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

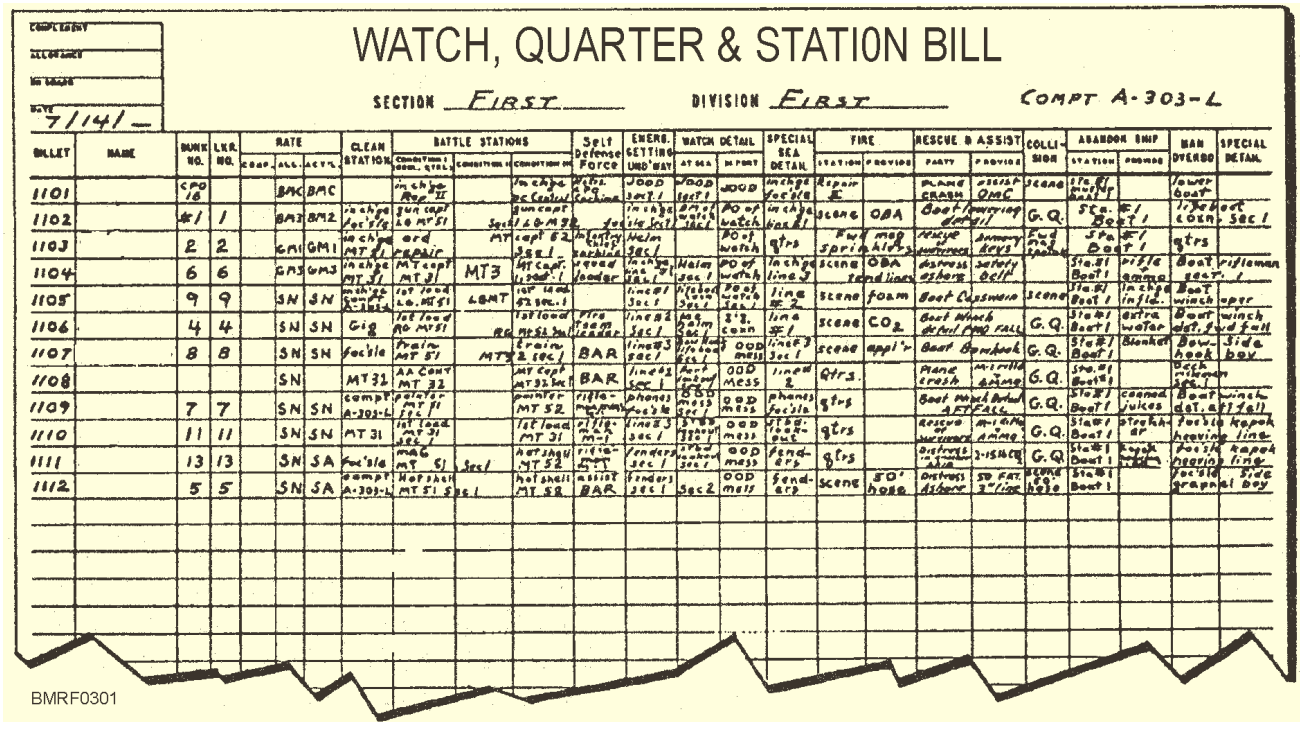

Figure 3-1.—Watch, quarter, and station bill.

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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.

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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

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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

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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.

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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,

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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.

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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:

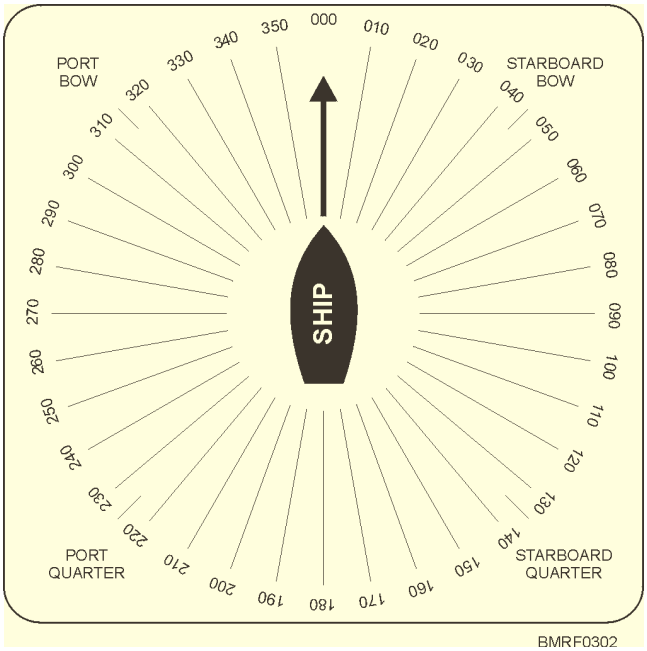

Figure 3-2.—Relative bearings.

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.

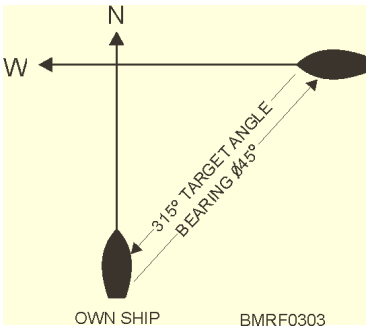

Figure 3-3.—Target angle.

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.

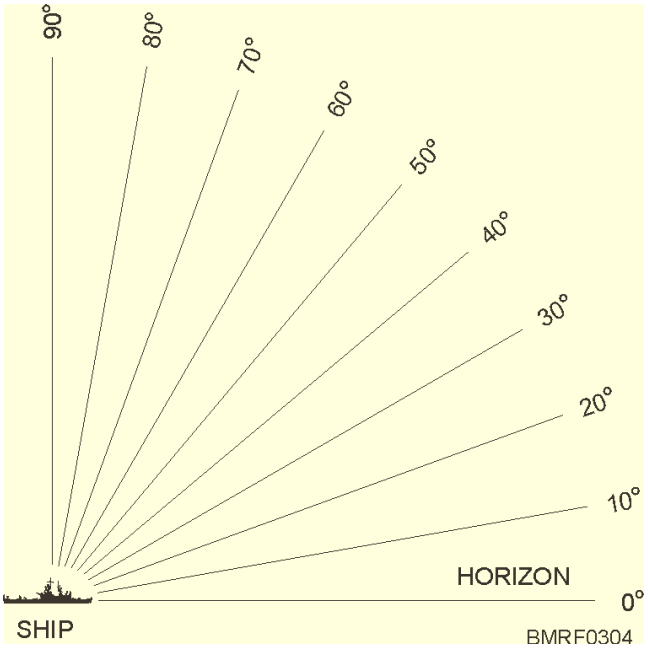

Figure 3-4.—Position angle.

