

CHAPTER 1

WATCHES

As a Seaman, you are a part of the backbone of the Navy. Depending upon the location of your duty station, you may be assigned to do anything from clerical work to helping run a ship. Since most Seamen have duty assignments on board ships, this course will deal basically with that situation.

On board a ship, you will be assigned to jobs such as keeping up the ship's compartments, decks, deck machinery and other equipment, external structures, and lines and rigging. You will also be standing deck watches, such as helmsman, lookout, and messenger watches underway and in port; standing sentry, fire, security, anchor and other special watches; manning and operating small boats, booms, cranes and winches; and acting as a member of gun crews and damage control parties. Without personnel with the skills to do these jobs, the power of the Navy would be nonexistent. We will talk about watch standing in this chapter.

A Navy ship in commission can never be left unattended. In port or underway, the security of the ship and the safety of personnel are vital. As an underway watch stander, you have, by necessity, a great responsibility placed upon your shoulders. Outstanding performance is the only acceptable performance, and it is also the minimum standard.

WATCHES

LEARNING OBJECTIVE: Identify the different types of watches aboard ship.

When assigned to a watch, you are responsible for the proper performance of all the duties prescribed for that watch. You should remain alert, be prepared for any emergency, and require all subordinates to be attentive. Orders must be issued in the customary style of the U.S. Navy.

When you are on watch, it is your duty to promptly inform the officer of the deck (OOD), the Boatswain's Mate, or the petty officer of the watch of any matters about the watch. Do not relieve another watch stander until you are thoroughly acquainted with the standards and responsibilities pertaining to the watch. You may decline to relieve your predecessor if you feel it is

justified, but you must immediately report that action to the officer of the deck (OOD).

Finally, as a watch stander, do not leave your post until relieved or secured by proper authority. Clearly, the highest level of professional performance is expected when on watch.

TYPES OF WATCHES

Civilian companies that work around the clock are said to have shifts. In the Navy, the ship's day is divided into watches. These watches follow one another continuously, and not only keep the ship in operation but also keep it ready for possible action.

The term watch is used in several ways. Most of the watches are of 4 hours' duration. Usually, it means one of the periods into which the day is divided, as in the following watch periods.

- 0000-0400 MIDWATCH
- 0400-0800 MORNING WATCH
- 0800-1200 FORENOON WATCH
- 1200-1600 AFTERNOON WATCH
- 1600-1800 FIRST DOG WATCH
- 1800-2000 SECOND DOG WATCH
- 2000-2400 EVENING WATCH

The 1600 to 2000 watch is dogged, which means it is divided to allow personnel to be relieved to eat their evening meal. The dog watches also permit rotation of the watches. Otherwise, personnel would stand the same watch each day. (Usually, the 1600 to 2000 watch is dogged only at sea.)

DUTIES OF A WATCH STANDER

A watch, in-port or underway, sometimes refers to the location of the member on watch, such as the quarterdeck watch. It may also refer to the section of the ship's crew on duty or to a member on watch, such as the lookout watch.

Each member of the crew is assigned to a watch section. The number of sections varies with the number of personnel assigned and the ship's commitment. When word is passed that the first section (or the second, and so on) has the watch, each member in that section reports to his or her assigned watch station.

Watches must be relieved in ample time. Usually, this means 30 minutes before the next watch. This time difference is essential so the relief can receive information and/or instructions from the person on watch. In the case of night lookouts, this extra time allows your eyes to adjust to night vision.

When reporting directly to the person being relieved, a relief should say, "I AM READY TO RELIEVE YOU." The person to be relieved then passes on to the relief any pertinent instructions or information relating to the proper standing of the watch. When the conditions and instructions are understood by the oncoming watch, he or she reports to the OOD, saying "I REQUEST TO ASSUME THE DUTIES OF (MESSENGER, PETTY OFFICER OF THE WATCH, ETC.)." The OOD may question the relief as to the instructions, and once satisfied, will grant permission. The offgoing watch then reports to the OOD that he or she has been properly relieved.

CONDITIONS OF READINESS

LEARNING OBJECTIVES: Identify the conditions of readiness aboard ship. Explain the duties of the messenger, including general rules and the handling of incoming messages.

Six conditions of readiness govern the type of watch aboard ship. Following is a brief description of these conditions of readiness.

