CHAPTER 13
SHIPBOARD DAMAGE CONTROL TRAINING

Learning Objectives: Recall the organization and responsibilities of the damage control training team (DCTT) and the objectives of DCTT training.

As a general rule, it is accepted that any senior Damage Controlman should have the ability to develop and conduct damage control exercises to provide shipboard personnel training in damage control readiness. This chapter is designed to introduce you to the organization and function of the damage control training team (DCTT) and the importance of ongoing DCTT training. The information provided will enhance your ability to provide classroom lectures and develop in-port and at-sea damage control training scenarios.

TRAINING TEAM RESPONSIBILITIES
Learning Objectives: Recall the need for damage control training programs and the organization and responsibilities of the damage control training team.

The purpose for damage control training is to provide a means to increase individual or team skills in the capability to use and operate both portable and installed equipment. Training should also result in an increased knowledge of specific damage control tactics and procedures that allows personnel to complete required tasks in a more expeditious manner.

The key to a successful training program is to develop a self-sustaining training capability in each ship through the use of onboard training teams. Fleet training resources are used to build this capability by “training the trainers” who, in turn, train the shipboard watch standers and repair parties.

TRAINING TEAM FUNCTIONS

Training teams provide five general functions. They are as follows:

1. TRAINING. Training includes both individual and team training and encompasses prebriefing and debriefing actions as well as providing feedback during actual training scenario.

2. EXERCISE CONTROL. Exercise control includes initiation of the exercise and provides responses to watch stander/team actions.

3. EXERCISE ROLE-PLAY. For example, the training teams perform various positions in a damage control training scenario.

4. DRILLS. The training team develops a drill package and then conducts the drill. The team evaluates the drill results and afterward critiques the results with drill participants.

5. MONITOR SAFETY. Safety is ALWAYS a paramount concern. Training will be immediately stopped if any unsafe condition develops during an exercise or drill.

SHIPBOARD TRAINING TEAMS

Training teams should include a core group of the most knowledgeable and experienced personnel from the ship. These people should bring enthusiasm to the training process. The size of the crew, number of qualified personnel, complexity of the exercise, and safety requirements will influence the size of the team. In addition, some training objectives for a particular event may not require the stationing of a full training team. Ships may find it desirable to have a multi-section training team program in which a training team will be formed from one watch section to train the other and vice versa.

The training teams that should be established are as follows:

1. Integrated training team (ITT).
2. Combat systems training team (CSTT).
3. Engineering casualty control training team (ECTT).
4. Damage control training team (DCTT).
5. Seamanship training team (STT).
6. Aviation training team (ATT). ATT is required for LHA/LHD/LPH/MCS/LPD only.
7. Medical training team (MTT). MTT is required only for ships with medical departments headed by medical officers.

The training teams are responsible, under their team leaders, for identification, formulation, integration, and conduct of all phases of watch stander
and team training. These responsibilities include the following:

- Plan, brief, conduct, and debrief training using applicable instructions and publications.
- Raise watch stander level of knowledge (LOK) through a program that combines evolutions, seminars, and embedded training devices in addition to drills and exercises.
- Assess the readiness and effectiveness of watch teams in the performance of watch station specific tasks.
- Analyze problem areas or training deficiencies and initiate corrective actions to eliminate the possibility of personnel injury and damage to equipment.

**DAMAGE CONTROL TRAINING TEAM (DCTT) MEMBERSHIP**

The damage control training team is composed of qualified senior members of the ship’s crew specifically tasked to ensure the ship’s company maintains the highest level of battle readiness. This training is maintained through comprehensive training programs, which include lectures and drill scenarios.

Members of the DCTT should include the following: team leader, team coordinator, watch station evaluators, trainers, and safety observers. The responsibilities of these members of the training team are stated below.

**Damage Control Training Team (DCTT) Team Leader**

The executive officer serves as the chairman of the planning board for training and team leader of the DCTT. The executive officer will coordinate the planning and execution of the ship’s training effort. The team leader of the DCTT is responsible for the management of the training team. This requires the team leader to conduct additional duties that include the following:

- Be a member of the planning board for training (PB4T) and the DCTT.
- Formulate a training package tailored to specific integrated or individual functional area team training objectives.
- Identify training constraints, disclosures and simulations, and annotate the training package accordingly.

