To prevent fire spread, release the heat, smoke, and gases to the atmosphere. However, the structural design of a ship makes it difficult to rapidly cut openings through decks, bulkheads, or the ship's hull for ventilation. It is imperative that the fire be confined to the smallest possible area. Doors and hatchways should be kept closed when they are not in use. If a fire is discovered, attempts should be made to close off all openings to the fire area until firefighting personnel and equipment can be brought into position to fight the fire.

**Radiation**

Heat radiation is the transfer of heat from a source across an intervening space; no material substance is involved. The heat travels outward from the fire in the same manner as light; that is, in straight lines. When it contacts a body, it's absorbed, reflected, or transmitted. Absorbed heat increases the temperature of the absorbing body. For example, radiant heat that is absorbed by an overhead will increase the temperature of that overhead, perhaps enough to ignite its paint.

Heat radiates in all directions unless it's blocked. Radiant heat extends fire by heating combustible substances in its path, causing them to produce vapors, then igniting the vapor.

Within a ship, radiant heat raises the temperature of combustible materials near the fire and, depending on the ship's design, at quite some distance from the fire. Ship fires can spread as a result of radiating bulkheads and decks. Intense radiated heat can make an approach to the fire extremely difficult. For this reason, protective clothing should be worn by firefighters.

**REVIEW 6 QUESTIONS**

Q1. Fire prevention is the responsibility of—

Q2. List the three components that make up a fire.

a.

b.

c.

Q3. What process is involved in most cases of spontaneous combustion?

Q4. List the three methods of heat transfer.

a.

b.

c.

**CLASSES OF FIRE**

**Learning Objective**: When you finish this chapter, you will be able to—

- Recognize the four classifications of fire and identify the means used to extinguish them.

Fires are divided into four classifications, each indicating the type of material burning. By knowing the

***Student Notes:***

| CLASSES OF FIRE | TYPES OF MATERIALS INVOLVED | METHOD(S) OF EXTINGUISHING |
|---|---|---|
| A | Wood and wood products, cloth, textiles and fibrous materials, and paper and paper products. | Water in straight or fog pattern. If the fire is deep-seated, aqueous film forming foam (AFFF) is more effective than seawater and can be used as a wetting agent. |
| B | Flammable liquids, such as gasoline, diesel fuel (F-76), jet fuels, hydraulic fluid, and lube oil. Also, involves flammable gases. | Extinguished with AFFF, Halon 1211, Halon 1301, or potassium bicarbonate (PKP). Never extinguish flammable gases unless there is a good chance that the flow of gas can be secured. **Securing the flow of gas is the single most important step in controlling a gas fire**. |
| C | Energized electrical fires. | Use nonconductive agents, such as $CO_2$, Halon 1211, or water spray. Most effective tactic is to de-energize and handle the fire as a class A fire. If fire isn't deep-seated, clean agents that don't a cleanup problem are preferred ($CO_2$ or Halon 1211). |
| D | Combustible metals, such as magnesium and titanium. | Water in quantity, using fog patterns. When water is applied to burning class D materials, explosions may occur. Apply water from a safe distance or from behind shelter. |

**Figure 12-9.—Classes of fire.**

class of fire, the primary agent and best method for extinguishing the fire can be determined as shown in figure 12-9.

Many substances, such as liquids, gases, and solids, are used as firefighting agents. The selection and use of these agents varies with the class of fire, its location, and the extent of the fire involvement. Although seawater is the most valuable firefighting agent available based on its endless supply, considerations should always be taken to determine if water is the best agent to put out the type of fire being fought.

## REVIEW 7 QUESTIONS

Q1. Match the class of fire with the types of materials involved.

| MATERIALS | CLASSES OF FIRE |
|---|---|
| a. Hydraulic fluid | A |
| b. Energized circuit board | B |
| c. Paper | C |
| d. Gasoline | D |
| e. Magnesium | |
| f. Cloth | |
| g. Titanium | |

***Student Notes:***

Q2. What is the most available heat-removing agent for shipboard use?

Q3. AFFF was developed to combat what class of fire?

Q4. $CO_2$ is the primary agent to disrupt the fire triangle of what class fire?

Q5. What is an effective agent against a class D fire?

## DAMAGE CONTROL EQUIPMENT

**Learning Objective:** When you finish this chapter, you will be able to—

- Identify the portable equipment and fixed systems that make up the shipboard inventory of protection equipment.

As you've learned in this chapter, damage control is an all hands job. The time it takes to get a fire or flooding under control is vital. You should become familiar with the portable equipment and fixed systems that make up your ship inventory of protection equipment. Because of the large amount of explosives, fuels, and other flammable materials aboard ship, you must know where equipment is located and how to use it before an emergency exists.

Knowing where equipment is and how to use it applies not only to firefighting equipment but also the equipment used for flooding or CBR protection. The equipment and its storage location varies from ship to ship, so you must know your ship.

You may find yourself the first person on the scene, so knowing the basic rules of damage control and equipment usage may make the difference in the loss of many spaces or a shipmate's life. Perhaps you will be called to serve on a fire party or flooding detail. As a team member, keep in mind, the lack of equipment and procedures could result in a disastrous outcome.