	GENERAL DEGREES OF READINESS	CONDITION WATCH
1st	Complete readiness for immediate action	I
2nd	Temporary relaxation from 1st degree for rest and for meals at battle stations	IE
2nd	Readiness to conduct amphibious assault operations	IA
2nd	Readiness to conduct ASW operations	IAS
Special	Readiness for limited action	
3rd	Part of armament ready for immediate action, remainder on short notice	II
3rd	Readiness to conduct ASW operations for prolonged periods with all sensors and control stations and some weapons manned	IIAS

	GENERAL DEGREES OF READINESS	CONDITION WATCH
4th	Part of armament ready for immediate action, remainder at prolonged notice	III
5th	Peacetime cruising, no armament manned	IV
6th	In port, peacetime, no armament manned	V

DUTIES OF A MESSENGER

Most messenger duties are as messenger to the officer of the deck, commonly called the OOD messenger.

When given a message to deliver, be sure you know exactly where to go and what to say. When you arrive at your destination, repeat the message in the exact words that were told to you. Always carry the messages directly and quickly.

Before returning to the sender to report delivery of the message, wait for a reply or until you are told there is none.

MESSAGES

Messages for the captain of the ship or the admiral should be delivered to the respective officer or to his or her orderly if one is assigned.

Develop resourcefulness in tracking down people who are not easy to locate. Report your return to the officer of the deck; and if there was a delay in delivering the message, tell him why.

GENERAL RULES FOR A MESSENGER

The general rules for a messenger are as follows:

1. Be in the prescribed uniform of the day at all times.
2. Be attentive to all calls.
3. Deliver messages directly and quickly. Return at once to the sender and report the delivery of the message.
4. If unable to deliver a message, report this fact at once to the sender.
5. If you are sent to an officer's or chief petty officer's room, knock. Do not enter until you are told to do so.
6. Before going to meals or to the head, obtain permission from the petty officer of the watch.

7. Unseamanlike conduct, skylarking, or other such behavior is never permitted.

8. Remain covered in officer country. Salute the officer to whom a message is addressed.

9. Uncover before entering the wardroom or chiefs mess unless you are on watch and wearing the duty belt.

10. Uncover if you enter any area where a meal is in process, even if you are wearing the duty belt.

IN-PORT WATCHES

LEARNING OBJECTIVE: Explain the in-port watches that are required for a messenger:

Underway, your station as messenger of the watch is located on the bridge; in port, it is located on the quarterdeck. Besides keeping the quarterdeck swept down and neat, lend a hand whenever you are needed. If you have the morning watch, clean the entire quarterdeck area and polish all the brightwork.

At home, ashore, and at sea, the telephone is a part of everyone's life. It is an essential instrument in every Navy office and you must know how to use it properly. By observing proper techniques, you will be able to give and receive information correctly and quickly. Remember that the success of your telephone conversations depends almost entirely upon your ability to express yourself in words, whereas when you are speaking to a person directly, your facial expressions, gestures, and the like, all aid in getting your point across.

OFFICE TELEPHONE WATCH

Good telephone technique starts with answering your telephone quickly. Don't let it ring several times while you finish what you are doing. After lifting the receiver, speak immediately to the person calling; identify your command, yourself, and your position; inform the person calling that the line is an unsecure line. Usually the person making the call will do the same. This procedure puts the conversation on a businesslike basis and eliminates uncertainty as to who is on the other end.

Do not go on talking to someone in the office when you answer the telephone. You never know who your caller may be, and information heard this way could be harmful to national security. Also, 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's 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 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 of the message, and (4) your name.

SIDE BOYS

As a side boy, you stand your watch from 0800 to sunset except at mealtime and during general drills. Wear a clean dress uniform of the day at all times and be especially neat and military in appearance. Keep close to the quarterdeck at all times so you can hear the side boy's call on the boatswain's pipe.

When officers or civilian officials who rate side boys are coming aboard, the Boatswain's Mate sounds one veer on the pipe for two side boys, two veers for four, three veers for six, or four veers for eight. The number of veers depends on how many side boys the visitor rates.

At the sound of the pipe, all side boys indicated fall in smartly on the double in two ranks, facing each other to form a passageway at the gangway, and wait at attention. The Boatswain's Mate then sounds the call "Alongside" so as to finish just as the visitor's boat makes the gangway. During this pipe, the side boys remain at attention but do not salute.