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).

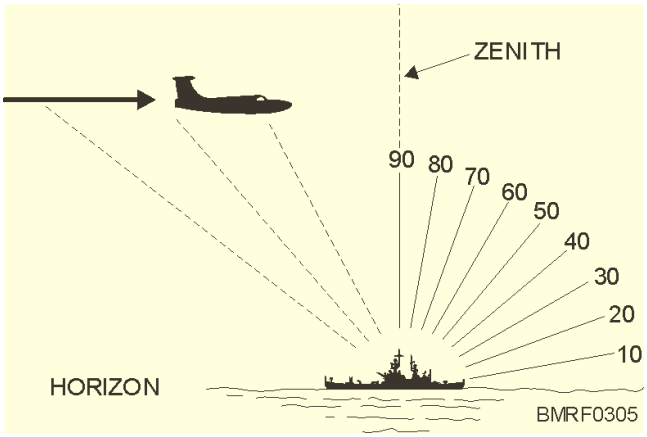

Figure 3-5.—Position angle.

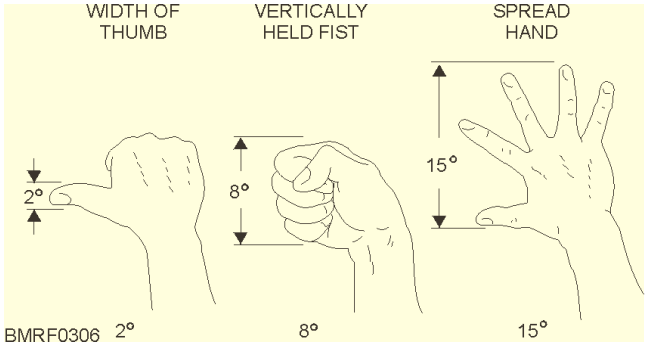

Figure 3-6.—Position angle aids.

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.

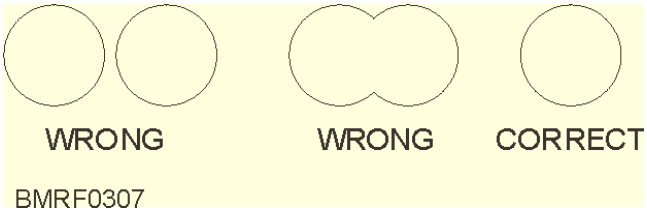

Figure 3-7.—Proper IPD setting.

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.

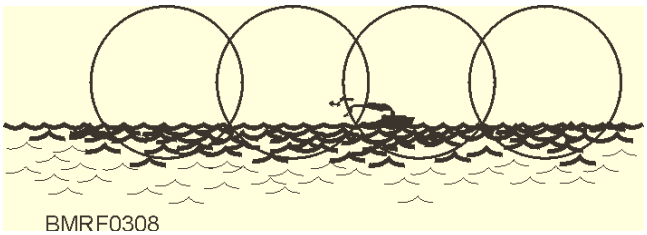

Figure 3-8.—Scanning using the step-by-step method.

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.

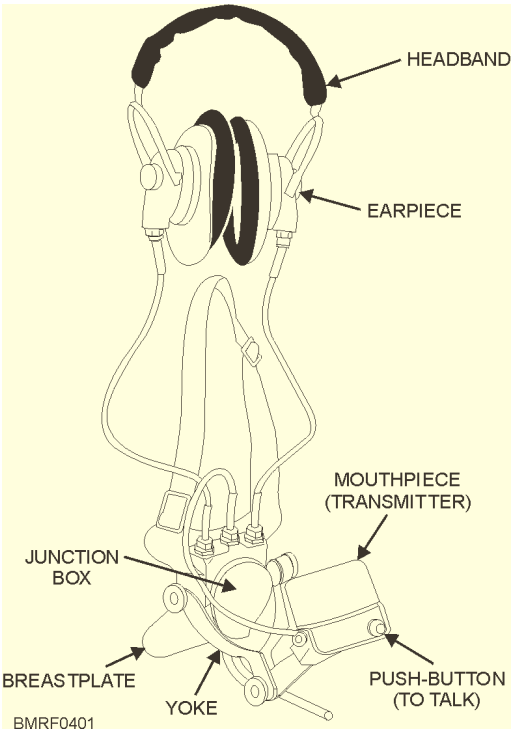

Figure 4-1.—Headset.

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.)

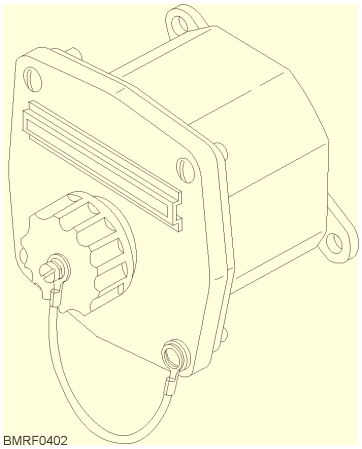

Figure 4-2.—Sound-powered telephone jack box.

2. Remove the headset and hang it over the transmitter yoke, as shown in figure 4-3.

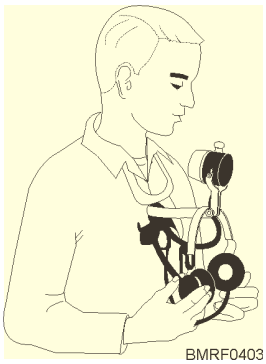

Figure 4-3.—Hanging the headset on the yoke.

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.

