

CHAPTER 1

DAMAGE CONTROLMAN RATING

Learning Objectives: Recall the primary duties and responsibilities of personnel in the Damage Controlman rating, the duties and responsibilities for damage control of other key personnel in the chain of command, and the various damage control administrative programs, directives, and reports.

The Damage Controlman rating is a general rating and has no service ratings associated with it. As you become familiar with the requirements for advancement in this rating, you will recognize that the requirements for the rating are quite extensive.

RATING RESPONSIBILITIES

Learning Objective: Recall the duties and responsibilities of the Damage Controlman rating.

As a Damage Controlman, your tasks and duties will include the following:

- Organizational and intermediate level maintenance and repair of damage control equipment and systems.
- Plan, supervise, and perform tasks necessary for damage control, ship stability, preservation of watertight integrity, fire fighting, and chemical, biological, and radiological (CBR) warfare defense.
- Instruct and coordinate damage control parties.
- Instruct personnel in the techniques of damage control and CBR defense.
- Supervise and perform tasks in procurement and issuance of supplies and repair parts; and prepare records and reports.

LEADERSHIP

As you advance in the Damage Controlman (DC) rating, you will have increasing responsibilities for military and technical leadership. Every petty officer must be a military leader as well as a technical specialist; however, your responsibilities are unique to the DC rating and are directly related to the nature of your work. Your ability to lead others is particularly important because in casualty situations damage control often becomes an “all-hands” evolution. In

these situations, a Damage Controlman holds a key position in the damage control organization and is required to coordinate the efforts of others for the successful control of damage. For these reasons, you must possess qualities of leadership as well as be highly skilled and knowledgeable in the field of damage control.

Organization and teamwork are the keys to successful damage control. Strong leadership is required to keep the organization functioning and to ensure effective teamwork needed to meet the following goals:

1. Preserve or reestablish watertight integrity, stability, maneuverability, and offensive power.
2. Control list and trim.
3. Repair material and equipment.
4. Limit the spread of, and provide protection from fire.
5. Limit the spread of, remove the contamination by, and provide adequate protection against chemical and biological agents or noxious gases and nuclear radiation.
6. Care for wounded personnel.

BASIC OBJECTIVES OF DAMAGE CONTROL

Shipboard damage control is designed to work toward three basic objectives. These objectives are as follows:

1. Take all practicable preliminary measures to prevent damage.
2. Minimize and localize damage as it occurs.
3. Accomplish emergency repairs as quickly as possible, restore equipment to operation, and care for injured personnel.

The damage control organization has the same objectives whether the country is at peace or at war. The ship’s ability to perform its mission will depend upon the effectiveness of its damage control organization.

To attain these objectives, we must accomplish the following:

1. Preserve stability and fume-tight and watertight integrity (buoyancy).
2. Maintain the operational capabilities of vital systems.
3. Prevent, isolate, combat, extinguish, and remove the effects of fire and explosion.
4. Detect, confine, and remove the effects of chemical, biological, or radiological contamination.
5. Prevent personnel casualties and administer first aid to the injured.
6. Make rapid repairs to correct structural and equipment damage.

AREAS OF RESPONSIBILITY

The three primary areas of responsibility for damage control include the following:

1. The functional combination of all equipment, material, devices, and techniques that prevent and minimize damage and restore damaged equipment and structures. This damage can occur in wartime or peacetime.
2. The passive defense against conventional, nuclear, biological, and chemical warfare.
3. All active defense measures short of those designed to prevent successful delivery of an enemy attack by military means or sabotage.

PROFESSIONAL DEVELOPMENT

Because damage control covers a wide variety of areas, training is essential for an effective emergency party. This training is accomplished in several ways. You may learn through schools, correspondence courses, on-the-job training, shipboard training lectures, and films. Most of the training programs available are explained in the following paragraphs.

Navy Schools

There are a number of Navy schools to train personnel in damage control. Your damage control assistant normally requests quotas to send a complete repair party to a school as a unit. Members of the repair parties train together and learn to work as a unit. These schools include shipboard damage control, shipboard fire fighting, and aviation fire fighting. Figure 1-1 shows fire-fighting training being conducted at the Damage Control School in Great Lakes, Illinois. Refer

to the *Catalog of Navy Training Courses (CANTRAC)* for the latest listing of courses available. This catalog is available from your Education Services Office (ESO).



Figure 1-1. Damage control team training.

Nonresident Training Course

This nonresident training course (NRTC) is designed for the Damage Controlman rating. There are other recommended courses that are good sources of training; a good example is *Blueprint Reading and Sketching*, NAVEDTRA 82014. This and other courses may be ordered through your ESO.