The Boatswain's Mate then falls in to the rear of the rank of side boys and starts the call "Over the side" as the visitor's head appears at the quarterdeck level. At the first note of this call, you and the other side boys salute smartly in unison. The salute is dropped at the last note of the call.

When visitors are leaving, the side boys are again called by the boatswain's pipe. This time, however, the Boatswain's Mate immediately falls in with you and first sounds "Over the side" as the visitor passes toward the gangway. You and the other side boys salute on the

first note and drop the salute on the last note. Remain at attention while the pipe again sounds "Alongside" as the boat departs. Do not break ranks from the gangway until you are released by the Boatswain's Mate. Never leave the vicinity of the quarterdeck without permission of the Boatswain's Mate.

During these side honors, you may have the opportunity to see important people. Your close range, however, does not give you permission to stare at them as they pass. Your eyes must always be kept straight ahead.

PIER SENTRIES

When required, the pier sentries will be posted at the head of the pier. They will perform duties as directed by the OOD (in port), including security of the pier and acting in ceremonial duties.

SECURITY WATCHES

Additional security watches and patrols may be assigned at the discretion of the Commanding Officer to increase physical security. Accordingly, watch personnel must keep the Commanding Officer informed through at least hourly reports to the OOD (in port). Personnel assigned to security watches and patrols will be qualified by the Security Officer, if assigned, or the department head responsible for specific watch and patrol areas. Duties of security watches and patrols include, but are not limited to, the following:

- Maintaining continuous patrols above and below decks
- Checking classified stowage, including spaces containing classified equipment
- Being alert for evidence of sabotage, theft, and hazards
- Checking security of weapons magazines
- Periodically inspecting damage control closures
- Checking the disbursing office and other spaces containing public funds
- Checking the ship's store outlets and storerooms

ANCHOR WATCH

The anchor watch is stationed as required by the commanding officer. The watch is instructed by the

ship's boatswain, and watch duties are performed under the direction of the OOD. The watch, posted in the immediate vicinity of the ground tackle, maintains a continuous watch on the anchor chain to observe the strain and how the chain is tending. You should familiarize yourself with the different strains (light, light to moderate, and moderate to heavy strain).

When an anchor watch is posted, a drift lead is often in use. This is a weight dropped to the bottom, attached to a line that should be kept slack. When the bridge asks "HOW DOES THE DRIFT LEAD TEND?," you should take up enough slack in the line to see which direction the lead is from the bow. As the ship veers around the anchor, the lead will tend to starboard or port, or underfoot. It may tend slightly aft as the ship surges. If there is no slack in the line and it tends noticeably forward, the anchor is probably dragging, and the bridge needs to know.

SHIPBOARD UNDERWAY WATCHES

LEARNING OBJECTIVE: Describe the duties of the underway bridge team members.

The personnel assigned to watch-standing duties are entrusted with the safety and proper operation of the ship. In many instances, watch standers who have failed to understand their responsibilities and authority have caused a collision, grounding, and even the loss of a ship. On the other hand, there are many cases of record where serious damage and loss of life were averted by the timely action of watch standers working as a coordinated and integrated team.

OFFICER OF THE DECK (OOD) UNDERWAY

The officer of the deck (OOD) underway has been designated by the Commanding Officer to be in charge of the ship, including its safe and proper operation. The OOD reports directly to the Commanding Officer for the safe navigation and general operation of the ship; to the Executive Officer for carrying out the ship's routine; and to the Navigator on sighting navigational landmarks, and on course and speed changes.

JUNIOR OFFICER OF THE DECK (JOOD)/CONNING OFFICER

The JOOD/CONNING OFFICER is the principal assistant to the OOD. Anyone making routine reports to the OOD normally makes them through the Conning

Officer. The Conning Officer stands the watch in the pilot house, but may be stationed on the open bridge during complex tactical operations or when directed by the OOD for indoctrinational purposes.

BOATSWAIN'S MATE OF THE WATCH

The Boatswain's Mate of the watch (BMOW) stands watch on the bridge when underway. His or her primary duty is to assist the OOD in carrying out the ship's routine and ensuring the efficient functioning of the watch team. It is the responsibility of the BMOW to see that all deck watch stations are manned, that all watch standers in previous watch sections are relieved, and that the oncoming enlisted watch team is in the prescribed watch-standing uniform. The BMOW will also assist the OOD in supervising and instructing members of the watch in their duties.