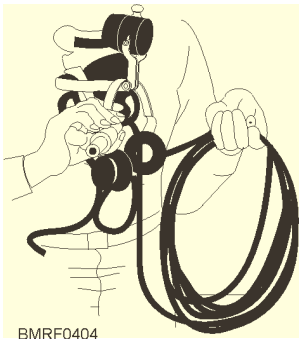

Figure 4-4.—Coiling the lead cord.

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.

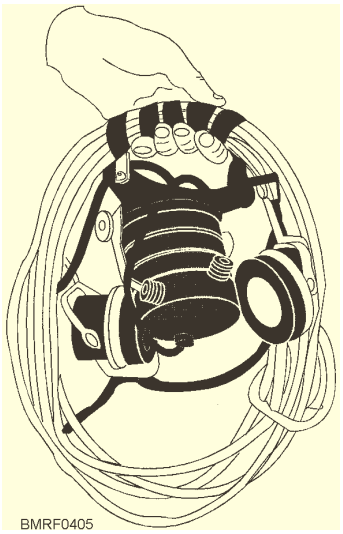

Figure 4-5.—Coiling completed.

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.)

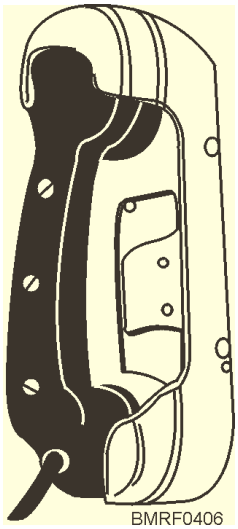

Figure 4-6.—Handset.

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:

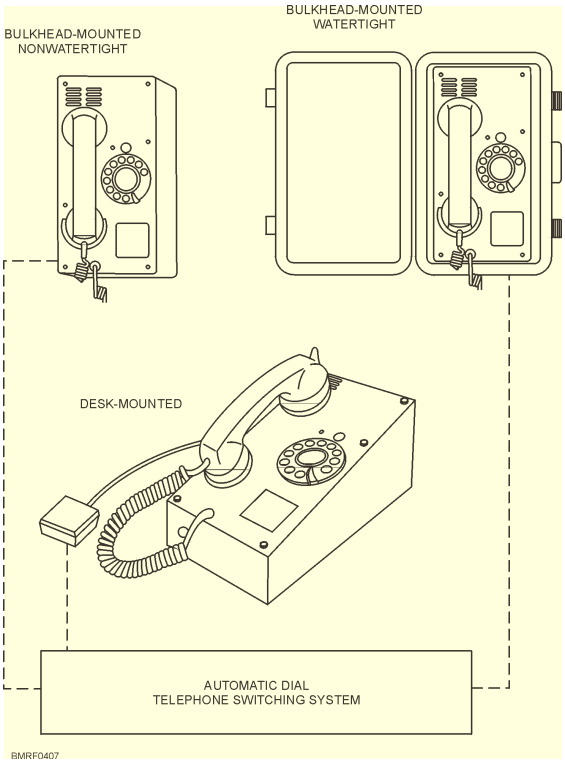

Figure 4-7.—Telephones.

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:

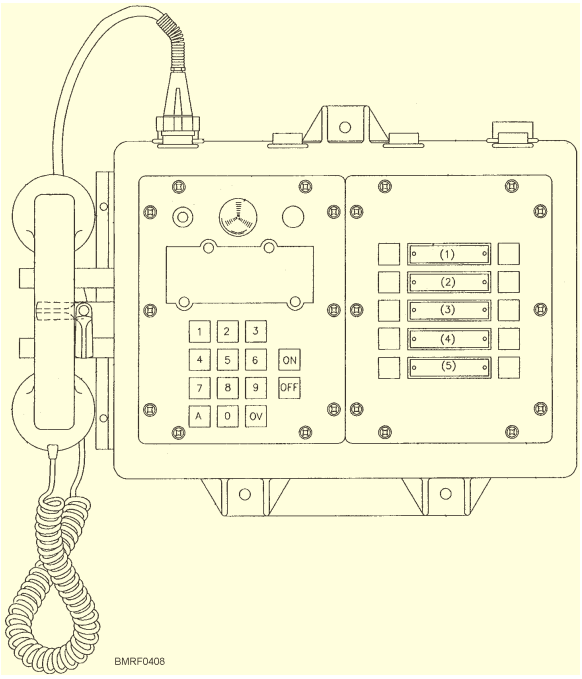

Figure 4-8.—Network terminal.

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.

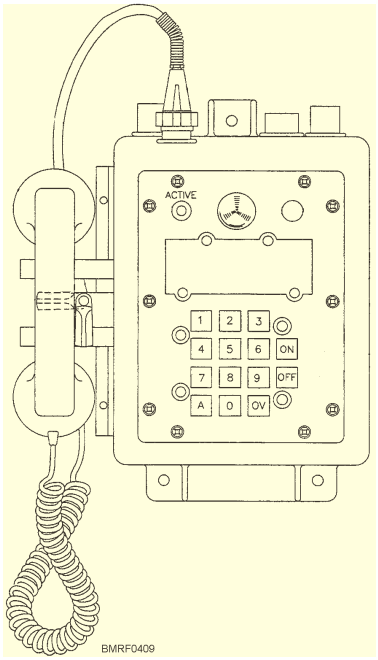

Figure 4-9.—Dial terminal.

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.