On-the-Job Training

Another method of training is on-the-job training. This training method allows you to learn while performing your daily tasks. Your fellow workers and supervisors may teach you by sharing their knowledge with you. Additionally, you may learn on your own by studying applicable publications.

On-the-job training is also carried out through emergency drills. These drills help train emergency party personnel to perform their assignments in a professional manner. The drills also train individuals to work together as an effective unit.

Sources of Information

There are many valuable sources of information about damage control. Some of the more important of these sources of information that you should become familiar with are stated below.

MANUFACTURERS' TECHNICAL MANUALS.—You should have access to the manufacturer's technical manuals for your equipment. These manuals provide information on the operation, maintenance, and repair of a specific piece of equipment, and you should always use the one for the equipment you are required to work on.

NAVAL SHIPS' TECHNICAL MANUAL (NSTM).—A complete set of *Naval Ships' Technical Manuals* should be available in the engineering log room. They are usually available on a single CD-ROM and may be available on a ship-wide network. These manuals cover different aspects of damage control, which include the following: fire fighting, flooding, ship's stability, and CBR countermeasures. Study of the NSTMs will help you complete your damage control personnel qualification standards.

DAMAGE CONTROL BOOKS.—Damage control books are furnished to all naval ships over 220 feet long and to some select smaller ships. Ships under 220 feet long that are not issued a damage control book may develop their own. These books contain descriptive information, tables, and diagrams. Each book is pertinent to an individual ship. The information given covers the following six subjects:

1. "Damage control systems"
2. "Ship's compartmentation"
3. "Ship's piping systems"
4. "Ship's electrical systems"
5. "Ship's ventilation systems"
6. "General information"

Naval Sea Systems Command (NAVSEA) maintains a record of all damage control books distributed. The books may not be transferred without NAVSEA authorization. The engineer officer is normally the custodian of the damage control books. Upon transfer, this officer must account for all copies before passing custody to the relieving officer.

You may requisition additional books with diagrams lithographed in color from the Naval Supply Depot, Philadelphia. Books with black-and-white diagrams should be requested from the planning yard of the ship. Copies of the damage control book should be available in DC central, main engine control, and each repair party locker.

It is important to keep all copies of the ship's damage control book up to date. One copy should be considered the "master copy" and be kept current at all times by the damage control assistant (DCA). The master copy is then used to update the other copies. *NSTM*, chapter 079, volume 2, contains the guidelines for updating a damage control book. These changes include alterations completed by ship's force and those completed by other activities. When the ship is decommissioned and scheduled for disposal or

scrapping, the damage control books should be burned and their disposition reported to NAVSEA.

REPAIR PARTY MANUAL.—The type commander is responsible for the preparation of a standard repair party manual for ships under his or her authority. The repair party manual provides detailed information on the standard methods and techniques used in damage control as outlined in *U.S. Navy Regulations*, NWP 3-20.31.

The repair party manual should include damage control procedures covering emergency damage control communications, casualty power, and counterflooding (where applicable). Door-and-hatch locations, air-conditioning and ventilation systems, and compressed air systems are also included. In addition, a standard repair party manual may include the following information:

1. A listing of the important features of each repair party area, including machinery, storage spaces, location of repair lockers, and magazines
2. Protective measures involving material and personnel with respect to imminent air attack, surface attack, underwater attack, fire, collision, and CBR attack
3. Methods of investigating damage; necessary precautions and means of reporting damage
4. Use of equipment for the following purposes: fire fighting, flooding control, repairing damage in action (shoring, pipe patching, etc.)
5. Controlling CBR contamination (monitoring, reporting, and decontamination of material)
6. Personnel casualty control (first aid and decontamination)
7. Primary and alternate methods of providing emergency service to vital systems by means of casualty power, emergency communications, and jumpers to restore firemain or magazine sprinkling service
8. Damage control central (DCC) location, equipment layout, communications, and personnel
9. A chain of command diagram
10. A secondary DCC description
11. Repair parties personnel billets, including duties, functions, and responsibilities; subunits (where applicable); and required publications, plates, plans, and diagrams

NOTE

Charts, diagrams, or detailed listings of fittings are not required in the type repair party manual. Such information is available in other publications. One of these is the NAVSEA damage control book, which should be available at every repair party locker.

Commanding officers, with the assistance of their engineer officers and DCAs, are responsible for ensuring that the standard repair party manual for their ship has only correct, complete, and up-to-date information.