Figures 12-10 through 12-15 show some examples of the equipment that's common to all ships. These figures show only a small amount of what you'll find in a ship's repair locker.

### THE FIREFIGHTER ENSEMBLE

The firefighter's ensemble (fig. 12-10) is used to protect the firefighter from short duration flame (flash) exposure, heat, and falling debris.

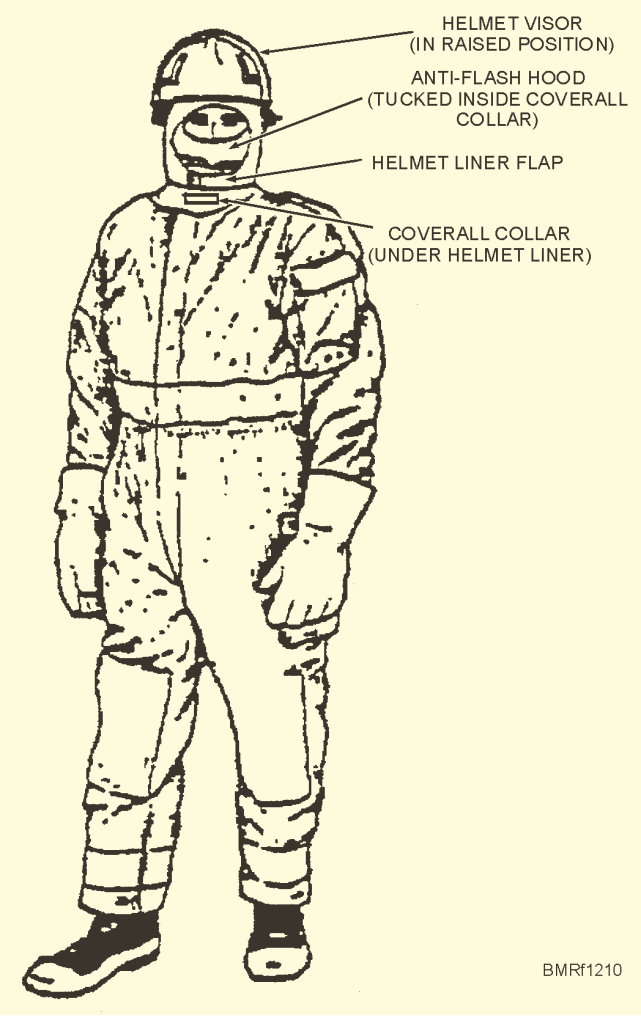



**Figure 12-10.—Firefighter's ensemble.**

***Student Notes:***

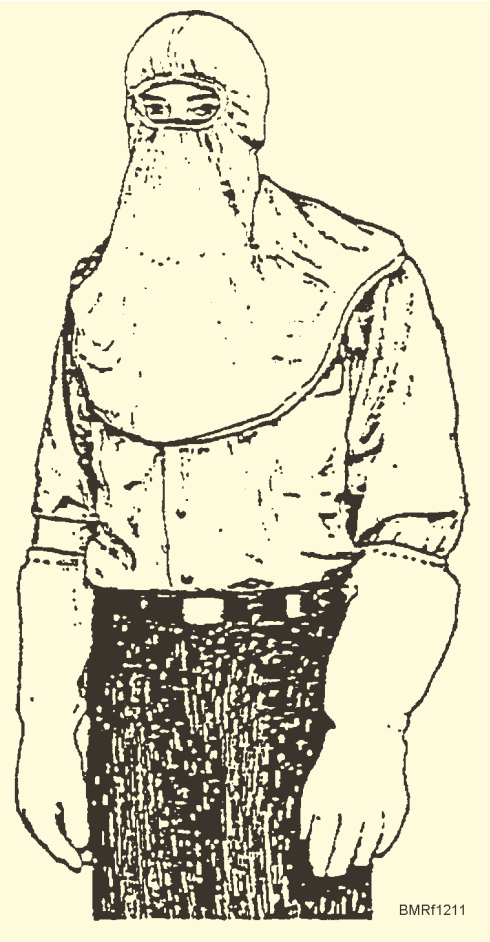



**Figure 12-11.—Anti-flash clothing.**

## ANTI-FLASH CLOTHING

Anti-flash clothing (fig. 12-11) is used to protect personnel from high temperatures resulting from the use of explosive weapons and from burns caused by fire. The clothing consists of the following two items:

1. Anti-flash hood
2. Anti-flash gloves

## FIRE HOSE STATION

A fire hose station (fig. 12-12) is commonly referred to as either a *fire station* or a *fireplug*. The fire hose station is the location of a fireplug and associated equipment. Branches of the firemain system supply water to the fire hose stations throughout the ship. Generally, fire hose stations aboard frigates and larger ships have 1 1/2-inch fireplugs and fire hose stations aboard ships larger than frigates have 2 1/2-inch fireplugs.

## P-100 PUMP

The P-100 pump is a diesel-engine-driven portable pump unit. It's designed for firefighting (fig. 12-13) and limited dewatering (fig. 12-14) functions aboard ships.