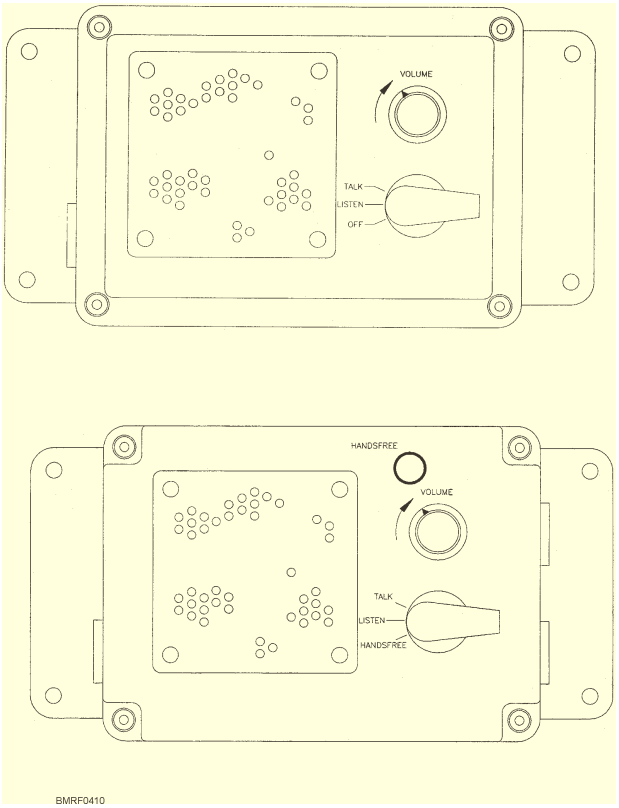

Figure 4-10.—Loudspeaker units.

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:

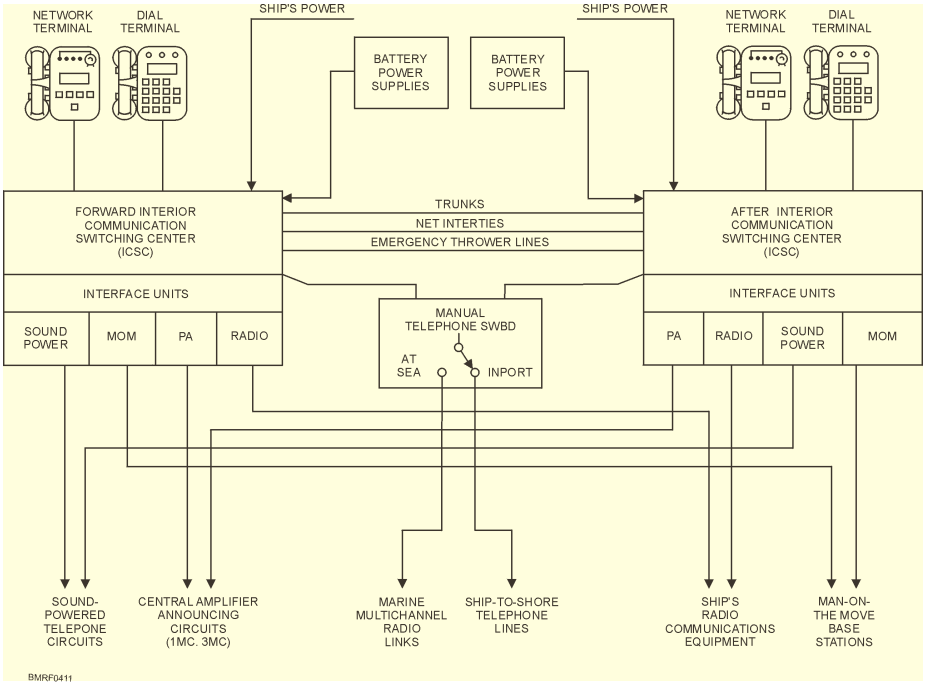

Figure 4-11.—IVCS block diagram.

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.

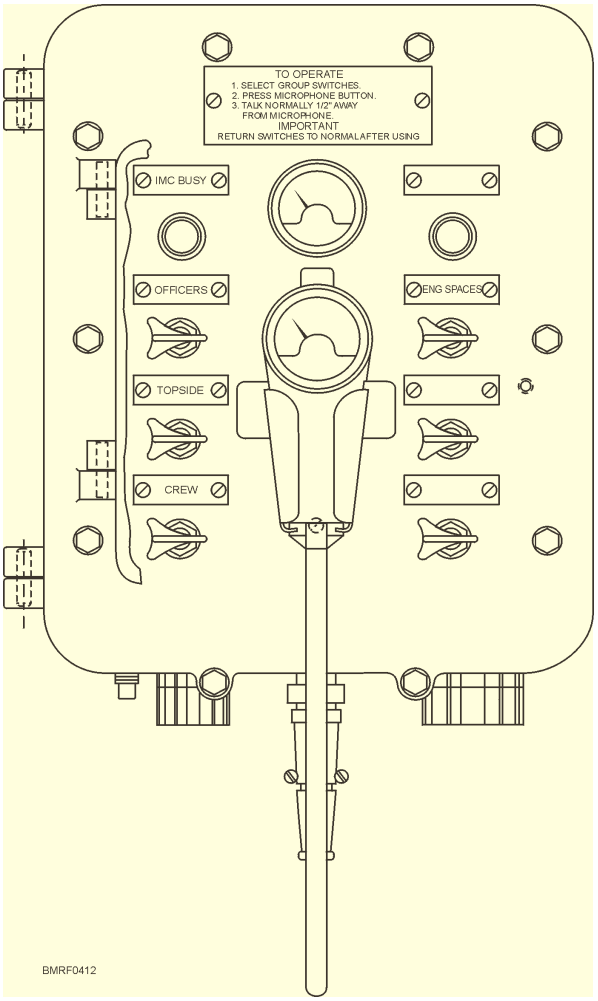

Figure 4-12.—Loudspeaker transmitter

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:

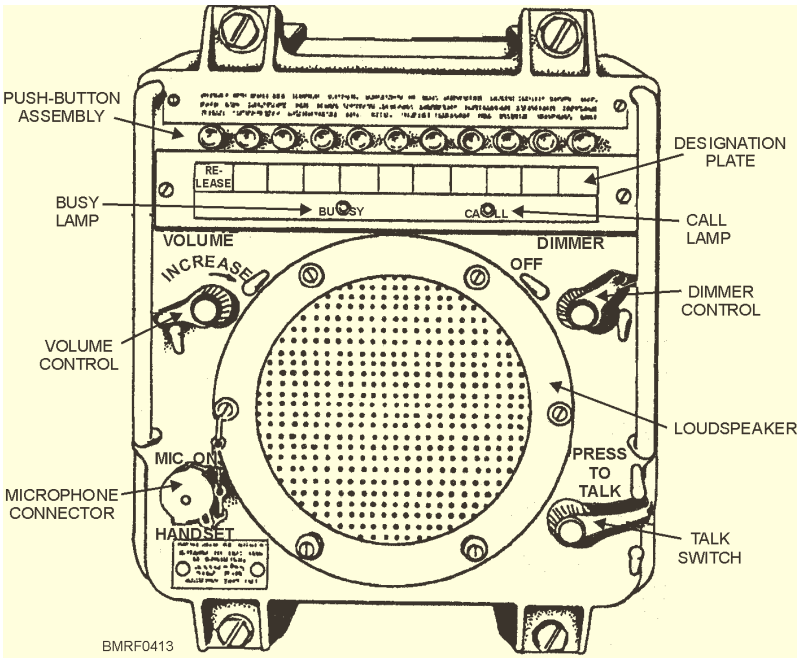

Figure 4-13.—A 24MC transmitter.