SHIP INFORMATION BOOK (SIB).—When a ship is built for the Navy, the builder prepares a ship information book (SIB). The ship’s crew uses the SIB to familiarize themselves with the ship’s characteristics. Normally the SIB will contain the following eight volumes:

1. *Hull and Mechanical*
2. *Propulsion Plant*
3. *Auxiliary Machinery, Piping, Ventilation, Heating, and Air-Conditioning Systems*
4. *Power and Lighting Systems*
5. *Electronic Systems*
6. *Interior Communications*
7. *Weapons Control Systems*
8. *Ballasting Systems*

A copy of the SIB is forwarded to NAVSEA. Then NAVSEA prints and distributes copies of the SIB to the appropriate locations. When changes are made to the ship, corrections to the SIB should be sent to NAVSEA. NAVSEA will incorporate the corrections, and reprint and distribute the revised SIB.

TRAINING FILMS.—Training films available are listed in the *Department of the Navy Catalog of Audiovisual Production Products*, OPNAVINST 3157.1. The training films are effective training tools especially for presentations of realistic situations. For example, one film shows an actual fire being fought on an aircraft carrier. The people in the films are not actors; they are sailors combating a casualty. The personnel casualties are real. These films will show that damage control is serious business and an “all-hands” responsibility.

PERSONNEL QUALIFICATION STANDARDS (PQS).—The *General Damage Control Qualification Standard*, NAVEDTRA 43119-2, is mandatory for all hands. You should also be familiar with the following damage control qualification standards:

- *Damage Control Emergency Parties Qualification Standard*, NAVEDTRA 43119-3
- *Damage Control Systems and Equipment Qualification Standard*, NAVEDTRA 43119-4
- *Division Damage Control Petty Officer (DCPO) Qualification Standard*, NAVEDTRA 43119-5

You will be assigned to a repair locker for general quarters and an in-port emergency party. You will be required to complete the appropriate sections of PQS that cover your assignments. You should try to complete all sections up to and including the section on “Repair Party Scene Leader.” In doing so, you will gain valuable knowledge in damage control, and, if necessary, you will be capable of taking over as scene leader during an emergency.

GENERAL SOURCES.—As a Damage Controlman you should understand the Ship’s Maintenance and Material Management (3-M) System, as well as supply and inventory control procedures. This knowledge is required for advancement. You will find the necessary information in the *Ship’s 3-M Manual*, OPNAVINST 4790.4 (series). Additionally, you will have responsibilities in other shipboard programs, such as *Quality Assurance*, CINCLANTFLT/CINCPACFLTINST. 4790.3; and the Heat Stress and Hearing Conservation Programs. These and other topics will be covered in more detail later.

REVIEW QUESTIONS

- Q1. Organization and teamwork are the key factors for successful damage control.
1. True
 2. False
- Q2. The basic objectives of shipboard damage control are as follows: take measures to prevent damage, minimize and localize damage as it occurs, accomplish repairs as soon as possible, restore equipment to operation, and care for injured personnel.
1. True
 2. False

- Q3. What person is normally responsible for requesting quotas to send a repair party to school for training?
1. Administrative officer
 2. Engineer officer
 3. Damage control party supervisor
 4. Damage control assistant
- Q4. What publications contain information (tailored to your ship) on damage control systems, ventilation systems, piping systems, electrical systems, and compartmentation?
1. Ship information book
 2. Damage control books
 3. *NSTM* 44 series
 4. NWP 3-20.31 and *Ship's 3-M Manual*
- Q5. What eight-volume series of books can help you familiarize yourself with your ship's characteristics?
1. NWP 3-20.31
 2. Damage control books
 3. Ship information book
 4. *NSTM* 99 series

DAMAGE CONTROL RESPONSIBILITIES OF KEY PERSONNEL

Learning Objective: Recall the damage control responsibilities of key personnel in the chain of command.

The damage control responsibilities presented in this chapter are taken from *U.S. Regulations, Surface Ship Survivability*, NWP 3-20.31, and OPNAVINST 3120.32A.

Damage control is the responsibility of "all hands" which includes everyone in each department aboard ship from the newest recruit to the commanding officer. Damage control is the responsibility of all hands. All personnel must know their assignments within the damage control organization and understand the importance of those assignments. Damage control cannot be overemphasized. The necessary state of readiness can only be achieved through a reliable damage control program. The program must be

supervised by an influential and energetic individual who is enthusiastic, well trained, and determined.

All areas of responsibility for damage control cannot be covered completely in this chapter; however, the basic responsibilities of key individuals are presented in the following paragraphs.