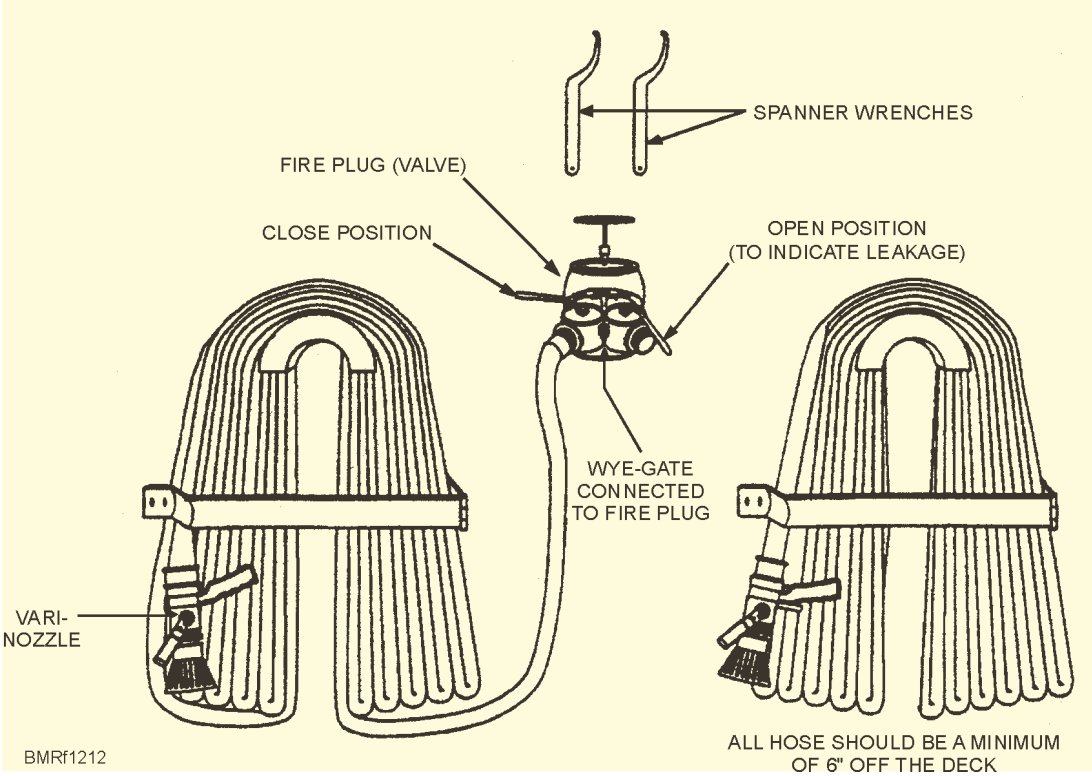



**Figure 12-12.—Fire hose station.**

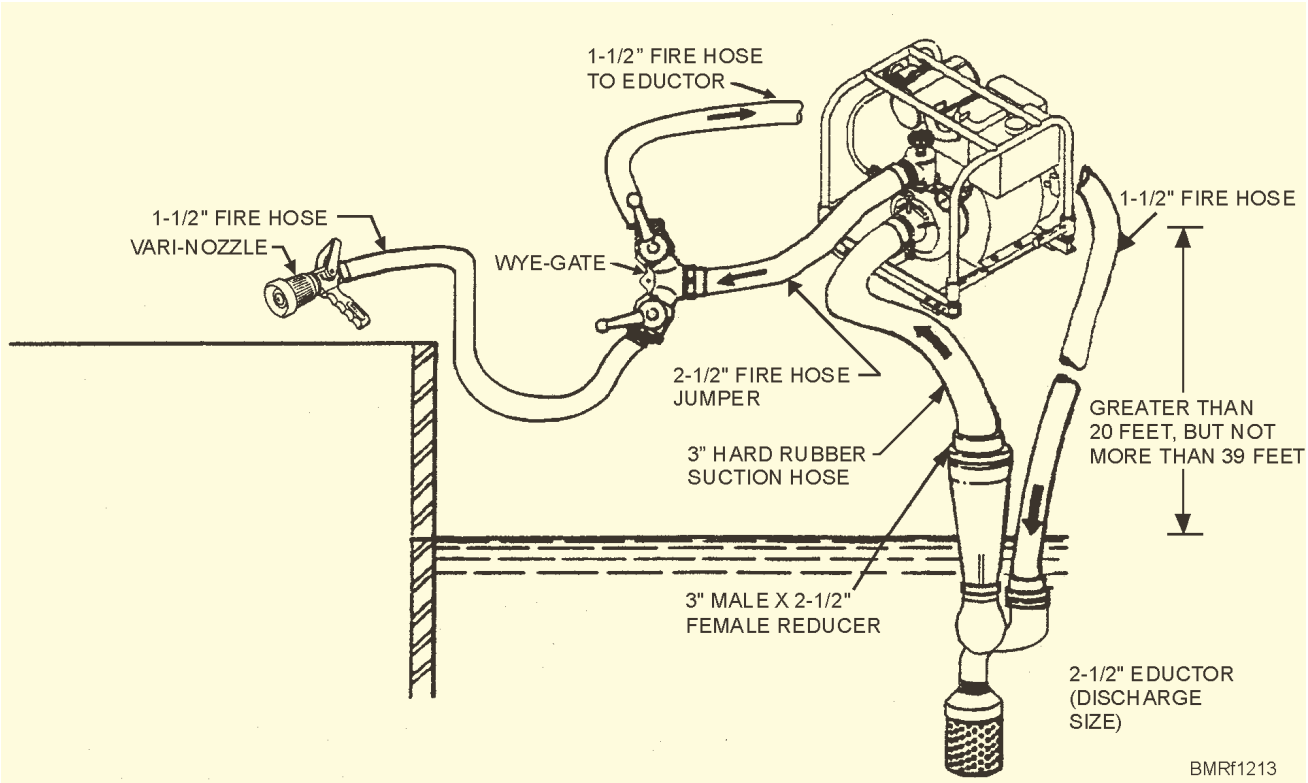



**Figure 12-13.—Firefighting hookup.**

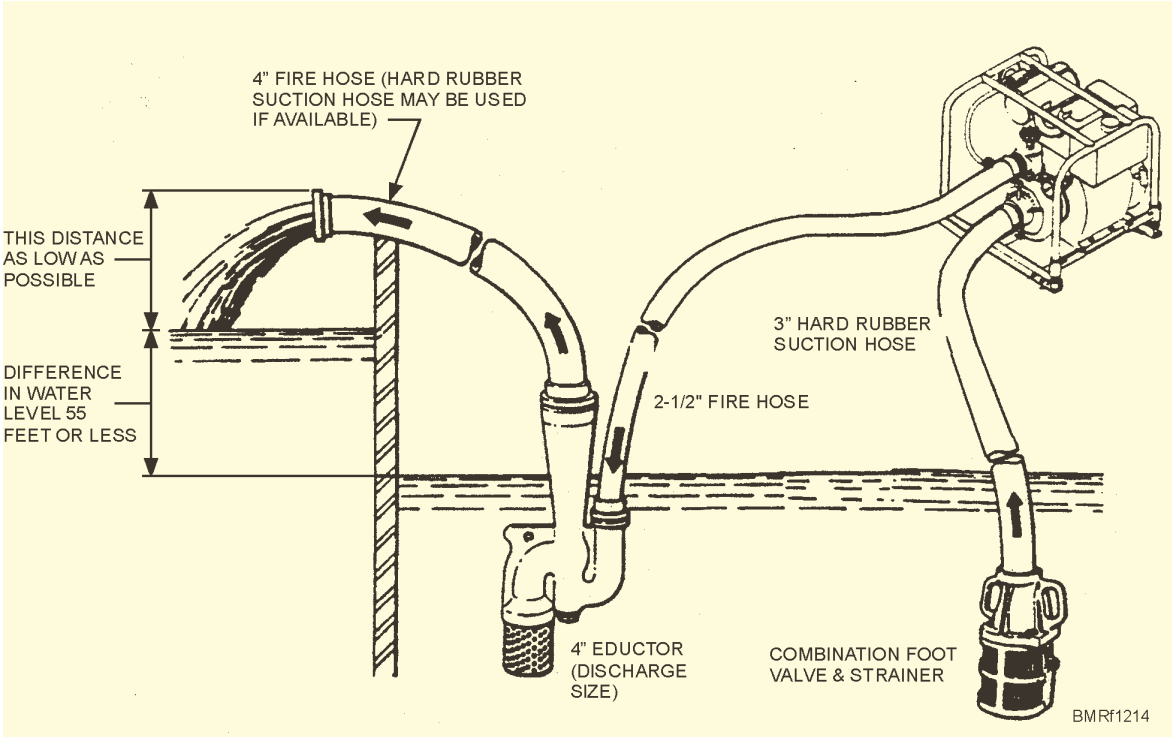



**Figure 12-14.—Dewatering hookup.**

## DAMAGE CONTROL SHORING CHEST

Each repair station has a damage control shoring chest (fig. 12-15). The chest is divided into three compartments to separate the different tools and materials needed for shoring.

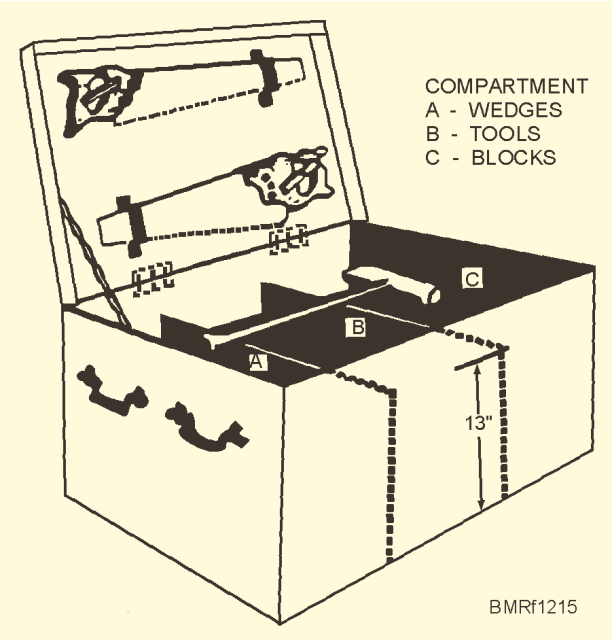



**Figure 12-15.—Damage control shoring chest.**

## REVIEW 8 QUESTION

Q1. Describe the purpose of the following items.

a. Damage control shoring chest

b. P-100 pump

c. Firefighter ensemble

d. Anti-flash clothing

e. Fire hose station

## SUMMARY

A ship lives or dies depending on its crew's ability to combat a wide range of casualties, and these casualties are not restricted to times of conflict. Casualties can occur while moored in your homeport, at anchorage overseas, or during a routine peacetime deployment. The requirement for every person on board, from the commanding officer to the fireroom messenger, to have a good, basic knowledge of damage control procedures and constant training and drills in combating shipboard casualties is essential to the ship's survival. This training and preparation demonstrated during the Persian Gulf crisis saved several U.S. Navy ships that sustained considerable damage. If these crews had not been trained in damage control, these ships and most likely a large portion of their crews may have been lost.