QUARTERMASTER OF THE WATCH

The Quartermaster of the watch (QMOW) is stationed on the bridge, and reports to the OOD all changes of weather, and temperature and barometer readings. He or she must be a qualified helmsman, and assist the OOD in navigational matters. The QMOW is responsible for entering in the Ship's Log all data required by current instructions or as directed by the OOD, and for executing sunset and sunrise procedures.

HELMSMAN

The helmsman must have successfully completed all personnel qualification standards for helmsmen and be qualified by the navigator. The courses the helmsman steers must be ordered by the conning officer.

The ability to steer can be attained only by practice. The first fact to bear in mind is that the ship turns under the compass card; the compass card itself remains steady. Thus, when the card appears to be turning to the left of the lubber's line, it really is the line (the ship's head) that is moving to the right. On all modern ships, the wheel, rudder, and ship's head all move in the same direction. To move the lubber's line and ship's head back to the left, then, you must turn the wheel to the left.

As a new helmsman, you may use too much rudder. This forcefulness is a natural trait, since when you turn your auto steering wheel, your car immediately turns; yet when you turn the ship's wheel a few degrees, nothing happens, because time is required for the

steering engine to operate and for the ship to begin answering its rudder.

When a ship is conned through a passage, such as the Panama Canal, or up to a berth or anchorage, the helmsman frequently is ordered to steer on a range, landmark, light, or some other object, instead of by the compass. Many helmsmen are so accustomed to the compass that they become tense under these circumstances. The simple truth is that it is always much easier to hold a ship steady on some object ahead than to keep on course by compass. Usually, the compass is located well abaft the bow, and the ship's head can swing quite a bit before the movement registers on the card. However, when the bow or the forestay is lined up with a mark ahead, the helmsman can see the ship go off course the instant it starts to do so.

Have the ship steady on course before you surrender the wheel to your relief. Inform your relief of the course and the compass or repeater you are steering by. If it is a gyro repeater, be sure you designate the correct repeater (if more than one). Also inform your relief of the equivalent course to steer by magnetic compass if the gyro fails and, if you are zigzagging, both the immediate course the ship is on and the base course it will follow when it ceases to zigzag.

Tell your relief about any steering peculiarity you discovered, such as 'Carrying a little right rudder,' or 'Carrying mostly left.' Relay any order you received that still is standing, such as "NOTHING TO THE LEFT," or "STEADY ON COURSE 091." If you are steering on a ship, range, landmark, or light, point it out to your relief, making sure it is recognized.

Good steering gets the ship to its destination faster by making mileage in the desired direction and by cutting down the drag caused by use of the rudder. It also enhances the reputation of the ship, lessens the possibility of a steering casualty, and is important to the safety of the ship. Every Seaman should, therefore, make the most of every opportunity to learn to steer. When on the helm, a Seaman should give exclusive attention to steering, regardless of previous experience.

Orders to the Helmsman

The words port and starboard are never used when giving orders to the helmsman. Years ago, right and left were substituted because they are more distinct. When an order necessitates a change of rudder angle to right or left, the direction of change is always stated first, such as 'RIGHT FULL RUDDER.' Standard orders to

the helmsman and their corresponding meaning are as follows:

RIGHT (LEFT) FULL RUDDER usually means 30 degrees on the rudder angle indicator.

HARD RIGHT (LEFT) RUDDER means put the rudder over to the right the maximum degrees allowed by that class of ship.

RIGHT (LEFT) STANDARD RUDDER varies on different ship classes. It is the designated number of degrees of rudder angle that causes the ships of that class to turn within a prescribed distance, called the ship's standard tactical diameter. You must find out what standard rudder is on your ship.

COME RIGHT (LEFT) TO 148 means to swing the ship's head in the direction stated and steady it on the course given; in this example, 148 degrees.

STEER 190 is the order usually given for only a minor change of heading to the number of degrees specified.

STEADY ON 225 states the course on which the ship's head is to be steadied. It normally is given while swinging.

INCREASE YOUR RUDDER means to increase the rudder angle; it is usually ordered when the conning officer wants the ship to move more rapidly.