COMMANDING OFFICER

Chapter 7 of *U.S. Navy Regulations* describes the various broad responsibilities of the commanding officer (CO). One of the requirements is that the CO "...maintain his or her command in a state of maximum effectiveness for war or other service" The CO should "Immediately after a battle or action, repair damage so far as possible, (and) exert every effort to prepare his command for further service"

To carry out his or her orders, the commanding officer must ensure that the command is adequately trained. This training is done through lectures, schools, and continual exercises in all aspects of damage control. The commanding officer should be fully aware of all of the ship's weaknesses. These include the inadequacy and inoperability of all damage control equipment. Shortages and defects should be corrected immediately.

EXECUTIVE OFFICER

The executive officer (XO) advises the commanding officer on the status of the ship's damage control readiness. This officer must be intimately familiar with all damage control evolutions, and this includes supervision of all actions related to damage control.

The XO ensures that responsible personnel carry out the following requirements:

- Conduct damage control training for the ship's company.
- Maintain ship's readiness to combat all casualties and damage that threaten the ship.

OFFICER OF THE DECK

The officer of the deck (OOD) is the senior member of the underway watch team. As the primary assistant to the commanding officer on the bridge, the OOD will carry out the following duties and responsibilities:

- Be intimately familiar with the ship. This includes its material condition and the established procedures for emergencies.

- Know the correct course of action or options for various damage control situations.
- Promptly analyze a situation and take prompt, positive, and correct counteraction.
- In the absence of the commanding officer, maneuver the ship.

The OOD's ability to act properly and promptly will be in direct proportion to the officer's training, knowledge of the ship, damage control procedures, and equipment available.

COMMAND DUTY OFFICER IN PORT

The command duty officer (CDO) in port is designated by the commanding officer. This officer is eligible for command at sea and is the deputy to the executive officer for a prescribed period of time. The CDO will carry out the following duties and responsibilities:

- Carry out the ship's daily routine in port.
- Carry out the duties of the XO during the temporary absence of that officer.
- Advise and, if necessary, direct the OOD in matters concerning the general duties and safety of the ship.
- Keep informed of the ship's position, mooring lines, or ground tackle in use.
- Know the status of the engineering plant and all other matters that affect the safety and security of the ship.
- In times of danger or emergency, take any action necessary until relieved by a senior officer in the succession of command.
- Relieve the OOD when necessary for the safety of the ship, and inform the commanding officer when such action is taken.

DEPARTMENT HEADS

We can achieve adequate damage control readiness only by the participation of all departments aboard ship. For this reason, each department head will carry out the following duties and responsibilities:

- Ensure that the material conditions of readiness within the department are at their best. Compartment check-off lists provided by the damage control assistant (DCA) prescribe material conditions. The DCA is discussed later in this chapter.

- Provide for continual and periodic inspections of department spaces according to current planned maintenance system (PMS) procedures.
- Require that damage control equipment and fittings be maintained in their proper locations and in operating order.
- Provide personnel for damage control, repair, fire, salvage, and rescue parties, and for other assignments as required by the ship's organization bills.
- Require that departmental material and equipment are secured to protect them from damage by heavy seas.
- Require an immediate report to the DCA of any deficiency in damage control markings, devices, fittings, equipment, or material, and initiate corrective action.
- Train personnel in damage control matters in coordination with the DCA.
- Be prepared to strip ship, or clear for action, according to the ship's instructions.

ENGINEER OFFICER

The engineer officer is also known as the damage control officer. This officer is responsible to the commanding officer for the following duties and responsibilities:

- The operation, care, and maintenance of the main propulsion plant, auxiliary machinery, and piping systems
- The control of damage
- The operation and maintenance of electric power generators and distribution systems
- The repairs to the hull
- The repairs to material and equipment of other departments that are beyond the capacity of those departments but within the capacity of the engineering department

In amplification of the duties contained in *U.S. Navy Regulations*, the engineer officer is required to carry out the following duties and responsibilities:

- Maintain the hull, machinery, and electrical system in battle readiness.

- Supervise fire fighting. Ensure that the ship's fire bill is adequate. Assign and instruct personnel according to the provisions of the bill.
- Maintain interior communication equipment.
- Control and restore engineering and ship control casualties.
- Coordinate all naval shipyard work. This includes all correspondence or communications on alterations or repairs to the hull and installed equipment.
- Maintain the PMS and other operating and maintenance records.
- Act as technical assistant to the executive officer to carry out chemical, biological, and radiological (CBR) defense procedures.
- Provide ship facilities, equipment, and key personnel to repair the hull and machinery. Ensure repairs to material and equipment of other departments that are within the capacity of the engineering department.
- Organize Repair 5 (Propulsion) according to the ship's battle bill.
- Supervise the training of Repair 5.
- Assign appropriate engineering ratings to other repair parties according to the ship's battle bill.