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

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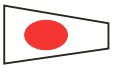
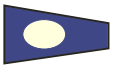
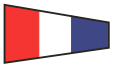
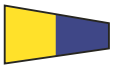
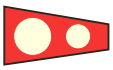
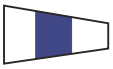
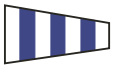
Figure 4-14.—Alphabet and numeral flags.

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

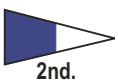
 1st. SUBSTITUTE	FIRST SUB	1st.	 3rd. SUBSTITUTE	THIRD SUB	3rd.
 2nd. SUBSTITUTE	SECOND SUB	2nd.	 4th. SUBSTITUTE	FORTH SUB	4th.

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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.

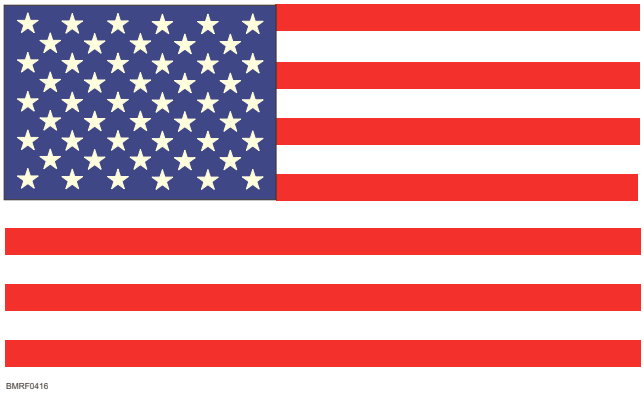

Figure 4-16.—The United States national ensign.

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.

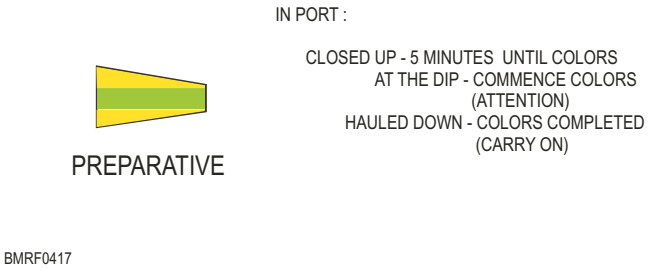

Figure 4-17.—Preparative pennant.

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.

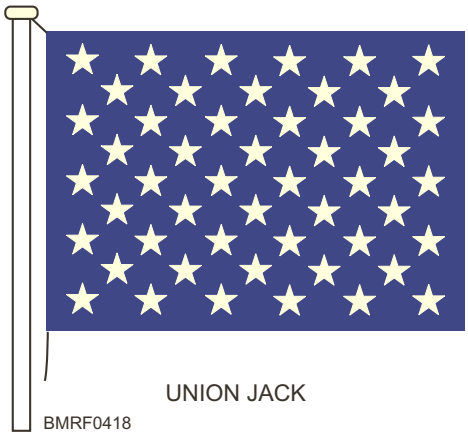

Figure 4-18.—Union jack.

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.

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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.

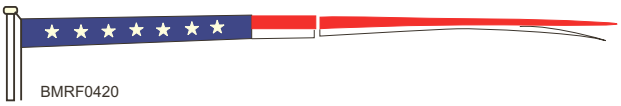

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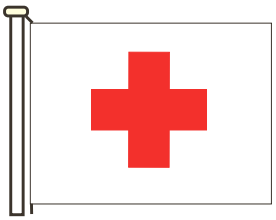
Figure 4-20.—Commission pennant.

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

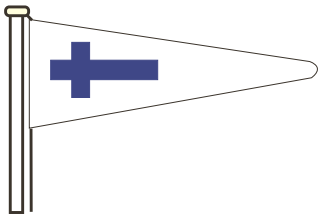
Figure 4-21.—Red Cross flag.

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:

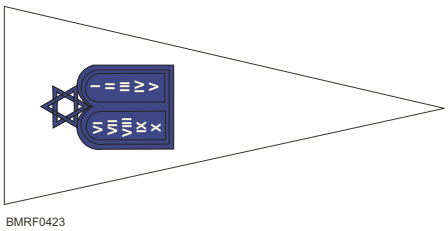
exception is during church services aboard ship conducted by Navy chaplains or visiting church dignitaries. Then the church pennant (fig. 4-22) or the Jewish worship pennant (fig. 4-23) is flown above the ensign. Many ships are fitted with two halyards to the same point of hoist at both the staff and gaff to permit display of the church pennant and ensign simultaneously.



BMRF0422

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.

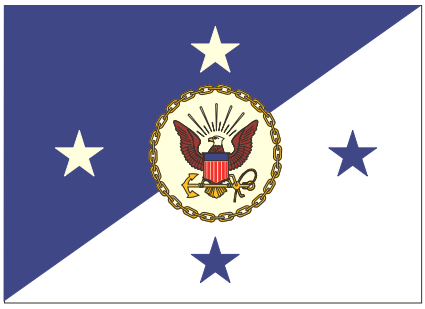


BMRF0423

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.