The proper use of the closure log is just as important as knowing how to don an OBA or use a fire hose. The business of damage control is serious. Learn it well; your life, the lives of your shipmates, and your ship depend on it.

## REVIEW 1 ANSWERS

A1. The damage control organization is divided into the—

a. **Administrative organization**

b. **Battle organization**

A2. The purpose of the administrative phase of DC is **to establish and maintain material readiness conditions**.

A3. **The engineer officer** is responsible for maintaining properly trained DCPOs, repair parties, and repair locker personnel.

A4. The **XO** is the senior person assigned as team leader on DCTT.

***Student Notes:***

A5. The **DCPO** is responsible for making sure that all battle lanterns, dog wrenches, spanners, and other damage control equipment are in place and in a usable condition within their division.

A6. Before anyone enters a poorly ventilated space or void, the **gas free engineer** (**GFE**) certifies the space as safe.

### REVIEW 2 ANSWERS

A1. The battle phase of damage control starts **when the ship receives actual damage**.

A2. The battle station for the DCA is **DCC/CSS**.

A3. DCC receives reports and casualty status from **repair parties**.

A4. The minimum requirement to be a member of the in-port emergency team is to be **repair party qualified**.

A5. The primary missions of the rescue and assistance team are **to assist persons from the water, other units in distress, and other persons or activities in distress ashore**.

A6. **General quarters** is the highest state of readiness.

### REVIEW 3 ANSWERS

A1. The X40J circuitry is commonly referred to as the **salt and pepper line**.

A2. The alarms that can override the microphone control of the IMC are the

a. **Collision**

b. **Chemical attack**

c. **General**

d. **Flight crash**

A3. When all communications systems fail, **messengers** are used to deliver messages and orders between repair lockers and DCC.

### REVIEW 4 ANSWERS

A1. Survivability of the ship can be ensured by **compartmentation**.

A2. The three basic material readiness conditions are—

a. **XRAY**

b. **YOKE**

c. **ZEBRA**

A3. Material condition **XRAY** provides the least amount of watertightness.

A4. Normally, **YOKE** is set at sea and in port during wartime.

A5. Material condition **ZEBRA** is set when GQ is sounded.

A6. **DOG ZEBRA** fittings are closed to set darken ship.

A7. To find a list of all DC fittings within a compartment, you should refer to the **compartment checkoff list**.

### REVIEW 5 ANSWERS

A1. The EEBD is designed to provide **15 minutes** of air.

A2. You should stay away from open flames when you first remove an EEBD **because your hair is saturated with oxygen and could catch fire**.

A3. When donning an EEBD, you should hear a **hissing sound**.

A4. Engineering watch standers wear a **SEED**.

A5. The effective time of an OBA is **45 minutes**.

A6. You pull the cotter pin on an OBA **after the canister has been inserted in the OBA and locked in place.**

### REVIEW 6 ANSWERS

A1. Fire prevention is the responsibility of **all hands**.

A2. The three components that make up a fire are—

a. **Heat**

b. **Fuel**

c. **Oxygen**.

A3. Most cases of spontaneous combustion involve the process of **rapid oxidation**.

A4. The three methods of heat transfer are—

a. **Conduction**

b. **Radiation**

c. **Convection**

## REVIEW 7 ANSWERS

A1.

| MATERIALS | CLASSES OF FIRE |
|---|---|
| a. Hydraulic fluid | **B** |
| b. Energized circuit board | **C** |
| c. Paper | **A** |
| d. Gasoline | **B** |
| e. Magnesium | **D** |
| f. Cloth | **A** |
| g. Titanium | **D** |

A2. **Sea water** is the most available heat-removing agent for shipboard use.

A3. AFFF was developed to combat **class B fires**.

A4. **$CO_2$** is the primary agent to disrupt the fire triangle of class C fires.

A5. **Water fog** is an effective agent against a class D fire.

## REVIEW 8 ANSWERS

A1. The purposes of the following items are as follows:

a. Damage control shoring chest. **A chest that is divided into compartments for storing materials used for shoring**.

b. P-100 pump. **The P-100 pump can be used to fight fires or to dewater spaces**.

c. Firefighter ensemble. **The firefighter ensemble protects personnel from short duration flames, heat, and falling debris**.

d. Anti-flash clothing. **Anti-flash clothing protects personnel from heat caused by high explosive weapons and from burns caused by fire. There are two items that make up anti-flash clothing—anti-flash gloves and the anti-flash hood**.

e. Fire hose station. **The fire hose station is where the fireplug and associated equipment is located**.