DAMAGE CONTROL ASSISTANT

The damage control assistant (DCA) is responsible to the engineer officer for the control of damage. This includes the control of stability, list, and trim. It also includes fighting fires, repairing damage, and maintaining CBR defense.

The DCA is the overall coordinator of damage control matters within the command organization. This responsibility includes the ship's damage control training program. During emergency situations, the DCA controls the damage control problem with the technical advice and assistance of all departments. Fires and other damage that occur while the ship is at general quarters will be handled as a battle casualty. Corrective action under the direction of the DCA will be taken by the repair parties in the vicinity. On aircraft carriers, the ship's air officer will direct repair parties for fires in aircraft or associated equipment on the flight deck or in the hangar bays.

The DCA is required to perform the following damage control duties and responsibilities:

- Prepare directives for the signature of the commanding officer in connection with all damage control functions requiring coordination of departments.
- Submit to the planning board for training, a schedule of all-hands damage control training requirements, including battle problem requirements.
- Prepare a damage control training syllabus, and provide damage control instructors for all-hands training.
- Furnish standard damage control equipment (tools, portable lights, and portable pumps) to repair party lockers and to other prescribed locations throughout the ship. Conduct periodic inspections of such equipment.
- Assign Damage Controlmen and Hull Maintenance Technicians to various repair parties according to the ship's battle bill and manning document.
- Conduct inspections throughout the ship, accompanied by the cognizant department head, to ensure that the ship's watertight integrity is maintained. Ensure that all departments are maintaining a high degree of damage control readiness.
- Ensure that the master damage control book is updated whenever alterations are made to the ship.
- Ensure that damage control compartment check-off lists are posted.
- Ensure that damage control markings, routes, stations, and labels are posted throughout the ship.
- Ensure that emergency escape routes to weather decks are clearly labeled.
- Maintain a damage control central (DCC) with facilities to evaluate damage to the ship's hull and equipment and to make decisions to counteract the effects of such damages. Coordinate repair parties and keep the commanding officer informed of major developments.
- Prescribe routes for transporting injured personnel to battle dressing stations.

- Ensure that an effective organization is always present for execution of each of the emergency bills.
- Inform the engineer officer of any condition or practice that lowers the damage control readiness of the ship.
- Organize Repairs 1, 2, 3, 4, and 7 according to the ship's battle bill.
- Personally direct the training of Repairs 1, 2, 3, 4, and 7, and DCC personnel.
- Ensure, in coordination with department heads, that DCPOs are trained to accomplish their assigned duties.
- Act as or supervise the duties of the gas free engineer.
- Ensure that a liquid load status is provided daily to damage control central and all repair lockers (list status in feet and inches).

DAMAGE CONTROL SUPERVISOR

The damage control supervisor (DCS), when assigned, will carry out the following duties and responsibilities:

- Supervise the maintenance of any material condition of readiness in effect on the ship. This includes the responsibility to check, repair, and keep the various hull systems in full operating condition.
- Report directly to the OOD on all matters affecting the watertight integrity, stability, or other conditions that affect the safety of the ship.
- Report to the DCA for technical control and matters affecting the administration of the watch. The damage control patrols and the petty officers in charge of repair parties report to the DCS.
- Maintain a written damage control log. The log entries will show the hourly readings of the firemain pressure and the number of fire pumps in operation. Make entries such as the ship's getting underway, anchoring, and mooring. Include special evolutions such as general quarters, emergency drills, and the setting of material conditions, the discrepancies reported, and the corrective action taken.

- Supervise the maintenance of the ship's damage control closure log. List all fittings that are in violation of the prescribed material condition of readiness. All entries are made in ink and no erasures are to be made. All errors are corrected by drawing a line through the error and initialing it; then make the correct entry on the following line. The dates for opening the fitting include the day, month, and year. Keep the closure log sheets on file for a period of 6 months.

All log entries will include the following information:

1. Name of the person requesting permission
2. Rate of the person requesting permission
3. Type of fitting opened
4. Identification of the fitting
5. Classification of the fitting
6. Time the fitting was opened
7. Estimated time the fitting is to remain open
8. Time the fitting was closed
9. Name of the person granting permission
10. Rate of the person granting permission

NOTE

The estimated time a fitting is open will not be more than 24 hours. At the end of the 24 hours, the fitting will be either logged open again or will be logged closed. Anyone who violates the material condition of readiness in effect without permission to do so will be subject to disciplinary action.