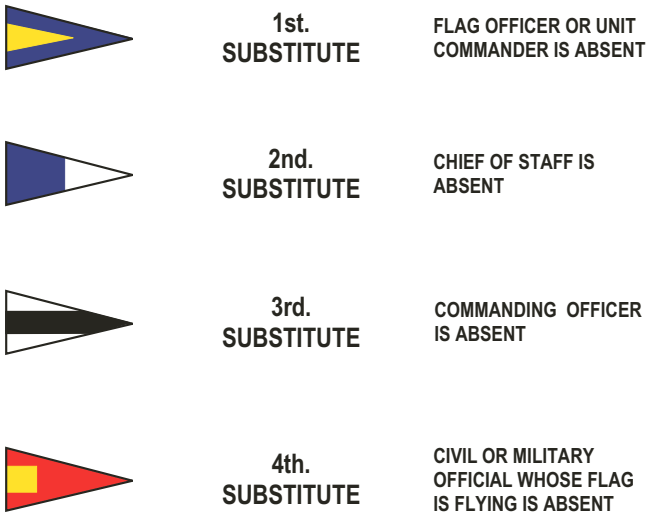
The flag of the Chief of Naval Operations (fig. 4-24) is a blue and white rectangle, divided diagonally from lower hoist to upper fly. In its center is the official seal of the Chief of Naval Operations—an eagle clutching an anchor and encircled by 50 gold links of chain. The CNO's flag is displayed 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.



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.

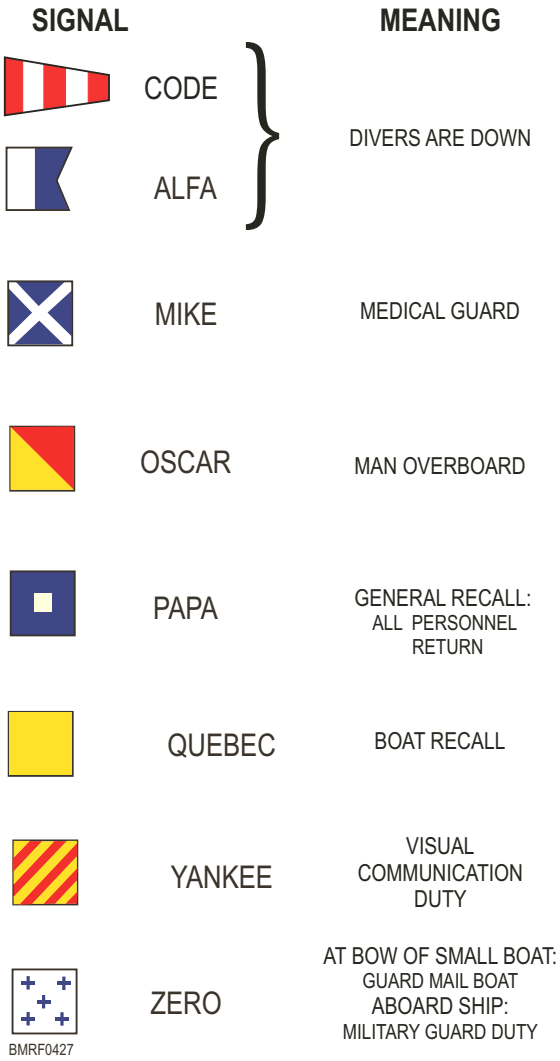


Figure 4-27.—General signals.

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

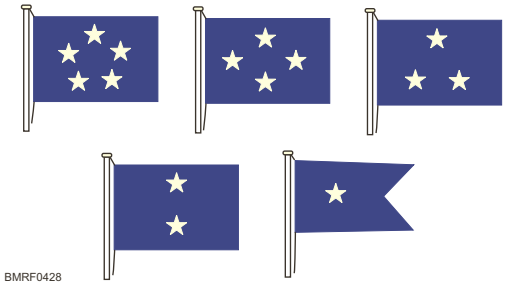


Figure 4-28.—Personal flags.

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

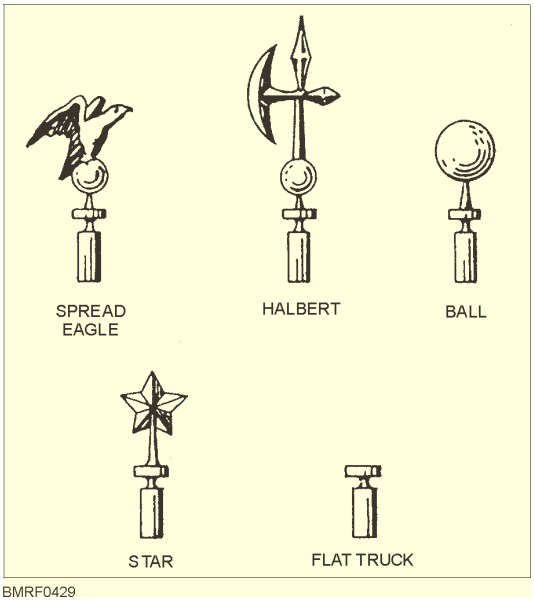


Figure 4-29.—Flagstaff insignias.

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:

ASSIGNMENT 2

Textbook Assignment: Chapter 3 "*Watch Standing*" and chapter 4 "*Communications*."

---

1. A ship maintains a watch for which of the following reasons?

    1. Communications
    2. Security
    3. Safety
    4. All of the above

2. A ship's plan for action is contained in what type of bill?

    1. Battle bill
    2. Admin bill
    3. Organization bill
    4. Watch, quarter, and station bill

3. Qualified personnel are assigned to stations by which of the following persons?

    1. Division officer and division chief
    2. Leading petty officer
    3. Leading chief petty officer
    4. Executive officer

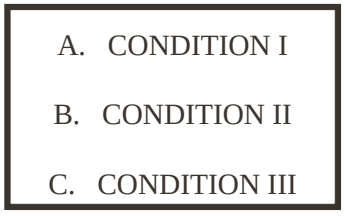


Figure A

IN ANSWERING QUESTIONS 4 AND 5, REFER TO FIGURE A AND SELECT THE CONDITION USED TO DEFINE THE QUESTION.