# CHAPTER 13

# CHEMICAL, BIOLOGICAL, AND RADIOLOGICAL DEFENSE

*If we do not stem the proliferation of the world's deadliest weapons, no democracy can feel secure... One of our most urgent priorities must be attacking the proliferation of weapons of mass destruction, whether they are nuclear, chemical or biological.*

—President Bill Clinton
1993

As a member of the Navy, you need a good working knowledge of chemical, biological, and radiological defense (CBR-D). CBR-D is defined as *defensive measures taken against the effects of a chemical, a biological, or a nuclear weapons attack*. Training in defensive measures lets the command maintain operational readiness and complete its mission.

Throughout history, countries and factions have developed and used chemical, biological, and radiological (CBR) warfare. In WWI, chlorine gas was used, which forced the development of the gas mask. In WWII, nuclear weapons were used for the first time. During WWII, many nations began developing chemical and biological agents as a warfare tool. More recently, a nerve agent was used in Japan's subway system, and blister agents were used on the Kurds during the Iraq and Iran war. The use of CBR clearly demonstrates the need for a positive defensive posture within our Navy.

United States national policy prohibits our being the first to use chemical agents against an attacking nation. The approval for our initial use of chemical weapons must come from the President of the United States.

The United States **will not use** biological agents, including toxins, regardless of source or manner of production, or other methods of biological warfare under any circumstances. The United States strictly limits its biological and toxin research program to defensive measures, such as production of vaccines, antidotes, treatment, and protective equipment.

An aggressive nation might decide using a chemical or biological (CB) weapon first is to its advantage, perhaps as a surprise attack. Therefore, all members of the U.S. Navy must be highly trained in CBR-D. CBR-D training allows Navy units to survive CBR attacks and continue to fight and defend their ship or unit under CBR-contaminated conditions.

The need for training in CBR-D is never ending. The Navy has developed and continues to develop different countermeasures against many possible CBR applications that an enemy might think of. Because possible enemies continually develop CBR applications, training programs using information about the greatest CBR threats are developed to train naval personnel. These programs include disaster preparedness drills and personnel qualification standards (PQS). Don't take this training lightly; it may save your life.

## CHEMICAL, BIOLOGICAL, AND NUCLEAR WARFARE OPERATIONS

**Learning Objectives**: When you finish this chapter, you will be able to—

- Recognize chemical, biological, and radiological (CBR) attack methods.
- Recognize the need for CBR defense.
- Identify terms used with CBR.

The primary purpose of nuclear weapons is the mass destruction of targets and personnel. The primary purpose of biological and chemical attacks is the mass casualties of personnel, livestock, and/or crops. These weapons are called *weapons of mass destruction* because they destroy large areas or kill and disable large segments of the population.

In chemical warfare (CW) operations, chemical agents can kill or disable personnel by affecting their blood, nerves, eyes, skin, lungs, or stomach. Biological warfare (BW) operation agents include microorganisms, fungi, toxins, and microtoxins to cause diseases that will kill or produce other casualties. Nuclear weapons produce explosions of great force and heat and release nuclear radiation.

Many types of weapons and methods may be used to deliver chemical and biological agents and nuclear bombs. The use of two or more different types of weapons to deliver these agents may be used at the same time. Missiles having long-range attack capability provide a means of delivering chemical, biological, and nuclear weapons that can be launched in almost any manner by land, sea, and/or air units.

Chemical agents have been placed in projectiles and used effectively. A similar possibility exists with biological agents; however, for technical reasons it appears that the most probable method of delivery is by aerosol.

## CHEMICAL WARFARE

**Learning Objectives:** When you finish this chapter, you will be able to—

- Identify terms used with chemical warfare (CW).
- Identify types of CW.
- Identify the effects of CW agents.
- Identify self-aid and first-aid methods for countering nerve, blister, and choking agents.

CW agents are used to produce death, injury, temporary incapacitation, or irritation effects. Broadly speaking, there are two types of antipersonnel agents—casualty and incapacitating. Some of the types of CW agents are described in table 13-1.

**Table 13-1.—Characteristics of Selected CW Agents**

| Agent Name | Agent Type | Physical Properties | Physiological Effects | Relative Rate of Action |
|---|---|---|---|---|
| Sarin | Nerve | Colorless odorless, volatile liquid | Difficulty breathing, excessive contraction of the pupil of the eye (miosis), blurred vision, headache and nausea leading to respiratory distress, convulsions, and eventually death. | Rapid (within minutes) |
| VX | Nerve | Colorless odorless, low volatility, oily liquid | Difficulty breathing, miosis, blurred vision, headache and nausea leading to respiratory distress, convulsions, and eventually death. | Relatively rapid (within 30 minutes) |
| Mustard | Blister | Garlic odor, medium volatility, oily liquid | Blisters or irritates skin, eyes, and lungs. | Delayed onset (4-6 hours) |
| Hydrogen cyanide | Blood | Almond odor, highly volatile gas | Prevents the normal transfer of oxygen from the blood to body tissue resulting in respiratory paralysis. | Rapid (within minutes) |

***Student Notes:***

## CASUALTY CW AGENTS

Casualty CW agents can cause death or severely incapacitate personnel for long periods of time. Casualty agents can be either persistent or nonpersistent. They are classed as blood, choking, nerve, and blister agents, all of which can inflict serious injury or death.