- At the end of each watch, the DCS obtains from the ship's oil king a report on which fuel tanks were emptied during the watch. The DCS lists in the damage control log the compartment numbers of the tanks and whether or not they have been ballasted.
- The DCS reports hourly to the OOD on the status of the ship's watertight integrity.
- When the ship is under way, the DCS has the sounding and security watch take and report

soundings of all voids and cofferdams at least once during each 4-hour watch. While in port, soundings are taken at least once each day. In addition, the DCS has to watch check the material condition of readiness in their respective areas and report any corrective action taken in this respect.

- Ensure that the draft is taken, or computed if at sea, and logged daily on the 0400 to 0800 watch. The draft should be taken daily, before entering or leaving port, before and after fueling, when taking on supplies, or when rearming.
- Notify the OOD, DCA, and weapons department duty officer when the fire alarm board indicates that the temperature of any magazine is above 105°F.
- Ensure that the master key to the repair lockers is issued only to authorized personnel.
- At 1600 daily, request the OOD have the word passed, "All divisions check the setting of material condition YOKE. Make reports to damage control central. " After a half hour, ensure that any division that has not reported does so.

FIRE MARSHALL

The fire marshall is an assistant to the engineer officer and aids the DCA in the training of personnel and the prevention and fighting of fires. The fire marshal must be thoroughly familiar with the following documents:

- *NSTM*, "Gas Free Engineering," chapter 074, volume 3
- *NSTM*, "Practical Damage Control," chapter 079, volume 2
- *NSTM*, "Surface Ship Firefighting," chapter 555, volume 1
- Ship's instructions
- Ship information book
- Ship's plans
- Ship's compartmentation

The fire marshall should conduct daily inspections throughout the ship, paying particular attention to good housekeeping, fire equipment, and fire and safety hazards. The fire marshal reports fire hazards and

recommends corrective action. These reports are submitted to the DCA with copies to the XO and appropriate department heads. A follow-up inspection should be made to ensure that corrective action has been taken.

When in port, the fire marshal is responsible for the supervision of the in-port fire party. In this situation, the fire marshal reports directly to the command duty officer.

DIVISION OFFICERS

Division officers are responsible for visual inspections of their spaces, and this officer should take all practicable preventive measures before damage occurs. This requirement includes maintenance of the ship's watertight and airtight integrity, removal of fire hazards, and maintenance of emergency equipment. This is done by making daily inspections of divisional spaces and equipment to verify that they are maintained in the best possible condition. The following publications are helpful to the division officer conducting these checks.

- *NSTM*, "Practical Damage Control," chapter 079, volume 2
- *NSTM*, "Inspections, Tests, Records, and Reports," chapter 090
- *NSTM*, "Lighting Ships," chapter 330
- *NSTM*, "Surface Ship Firefighting," chapter 555, volume 1

DAMAGE CONTROL PETTY OFFICER

A senior petty officer within each division is assigned as the division damage control petty officer (DCPO) for that division. The DCPO is responsible, under the division leading petty officer (LPO), for damage control functions of the division and related matters. Outside normal working hours, duty division section leaders will perform DCPO duties on their duty days.

Each DCPO is responsible for performing and understanding the following eleven duties and responsibilities:

1. Understand all phases of the ship's damage control, fire fighting, and CBR defense procedures.
2. Assist in the instruction of division personnel in damage control, fire fighting, and CBR defense procedures.

3. Ensure the preparation and maintenance of damage control compartment check-off lists for all divisional spaces.

4. Supervise the setting of specified damage control material conditions within divisional spaces and make required reports.

5. Weigh portable CO₂ bottles, inspect and test damage control and fire-fighting equipment, and prepare required reports for approval by the division officer according to current ship's instruction.

6. Ensure that the required battle lanterns, dogging wrenches, spanner wrenches, and other damage control equipment are in place and in a usable condition in all divisional spaces.

7. Ensure that all compartments, piping, cables, and damage control and fire-fighting equipment are properly stenciled or identified by color codes.

8. Ensure the posting of safety precautions and operating instructions in required divisional spaces.

9. Assist the division officer in the inspection of divisional spaces for cleanliness and preservation, and assist in the preparation of required reports.

10. Conduct daily inspections of divisional spaces for the elimination of fire hazards.

11. Perform such other duties with reference to damage control and maintenance of divisional spaces as directed by supervisory personnel.

DAMAGE CONTROLMAN

As a Damage Controlman (DC) you will work with damage control daily. During your daily routine, you will work to prevent fires and flooding while accomplishing your regular job. You will inspect and maintain damage control equipment and systems. When you first start out, you will be assigned to an emergency damage control team. You will be required to familiarize yourself with your ship's systems and all aspects of damage control. Eventually, you will qualify as scene leader for the emergency damage control teams. You will also be expected to help train other personnel in damage control. Although damage control is an ALL-HANDS responsibility, the DC community ensures that damage control readiness is kept at the highest possible level.