4. General quarters—all battle stations are manned.

    1. A
    2. B
    3. C

5. Normal wartime cruising watch—4 hours on, 8 hours off.

    1. A
    2. B
    3. C

6. If you are scheduled to stand the second dog watch, you should report at which of the following times?

    1. 1745
    2. 1750
    3. 1755
    4. 1800

7. If you are told to report to your duty station at 0745 (24-hour clock), you should arrive at what time?

    1. 6:45 am
    2. 7:45 am
    3. 6:45 pm
    4. 7:45 pm

8. What watch are you standing between 2000 and 2400 hours?

    1. Midwatch
    2. Forenoon watch
    3. First dog watch
    4. Evening watch

9. Watches are split into port and starboard for what reason?

    1. For convenience
    2. For security
    3. To rotate personnel
    4. To allow extra liberty

10. What type of watch do most Sailors stand?

    1. Phone
    2. Security
    3. Admin
    4. Division

11. Which of the following is a type of a security watch?

    1. Sentry duty
    2. Barracks watch
    3. Fire watch
    4. Each of the above

12. Which of the following is a key assignment for officers in the watch organization?

    1. CDO
    2. OOD
    3. JOOD
    4. Each of the above

13. Which of the following is a duty of the QMOW?

    1. To maintain the ship's deck log
    2. To make sure all bells are correctly answered
    3. To stand watch in the bridge and deliver messages
    4. To line up and operate the steering engines

14. What person makes sure all deck watch stations are manned with qualified personnel and all watch standers from previous watches are relieved?

    1. BMOW
    2. QMOW
    3. JOOW
    4. JOOD

15. Where is the fog lookout watch usually stood?

    1. Helm
    2. Aftermast
    3. In the bow where approaching ships can be heard
    4. CIC

16. For what reason does the fog lookout watch normally consist of two Sailors?

    1. In case there is a man overboard
    2. To allow the lookout to work without having his/her hearing impaired by wearing sound-powered phones
    3. The two-man security rule
    4. To verify visual and sound contact

17. What type of watch is set when positive steering control must be maintained?

    1. Helmsman
    2. Lee helmsman
    3. After steering
    4. QMOW

18. What is the purpose of the security watch?

    1. To minimize damage to equipment
    2. To control contact with the CIC
    3. To increase the physical security of the ship

19. Which of the following is a duty of security watches and patrols?

    1. To be alert for fire hazards
    2. To check the security of weapons magazines
    3. To inspect damage control closures
    4. Each of the above

20. You are a member of a security patrol, and you detect a fire hazard that affects the safety of the ship. What action should you take?

    1. Note it on the security log
    2. Inform your LCPO
    3. Investigate it
    4. Report it to the OOD immediately

21. What is the purpose of a shipboard fire watch?

    1. To immediately extinguish fires caused by welding or burning operations
    2. To make sure the welder strikes the welding surface
    3. To relay messages from the work site
    4. To make sure there is a controlled burn of material at the work site

22. When standing a barracks security watch, you have which of the following responsibilities?

    1. Knowing and carrying out provisions of the fire bill
    2. Knowing and carrying out provisions of the emergency bill
    3. Knowing barracks regulations
    4. All of the above

23. When standing a barracks security watch, which of the following is the first action to take if there is a fire?

    1. Report the fire
    2. Spread the alarm
    3. Close doors and windows
    4. Fight the fire, if possible, if you have the proper equipment

24. Sentries are governed by what two types of orders?

    1. Understood and general
    2. Special and verbal
    3. General and special
    4. General and verbal

25. You are required to know the general orders of a sentry. How many general orders are there?

    1. 11
    2. 14
    3. 16
    4. 18

26. When aboard ship, you should refer to what publication for the procedures used to relieve an armed watch?

    1. SOP
    2. FOD
    3. Watch bill
    4. Battle bill

27. Which of the following is a precaution to follow when standing an armed watch with a pistol?

    1. When relieved, unload the pistol in a safe area
    2. Don't surrender the pistol to an unauthorized person
    3. Keep the pistol (which is loaded with one round in the chamber) in its holster unless you have to use it
    4. Each of the above

28. Under which of the following conditions can deadly force be used?

    1. To prevent the escape of a murderer
    2. To prevent sabotage
    3. To protect your life
    4. Each of the above

29. Why is a lookout posted?

    1. To prevent blind spots caused by metal objects
    2. To search for objects radar can't detect
    3. To detect objects low in the water
    4. To search for air attacks

30. The peacetime lookout organization has how many Sailors in each watch station?

    1. One
    2. Two
    3. Three
    4. Four

31. Which of the following is/are types of bearings?

    1. Relative only
    2. True only
    3. Magnetic only
    4. Relative, true, and magnetic

32. Which of the following is Navy phraseology for reporting a bearing of 038º?

    1. O, three, eight
    2. O, three, ate
    3. Zero, tree, ate
    4. Zero, tree, eight

33. Lookouts report what type of bearing?

    1. Magnetic
    2. Relative
    3. True

34. Which of the following statements describes a target angle?

    1. The magnetic north pole is used as the reference point
    2. True north is used as the reference point
    3. An object in the sky
    4. The relative bearing of your ship from another ship

35. A position angle can never be more than what number of degrees?

    1. 0º
    2. 45º
    3. 90º
    4. 180º

36. How are position angles reported?

    1. Three digits, spoken digit by digit
    2. Two digits, spoken digit by digit
    3. Three digits, spoken as a whole
    4. Two digits, spoken as a whole

37. How should you report objects that are low in the water?

    1. By feet above the surface
    2. By the object's approximate distance
    3. In feet from the ship
    4. From the object to the horizon

38. Ranges are reported in what unit of measurement?

    1. Feet
    2. Yards
    3. Rods
    4. Miles

39. When using binoculars, what adjustments should you make?

    1. One for focus
    2. Two for focus and one for proper distance between the lenses
    3. One for proper distance between the lenses
    4. Two for eyepiece and lens

40. When should you use binoculars?

    1. In foggy and rainy conditions
    2. When identifying objects at night
    3. When scanning sectors in the daytime
    4. Both 2 and 3 above

41. How long does it take for you to reach your best night vision?

    1. 10 minutes
    2. 15 minutes
    3. 25 minutes
    4. 30 minutes

42. What is meant by the term *dark adaptation*?

    1. The improvement of vision in dim light
    2. The inability to see in bright light
    3. The red light requirement
    4. Shadows that can't be seen clearly

43. When should you use "off-center vision"?

    1. Below decks
    2. When wearing glasses
    3. When it's dark
    4. In broad daylight

44. What information is contained in an initial report?

    1. The object only
    2. The object's bearing from the ship only
    3. The object and its bearing from the ship
    4. What the object might be

45. To report serial number 23NCI16 over the sound-powered telephone circuit, you would report the serial number in what way?