Some casualty agents have a cumulative effect, which means that successive doses add to the effect of each preceding dose. You might receive a nonlethal dose of a nerve agent, for example, followed within a few hours by another nonlethal dose. However, the cumulative effects of the two exposures could kill you.

## INCAPACITATING CW AGENTS

Incapacitating CW agents temporarily disable personnel but do not create permanent injury. They can produce physiological and/or psychological effects. These effects make individuals incapable of performing duties for hours or days even after exposure has ceased.

Some incapacitating agents have effects that typically last for significant periods of time but do not seriously endanger life; for example, riot control agents. Riot control agents produce only temporarily irritating or incapacitating effects when used in normal concentrations. Complete recovery is usually expected without medical treatment.

## EFFECTS OF CW AGENTS

CW agents will make you a casualty when your body comes in contact with a bigger dose than it can withstand. The limits of tolerance of the human body vary from short periods of exposure and low concentrations of certain agents to extended periods of exposure and high concentrations of certain other agents. Furthermore, the limits of tolerance to specific agents vary with individuals. Your principal concern is recognizing the symptoms and relieving the effects of exposure before the limit of exposure is exceeded.

### Nerve Agents

Poisoning by nerve agents affects bodily functions. The disruption of nerve impulses produces different effects on different body systems. It's important for you to recognize both mild and severe signs and symptoms of nerve agent poisoning. Mild symptoms will become severe if personnel are repeatedly or continually exposed to low concentrations of a nerve agent. High concentrations of nerve agent poisoning will cause rapid onset of severe symptoms, possibly without any mild symptoms at all. The symptoms of nerve poisoning are shown in the following chart:

| MILD SYMPTOMS | SEVERE SYMPTOMS |
|---|---|
| • Unexplained runny nose<br>• Unexplained sudden headache<br>• Excessive sudden drooling<br>• Difficulty seeing (reduced vision or miosis)<br>• Tightness in chest, difficulty breathing<br>• Localized sweating and muscular twitching in the area of contaminated skin<br>• Stomach cramps<br>• Nausea | • Strange or confused behavior<br>• Wheezing, difficult, or labored respiration and cough<br>• Severely pinpointed pupils<br>• Red eyes with tearing<br>• Vomiting<br>• Severe muscular twitching and general weakness<br>• Involuntary urination and defecation<br>• Convulsions<br>• Unconsciousness<br>• Respiratory failure |

***Student Notes:***

**NOTE**

Some symptoms of heat stress are similar to symptoms of nerve agent poisoning.

The rapid action of nerve agents calls for immediate administration of the antidotes atropine and pralidoxime chloride (2-PAM C1). Atropine acts to dry up secretions in the respiratory tract and to stimulate the central respiratory functions, and 2-PAM C1 simultaneously relieves muscle paralysis, especially in the respiratory tract. Both antidotes are self-injected into the lateral thigh muscle by the use of automatic injectors.

**Blister Agents**

Blister agents act on the eyes, mucous membranes, lungs, and skin. Blister agents include mustard vapors and mustard liquids. Mustards burn and blister the skin they contact, damage the respiratory tract when inhaled, and cause vomiting and diarrhea when absorbed. The degree of damage depends on the type and concentration of the agent, the weather, the amount of activity of the individual, and amount of exposure time. Blister agents are effective even in small quantities and produce both immediate and delayed injuries.

Mustard vapors burn any area of the skin; but, the burn is most severe in moist areas, such as the neck, genitals, groin, armpits, bends of knees, and elbows. Redness of the skin follows in 1/2 to 36 hours after exposure. This condition may be accompanied by intense itching, and blisters may then appear. Stiffness, throbbing pain, and swelling may also occur.

A few hours after breathing the mustard vapor, a victim experiences irritation of the throat, hoarseness, and coughing. After severe exposure, the lining of the respiratory system swells and interferes with breathing. Frequently, pneumonia develops.

If the whole body is exposed to mustard vapor, the body goes into a state of shock. This reaction is accompanied by nausea and vomiting.

Personnel who suspect contamination of their eyes or face must seek overhead shelter and flush the eyes with potable (drinkable) water from a canteen or shower. Mild exposure to skin can be treated by applying calamine lotion or topical steroid creams. All blisters should be opened, drained, and cleansed with tap or saline water. Any exposure to mustards require medical care by a corpsman or medical personnel.

**Blood Agents**

Blood agents inhibit the action of an enzyme responsible for transferring oxygen from the blood to the cells of the body. Thus the cells become starved for oxygen. Inhalation is the usual route of entry for blood agents.