EASE YOUR RUDDER means to reduce the rudder angle. It may be given as "EASE TO 15 DEGREES (10 DEGREES, 20 DEGREES) RUDDER."

RUDDER AMIDSHIPS means to put the rudder on the centerline; no rudder angle. As a rule, this order is merely, "MIDSHIPS!"

MEET HER means to check but not stop the swing by putting on opposite rudder. This order may be given when the ship is nearing the desired course.

STEADY means to steady the ship on the course it is heading at the time the order is given. If the ship is swinging at the time, the heading must be noted and the lubber's line brought back to and steadied on it as soon as possible. The order is also stated "STEADY AS YOU GO," and "STEADY AS SHE GOES."

SHIFT YOUR RUDDER commands you to change to the same number of degrees of opposite rudder angle. In other words, if your rudder angle is 15 degrees right and the order is given, you change to 15 degrees left rudder. This order is given most often when a single-screw ship loses headway and begins to gather

stemway, so as to partially counteract its tendency to back to port.

MIND YOUR HELM! is a warning that the ship is swinging off the course because of bad steering.

NOTHING TO THE RIGHT (LEFT) is given when the presence of some danger on one side or the other makes it necessary to avoid a set in that direction. You must keep the ship from swinging past the course in the direction warned against.

HOW IS YOUR RUDDER? is a question to the helmsman. The helmsman should reply, "5 (10, 15, etc.) DEGREES RIGHT (LEFT), SIR" or "FULL (STANDARD) RIGHT (LEFT) RUDDER, SIR."

HOW DOES SHE HEAD? or *MARK YOUR HEAD?* is a question to the helmsman. The helmsman should give the ship's head at the time, for example, "TWO SEVEN FIVE, SIR."

KEEP HER SO means to continue to steer the course you are heading. This order is usually given after you state the course you are steering.

VERY WELL is a reply of the conning officer to the helmsman, meaning that the situation is understood.

You must repeat distinctly, word for word, every order you receive so the officer of the deck or pilot may know that you understood correctly. Also report when you have carried out an order; for instance, report immediately when the rudder is right full or the ship is steady on 257 degrees. Also, when you are making a swing, report occasionally the compass heading that the lubber's line is passing so the conning officer can tell how far the ship has gone through the swing. Thus, if ordered to take the ship right from 000 degrees to 045 degrees, do not wait until you are heading 045 degrees to report. As the ship's head goes through the swing, report about every 10 degrees: "PASSING 010, SIR," for example.

NOTE

Before becoming a qualified helmsman, you should be given a written test of the orders and have at least 30 to 50 hours logged.

Lee Helmsman

The lee helmsman, as a qualified standby, regularly relieves the helmsman. The lee helmsman stands watch at the engine order telegraph. In this capacity the lee helmsman rings up the conning officer's orders to the

engine room, assuring and informing the conning officer that all bells are answered properly.

Although *port* and *starboard* are never used in orders to the helmsman, they are used when giving orders to the operator of the engine order telegraph. Stated first is the engine affected, then the direction in which the handle is to be moved, followed by the speed desired; for example, "PORT ENGINE AHEAD TWO-THIRDS," "ALL ENGINES STOP," and "PORT ENGINE BACK ONE-THIRD." Note that *all* is specified instead of *both*, because *both* could sound like *port*. *Back* is specified instead of *astern*, to avoid the confusion of *astern* with *ahead*.

To make sure you have heard your order correctly, repeat it aloud distinctly before you operate; thus, "STARBOARD ENGINE AHEAD TWO-THIRDS, SIR." When the answer appears on the pointer from below, sing it out: "STARBOARD ENGINE ANSWERS AHEAD TWO-THIRDS, SIR." The conning officer may order a specific rpm, for example; your reply then would be "ALL ENGINES AHEAD FLANK, 121 RPM INDICATED AND ANSWERED FOR, SIR!"

FOG WATCH

The fog watch is stationed in fog or reduced visibility. The watch is stood in those locations where approaching ships can best be seen or heard. Usually it is stood on the forecastle all the way forward, at a place commonly called the eyes of the ship. It is the duty of the fog lookouts to stand an alert watch to detect by either hearing fog signals or actually sighting approaching ships or craft or channel buoys. The fog lookout must be in direct communication with the OOD and is normally assisted by a phone talker because the fog lookout's heading must not be impaired by the wearing of sound-powered telephones.