    1. Too, three, november, charlie, india, wun, six
    2. Too, tree, november, charlie, india, wun, six
    3. Two, tree, november, charlie, india, wun, six
    4. Two, tree, november, charlie, india, wun, sics

46. It's important for you to remember that the mouthpiece and earpiece of sound-powered telephones are interchangeable for which of the following reasons?

    1. Two people can talk at once
    2. They can be interchanged if a piece breaks
    3. Undesirable noises can be fed into the system
    4. Both 2 and 3 above

47. The headset of sound-powered telephones is picked up as a unit for which of the following reasons?

    1. To make sure you have all the parts
    2. To avoid breaking them
    3. Both 1 and 2 above
    4 In case the earpiece is missing

48. When using the mouthpiece of a sound-powered phone set to report contacts, how far from your mouth should you position the mouthpiece?

    1. 1/2 to 1 inch
    2. 1 to 2 inches
    3. 2 to 3 inches
    4. 3 to 4 inches

49. Why should you unplug a phone's headset when it's not in use?

    1. To keep the user costs down
    2. Earpieces will pick up noise and transmit it over the circuit
    3. Carbon will build up at the connectors
    4. Calls from other circuits won't go through

50. Aboard ship, there are how many categories of shipboard sound-powered phone circuits?

    1. One
    2. Two
    3. Three
    4. Four

51. What category of shipboard telephone circuits is designed to maintain vital communications and are preceded by the letter *X*?

    1. Primary system
    2. Auxiliary system
    3. Supplementary system
    4. Command circuit

52. Which of the following sound-powered phone circuits is used as the CO's battle circuit?

    1. JA
    2. JC
    3. JL
    4. 1JV

53. To keep the meaning of a message intact when standing duty as a telephone talker, what action should you take?

    1. Speak loudly
    2. Repeat the message word for word
    3. Paraphrase what you hear
    4. Speak rapidly to transmit the message quickly

54. Which of the following statements is a rule for circuit discipline?

    1. Transmit only official messages
    2. Keep the button in the OFF position when not transmitting
    3. Use only standard words and phrases
    4. All of the above

55. Which of the following elements is included when taking a message?

    1. Name of caller
    2. Message
    3. Time and date
    4. Each of the above

56. The IVCS has which of the following components?

    1. Terminals
    2. Accessories
    3. ICSCs
    4. All of the above

57. Within the IVCS, what is the purpose of the ICSCs?

    1. To perform switching actions
    2. To keep lines clear
    3. To give multi-access to lines
    4. To ensure automatic cutoff for security purposes

58. Which of the following shipboard announcing systems is called the general announcing system?

    1. 1MC
    2. 2MC
    3. 3MC
    4. 4MC

59. Which of the following shipboard announcing systems is used for intership communications?

    1. 5MC
    2. 6MC
    3. 7MC
    4. 8MC

60. Which of the following shipboard announcing systems is used for hangar deck damage control?

    1. 39MC
    2. 51MC
    3. 53MC
    4. 58MC

61. Which of the following persons is authorized to pass calls over the 1MC?

    1. OOD
    2. XO
    3. CO
    4. Each of the above

62. What is the purpose of the 20MC announcing system?

    1. Radio room announcing system
    2. Flag officer's command announcing system
    3. Combat information announcing system
    4. Captain's command announcing system

63. Which of the following types of flags and pennants is/are used by the Navy?

    1. Substitute flags
    2. Numeral pennants
    3. International alphabet flags
    4. All of the above

64. Aboard ship, a man overboard is indicated by what emergency/warning flag?

    1. Code Alfa
    2. Oscar
    3. November Charlie
    4. Bravo

65. What administrative flag is used to recall all personnel to the ship?

    1. Hotel
    2. Juliett
    3. Romeo
    4. Papa

66. What administrative flag is flown in port to indicate the ship has ready duty?

    1. Hotel
    2. India
    3. Romeo
    4. Quebec

67. When under way, the national ensign is normally flown from what location?

    1. The gaff
    2. The aftermast
    3. The flagstaff
    4. The jackstaff

68. Which of the following statements defines the term “colors”?

    1. Colors give recognition of codes
    2. Colors consist of our national ensign along with the union jack
    3. Colors are lights on the flagstaff
    4. Colors are the flags of foreign ships

69. When a naval ship is in port or at anchor, the union jack is flown from what location?

    1. The gaff
    2. The jackstaff
    3. The aftermast
    4. The flagstaff

70. The U.S. Navy flag is flown in which of the following situations?

    1. At official ceremonies or official public gatherings when the Navy is officially a participant
    2 In parades
    3. In official Navy occasions
    4. Each of the above

71. Which of the following flags are half-masted at the death of the CO?

    1. National ensign
    2. Union jack
    3. Commission pennant
    4. Each of the above

72. On small ships, personnel from what watch are responsible for hoisting and hauling down absentee pennants?

    1. Security watch
    2. Quarterdeck watch
    3. Roving watch
    4. DC central watch

73. On large ships, what person is responsible for making sure that special flags or pennants are displayed to indicate changing events aboard ship?

    1. Boatswain’s mate
    2. Quarterdeck watch
    3. Duty signalman
    4. Topside watch

74. Where is a list of special flags and pennants normally posted as a ready reference for watch standers?

    1. Combat information center (CIC)
    2. After deck
    3. Quarterdeck area
    4. Half deck

75. An officer in command entitled to a personal flag is embarked in a boat on an official mission. Where should the pennant be flown?

    1. Amid ship
    2. In the bow
    3. In the stern
    4. Yardarm, port