REVIEW QUESTIONS

- Q6. What person is responsible for damage control?
1. Administrative officer
 2. Engineer officer
 3. Damage control assistant
 4. Damage control is an all-hands responsibility
- Q7. What officer is also known as the damage control officer?
1. Administrative officer
 2. Engineer officer
 3. Damage control assistant
 4. Commanding officer
- Q8. When logging fittings in the damage control closure log, you may log a fitting open for what maximum amount of time?
1. 10 hours
 2. 12 hours
 3. 18 hours
 4. 24 hours
- Q9. What assistant to the engineer officer assists the damage control assistant in providing damage control training for the ship's company?
1. Damage control supervisor
 2. Fire marshal
 3. Damage control assistant
 4. Damage control petty officer

DAMAGE CONTROL ADMINISTRATION

Learning Objective: Recall various damage control administrative programs, directives, and reports.

Provisions have been developed to administer shipboard damage control effectively. These include bills, directives, reports, and programs. These administrative requirements are discussed below.

BILLS AND DIRECTIVES

There are various ship's bills and directives governing the crew's actions under certain circumstances. It may be necessary for you to provide input to your chain of command so that the most qualified personnel are in place for these evolutions.

Battle Bill

The ship's Battle Bill is tailored to your ship for battle organization. You may need to provide information to the operations department when it is updated.

Rescue and Assistance Bill

The Rescue and Assistance Bill organizes qualified personnel by duty section or the entire ship to render emergency assistance outside the ship. Ship's security must be maintained within acceptable standards. The ship's engineer officer shall be responsible for the Rescue and Assistance Bill under the supervision of the executive officer.

Cold Weather Bill

The Cold Weather Bill is used to prepare the ship for cold weather operations. The executive officer is responsible for this bill and shall supervise overall preparation for cold weather deployment.

Toxic Gas Bill

The Toxic Gas Bill specifies the procedures and assigns duties and responsibilities for controlling and minimizing toxic gas casualties. The DCA is responsible for this bill.

Darken Ship Bill

The Darken Ship Bill is used to ensure that all DOG ZEBRA fittings are closed by applicable divisions whenever darken ship is ordered. The DCA shall assign responsibilities to divisions for maintaining and closing DOG ZEBRA fittings. The DCA is responsible for this bill.

Engineering Department Training Records

Training records must be kept to an absolute minimum and need only be maintained to show training has been accomplished and what remains to be done. Training records shall be retained for an individual for as long as he or she is assigned to the unit.

Damage Control Selective Records

There is technical documentation onboard which must be maintained current for the life of the ship. Throughout the life of a ship, there may be major equipment changes or even compartment or system modifications. These changes must be documented in order to assure that other naval activities are aware of these changes and to assure proper support for the systems or equipment involved. Refer to *Fleet Modernization Program Management and Operations Manual* (NAVSEA SL1720-AA-MAN-010) for information on updating these records.

Master Compartment Check-Off List (CCOL)

A Master CCOL is developed for each ship at the time of its construction. CCOLs are provided in each compartment of the ship and provide information on all fittings within the compartment. The DCA maintains a master CCOL book and a backup disk when the CCOL is computerized.

REPORTS

There are three equipment reports used in damage control administration. These reports are the CASREP, CASCOR and DC Equipment Test and Inspection reports.

Casualty Reports (CASREPs)

CASREPs are submitted to report the occurrence of a significant equipment casualty or malfunction which cannot be corrected within 48 hours and which reduces the ship's ability to perform its mission.

Casualty Correction (CASCOR)

A CASCOR is submitted when equipment, which has been the subject of casualty report, is back in operational condition. This report shall be submitted as soon as possible after the casualty has been corrected.

DC Equipment Test and Inspection Reports

The 3-M (Maintenance Material Management) Program requires the testing of damage control equipment and preparation of inspection reports. These actions improve the reliability of systems and equipment through documentation of maintenance information for analysis.

PROGRAMS

There are several programs that support damage control efforts. You may have some responsibility, either directly or as a supervisor, of these programs. The programs you will most likely be involved in are the Quality Assurance (QA) Program (to include inspections, reports, and audits), the Hearing Conservation Program, and the Heat Stress Program.

Quality Assurance (QA) Program

The QA Program is very important to meeting damage control requirements. This program is fully presented in CINCLANTFLT/CINCPACFLTINST 4790. In the following paragraphs we discuss the formal work and the control work packages which you may be often required to compose and complete.