LIFEBOAT WATCH

The ready lifeboat is likely to be a motor whaleboat, gripped in a strongback between the davits and ready for lowering. Usually one boat on either side is prepared in this manner. The leeward boat is the one you will use if you have to lower away.

Although lifeboat watches are not necessarily required to be on station at the lifeboat, crews should always be designated when at sea and be mustered as required. The Boatswain's Mate of the watch or the boat coxswain will tell you what your duties are—whether manning the boat, lowering, clearing falls, or so on. If

you are not told, ask! Handling the lifeboat is important, often dangerous work demanding expert knowledge on the part of every member.

LOOKOUT AND SOUND-POWERED-TELEPHONE TALKER WATCHES

Lookout duties are discussed in *Basic Military Requirements*, NAVEDTRA 10054-F. Telephone talker procedures also are covered in it and in the *Sound-Powered Telephone Talkers' Manual*, NAVEDTRA 14005-A. Another text covering lookout duties is the *Lookout Training Handbook*, NAVEDTRA 12968.

Sky and surface lookouts man the appropriate lookout stations and perform duties according to the ship's lookout doctrine. Lookouts are relieved at least hourly. They are under the direct supervision of the OOD, but are trained in their duties by the CIC officer. The *Navigation Rules, International Inland* requires that every vessel maintain a proper lookout by sight and hearing at all times.

The life buoy/after lookout watch is located at the designated station aft. If assigned, you will have a life ring with distress marker light attached and at least two pyrotechnic smoke floats in your possession, and will maintain an alert watch for persons overboard. Also, you will man sound-powered phones and will check communication with the bridge at least every half hour. During conditions of low visibility, this watch will be augmented by another person who will be the phone talker.

If assigned as bridge sound-powered-telephone talker, you will man either the JV or JL/JS circuits. The JV talker must be familiar with all other stations on the circuit and relay all orders from the OOD to these stations, including paralleling all orders to the engine order telegraph. Also, the talker relays all information from these stations to the OOD.

The JL/JS talker must be familiar with all other stations on the circuit and relay all orders from the OOD to these stations. The talker keeps the OOD informed of all information coming over the circuit.

TIME

LEARNING OBJECTIVES: Explain how time is computed in the Navy, the different kinds of times zones, and how to convert Greenwich mean time to local time, and local time to Greenwich mean time.

For time computations, the surface of Earth is divided into 24 zones, each consisting of 15 degrees.