The symptoms produced by blood agents depend on the concentration of the agent and the duration (length of time) of the exposure. Typically, either death occurs rapidly or recovery takes place within a few minutes after removal of the victim from the toxic atmosphere. High concentrations of blood agent cause labored breathing within a few seconds, violent convulsions, followed by cessation (stoppage) of breathing completely. Finally, the heart stops only a few minutes after initial exposure. The symptoms of exposure to blood agents are shown in the following chart:

| INITIAL SYMPTOMS | ADVANCED SYMPTOMS |
|---|---|
| • Increased respiration<br>• Headache<br>• Giddiness<br>• Dizziness<br>• Increased pulse rate<br>• Red, flushed skin | • Convulsions<br>• Coma<br>• Death |

***Student Notes:***

If you're exposed to a blood agent, immediately don (put on) a protective mask. Speed is essential! Blood agents act so rapidly that within seconds, the effects of exposure can make it impossible for individuals to don their own mask. If this happens, the nearest person should help those who can't don their mask. Medical personnel should administer medications.

**Choking Agents**

In low concentration, choking agents produce an action on the respiratory system that results in the accumulation of fluid in the lungs. Accumulation of fluid in the lungs can cause death. High concentrations produce death for the same reason, but the upper respiratory tract may be involved as well. Exposure to choking agents may produce immediate dryness of the throat, coughing, choking, tightness across the chest, headache, nausea, and at times, irritated and watery eyes. However, symptoms are usually delayed, and it's possible that no immediate symptoms will appear when exposed to a fatal dose.

Even a mild exposure to a choking agent that is accompanied by immediate symptoms may cause fluid to accumulate in the lungs within 2 to 24 hours after exposure. Shallow and rapid breathing, a hacking and painful cough, frothy saliva, and an ashen gray color of the skin indicate the presence of fluid in the lungs.

After exposure to a high dose of a choking agent, it's important to begin medical treatment quickly to prevent accumulation of fluid in the lungs. It's important to keep the victim at rest and warm. Cough suppressant and pain relievers can be given as long as the doses don't interfere with respiratory functions.

**Riot Control Agents (RCAs)**

RCAs are classified as either tear agents or vomiting agents and are characterized by very low toxicity and brief action. They are used to produce temporary misery and harassment. Most personnel exposed to RCAs don't require medical attention and casualties are rare. Tear agents act rapidly on nerve ends in the cornea and mucous membranes of the eye. Vomiting agents cause local inflammation of the respiratory tract, sinuses, and eyes. The symptoms of exposure to RCAs are shown in the following chart.

First aid for personnel exposed to tear agents includes providing a supply of fresh air as soon as possible and changing exposed clothing. If symptoms

| SYMPTOMS OF TEAR AGENTS | SYMPTOMS OF VOMITING AGENTS |
|---|---|
| • Violent burning sensation of the eyes<br>• Reddening of the eyelids<br>• Uncontrollable winking<br>• Excessive tearing<br>• Intolerance to light<br>• Burning sensation of the throat, with developing pain and a sensation of choking<br>• Sneezing<br>• Nausea<br>• Diarrhea<br>• Headache<br>• Burning sensation of the skin | • Irritation of the eyes, mucous membranes of the mouth and nose<br>• Runny nose, sneezing, and coughing<br>• Headache<br>• Tightness and pain in the chest<br>• Nausea and vomiting |

***Student Notes:***

continue, the eyes, mouth, and skin should be flushed with large amounts of water. Although the effects of vomiting agents can be dramatic, personnel can usually perform duties despite their effects. Personnel should continue to wear a face mask even though coughing, sneezing, salivating, and nausea occur. (The mask can be lifted from the face briefly to allow for vomiting and to drain saliva from the face piece). Analgesics can be given to relieve headache and general discomfort.

### REVIEW 1 QUESTIONS

Q1. What term is used to describe weapons that destroy large areas or kill and disable large segments of a population?

Q2. What is the most probable delivery method for chemical or biological weapons?

Q3. List the two types of antipersonnel agents.

a.

b.

Q4. The use of nerve agents produces symptoms that are similar to what other, more common condition?

Q5. What part of the body is most affected by blister agents?

Q6. If you are exposed to a blood agent, what action should you take first?

Q7. True or false. Cough suppressant and pain relievers can be given to a victim of a choking agent.

## BIOLOGICAL WARFARE

**Learning Objectives**: When you finish this chapter, you will be able to—

- Recall the terms used with biological warfare (BW).
- Identify the types of BW.
- Identify the effects of BW.

Biological warfare (BW) is the intentional use of living organisms, toxins, and microtoxins to disable or to destroy people and domestic animals, damage crops, or deteriorate supplies. BW might be used on a large scale; therefore, biological immunizations of military forces and the development of detection equipment, such as the Interim Biological Agent Detection System (IBADS), are being used. Some of the types of BW agents and their symptoms are described in table 13-2.

**Do not underestimate BW as a weapon**. BW agents can be produced on a scale not considered possible in the past. Even small nations with modern, adequate research facilities can produce large quantities of BW toxins and microtoxins more cheaply than they can produce other types of weapons. These toxins and microtoxins are hundreds to thousands times stronger than today's chemical weapons. The disadvantage of BW agents is that many are rapidly degraded when exposed to certain environmental conditions, such as ultraviolet radiation, visible radiation, heat, dryness, or humidity.

Animals, insects, and rodents can be used as carriers to spread BW agents. Saboteurs can also infect large numbers of people by contaminating a water supply. Infecting water, milk, and food supplies with microorganisms can spread diseases, such as anthrax, typhoid fever, cholera, and influenza.

In the early stages of any biological disease, the general symptoms include fever, malaise, and inflammation.

***Student Notes:***