INSPECTIONS AND REPORTS.—A formal work package for the QA Program combines all the applicable requirements for a particular maintenance task. In other words, it provides a plan for getting the job done safely while meeting the technical requirements. This action ensures that the complete scope of work, prerequisites, and preparations are known before starting the job. You document when the work is properly completed and the equipment is properly tested and restored to service.

A controlled work package consists of a formal work procedure and various quality assurance forms. These are used to ensure program compliance. These requirements include work authorization, use of proper material, and that critical specifications are met and required tests are satisfactorily completed.

QA AUDITS.—Audits provide a means of comparing the records of completed jobs to their requirements in order to ensure compliance. There are various types of audits. The two types of audits used by the ship's force are as follows:

1. Vertical Audit. These audits take into account all aspects of a job or task by examining the documentation used to certify or recertify the system/component during and after repairs. They not only track the task from start to finish but also verify the validity of the technical data and the hardware used. These audits may examine any aspect of the task (training and qualification of personnel, technical and production requirements, cleanliness, or material control).

2. Horizontal Audit. These audits are normally conducted on only one specific area or aspect of the QA Program (re-entry control [REC], welding, training, qualification, or testing). They focus on the particular area and do not track a job from start to finish as the vertical audit does.

Hearing Conservation Program

Hearing loss has been and continues to be a source of concern within the Navy. Monitoring of the Hearing Conservation Program is the responsibility of the safety officer. The safety officer's responsibilities include the following:

1. Ensure the program is evaluated for compliance and effectiveness.
2. Maintain a record of noise hazardous areas and equipment and the posting of each.
3. On ships having audiometric testing booths installed, annual certification of the booths and training of the audiometric technicians is required.

Heat Stress Program

The Heat Stress Program establishes Navy policy and procedures for the control of personnel exposure to heat stress. Heat stress is any combination of air temperature, thermal radiation, humidity, airflow, and workload, which may stress the body, as it attempts to regulate body temperature. The safety officer is also responsible for monitoring this program for compliance.

REVIEW QUESTIONS

- Q10. The purpose of the Rescue and Assistance Bill is to organize qualified personnel to provide assistance outside the command.
1. True
 2. False
- Q11. What person is responsible for the Toxic Gas Bill?
1. Administrative officer
 2. Engineer officer
 3. Damage control party supervisor
 4. Damage control assistant

SUMMARY

You have been introduced to damage control in this chapter. We discussed the responsibilities of individual personnel in a ship's DC organization and sources of information for training. We also covered various administrative programs for which you may have responsibilities. The remainder of this manual will cover the equipment, systems, and procedures used in damage control. Remember, damage control is an ALL-HANDS responsibility. However, the Damage Controlman maintains the majority of the equipment and systems and is recognized by shipmates in other ratings as an expert.

- Q12. What report is submitted after an equipment repair that was reported as a CASREP is completed?
1. CASCOR
 2. CASCAR
 3. CASREP
 4. DC equipment report
- Q13. What officer monitors the Heat Stress Program for compliance?
1. Administrative officer
 2. Engineer officer
 3. Safety officer
 4. DC equipment report

REVIEW ANSWERS

- A1. Organization and teamwork are considered the key factors for successful damage control operations. **(1) True**
- A2. The basic objectives of shipboard damage control are as follows: take measures to prevent damage, minimize and localize damage as it occurs, accomplish repairs as soon as possible, restore equipment to operation, and care for injured personnel. **(1) True**
- A3. What person is normally responsible for requesting quotas to send a repair party to school for training? **(4) Damage control assistant**
- A4. What publication contains information (tailored to your ship) on damage control systems, ventilation systems, piping systems, electrical systems, and compartmentation? **(2) Damage control books**
- A5. What eight-volume series of books can help you familiarize yourself with your ship's characteristics? **(3) Ship information book**
- A6. What person is responsible for damage control? **(4) Damage control is an all-hands responsibility**
- A7. What officer is also known as the damage control officer? **(2) Engineer officer**
- A8. When logging fittings in the damage control closure log, you may log a fitting open for what maximum amount of time? **(4) 24 hours**
- A9. What assistant to the engineer officer assists the damage control assistant in providing damage control training for the ship's company? **(2) Fire marshal**
- A10. The purpose of the Rescue and Assistance Bill is to organize qualified personnel to provide assistance outside the command. **(1) True**
- A11. What person is responsible for the Toxic Gas Bill? **(4) Damage control assistant**
- A12. What report is submitted after an equipment repair that was reported as a CASREP is completed? **(1) CASCOR**
- A13. What officer monitors the Heat Stress Program for compliance? **(3) Safety officer**