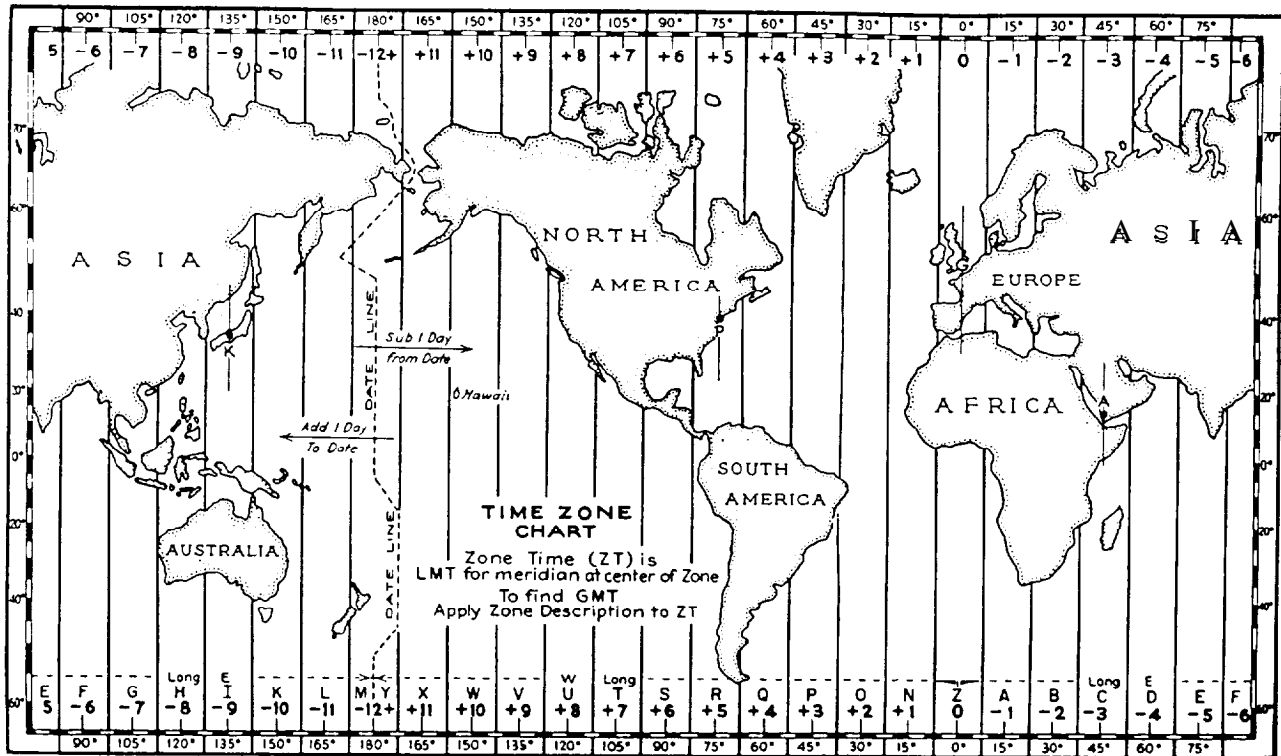


Figure 1-1.—Time zone chart of the world.

Each time zone is different by 1 hour from each of the zones next to it. See figure 1-1.

The initial time zone is called zero and extends 7 1/2 degrees either side of the zero meridian. The time of this zone is known as Greenwich mean time (GMT), often referred to as Zulu time. Each zone, in turn, is represented by the number that indicates the difference between the local zone time and GMT.

ZERO DEGREES LINE

Zones lying in longitudes east of zone zero are numbered from 1 to 12. They are designated minus because the zone number must be subtracted from local time to obtain GMT. Zones lying in longitudes west of zone zero also are numbered from 1 to 12 but are designated plus, because the zone number must be added to local zone time to obtain GMT.

Besides its zone number, each zone is assigned a letter. Zones A through M (J is omitted) are minus zones; zones N through Y are plus zones. The number of a zone, preceded by a plus or minus sign, is the zone description.

PRIME MERIDIAN

The 12th zone is divided by the 180th meridian, the minus half lying in east longitude and the plus half in west longitude. This meridian is the international date line, where each worldwide day begins and ends. If a ship crosses going to the west, the date is advanced one day. If a ship crosses the line going to the east, the date becomes one day earlier.

GREENWICH MEANTIME

Greenwich mean time (GMT) was adopted so that time may be uniform throughout the military services. This uniformity eliminates any doubt about which time is used. The designating letter for GMT is Z. (In lettering or printing, a horizontal bar through the riser of the capital letter Z helps prevent its being mistaken for the numeral 2.)

In the 24-hour system, the approved method of representing time is with the hours and minutes expressed as a four-digit group. The first two numbers of the group denote the hour, and the second two, the minutes. Thus, 6:30 a.m. becomes 0630; noon is 1200; 6:30 p.m. is 1830. Midnight is expressed as 0000 or 2400, and 1 minute past midnight becomes 0001. The time designation 1327Z shows that it is 27 minutes past

1:00 p.m. GMT. Numbers indicating the day of the month are placed before the time of the day to form what is known as a date-time group (DTG). The DTG 171320Z means the 17th day of the current month plus the time in GMT. Dates from the 1st of the month to the 9th of the month are preceded by the numeral 0. (For example, 041327Z is the 4th day of the month.)

Applying the preceding facts, you easily can figure GMT from your local zone time. Assume that you are on a ship operating in the Virginia Capes area where the local zone time is 1700R. The R time zone has a number designation of +5, which indicates the R time zone is 5 hours behind GMT. Simply add 5 hours to your present time of 1700, to find that it is 2200 GMT.

The reverse is true when computing GMT if you are in a time zone that lies in the eastern longitude. Assume your ship is in the Eastern Mediterranean and the time is 0900B. Zone B has a numeral designation of -2, so you simply subtract 2 hours from 0900 to find that GMT is 0700.

SUMMARY

In this chapter, you learned about shipboard watches, in-port and underway. You learned about the conditions of readiness and how to convert time. It is now up to you to put what you learned into use.