- Present the proposed training package to the commanding officer for approval.
- Conduct a prebrief for each training event for training team members and the repair party being trained.
- Ensure the training team before each training event conducts a thorough safety walk-thru to ensure conditions have not changed.
- Supervise the conduct of the training event.
- Conduct the training event debriefs.
- Establish a feedback mechanism to address deficiencies identified during exercises conducted.
- Identify training shortfalls and lessons learned.

**Damage Control Training Team (DCTT) Team Coordinator**

The ship’s senior Damage Controlman or Hull Maintenance Technician normally hold the position of DCTT team coordinator. The team coordinator is responsible to the DCTT team leader for the following:

- Organizing all team training periods, developing training event plans, and making all preparations in support of the event execution.
- Serving as overall manager of the training event briefs, performance, and debriefs.
- Training of team members in the proper conduct of their duties as drill initiators, exercise observers, and safety observers. These duties also include the operational risk management (ORM) process.
- Compiling the results of the training event and submit the event evaluation sheets along with the critique sheets to the team leader for review.
- Acting as coordinator for all recommendations and feedback concerning the training team.

**Trainers, Evaluators, and Safety Observers**

Trainers, evaluators, and safety observers directly observe individual and team performance of the training event and some may act as initiators. Their duties include the following:

- Conduct on-site observations and evaluations.
- Conduct safety walk through and pre-event checks.
• Provide training/prompting as necessary to meet the training objective during exercises conducted in the training mode.
• Normally provide prompting only as required to prevent disruption of the event timeline or for safety reasons during exercises conducted in the evaluation mode.
• Provide immediate feedback to individual watchstanders upon completion of the training event.
• Provide a post-exercise debrief on observations noted, lessons learned, and recommendations for corrective actions.

OBJECTIVES AND METHODS OF DAMAGE CONTROL TRAINING

Learning Objectives: Recall the objectives and methods of damage control training.

The goal of damage control training is to organize individual and team training to ensure shipboard readiness. An effective training program is based on a logical continuum of training, starting with basic knowledge/actions and progressing to more complex evolutions. This type of training includes classroom lectures and intensive casualty drill scenarios.

OBJECTIVES OF DAMAGE CONTROL TRAINING

Consistent training produces an optimal level of readiness that prepares members of repair party teams to react more efficiently and effectively to actual casualties. The general objectives of damage control training include the following:

• Writing and conducting various damage control exercises
• Developing the ability to meet training objectives as briefed
• Developing the ability to assess repair parties in all DC exercises
• Evaluating the ability to set and maintain material condition ZEBRA
• Developing the ability to recognize unsafe actions and conditions
• Developing the ability to recognize material deficiencies in damage control equipment and damage control fittings
• Developing the ability to brief, execute, debrief, and critique damage control exercises

Familiarization with basic damage control doctrine as directed in the following: Naval Ships Technical Manual (NSTM), chapter 555; NSTM,
Damage Control Assistant (DCA)

The specific damage control training objectives for the damage control assistant (DCA) for damage control training are as follows:

- Training in the coordinating and monitoring of repair party’s actions in multiple hit damage control problems
- Training in communicating vital information to ship control stations
- Training in evaluating damage and setting priorities for repair actions
- Providing informal material deficiency assessment
- Training in directing CBR defense postures

Damage Control Repair Parties

The specific objectives of damage control training for damage control repair parties include the following:

- Executing various damage control exercises
- Ensuring all repair party members can don and operate SCBAs, OBAs, and EEBDs
- Conducting informal inventories and inspection of repair party equipment
- Exercising pipe patching, shoring, dewatering, and plugging teams in hands-on drills
- Training CBR teams in proper monitoring, decontamination, and contamination control procedures
- Training CCA/decon personnel in setting up and processing contaminated personnel
- Developing the ability to set material conditions

In-port Damage Control Training Team

The responsibilities of the in-port damage control training team for damage control training are as follows:

- Training covering the duties of the in-port damage control training team
- Providing exercises in fire, underwater hull damage, and toxic gas drills
- Training in rescue and assistance

Damage Control Petty Officers

The responsibilities of damage control petty officers for damage control training are as follows:

- Training on responsibilities for setting and maintaining material YOKE
- Training on setting requirements for material condition YOKE
- Training on maintenance of portable damage control equipment

METHODS OF DAMAGE CONTROL TRAINING

There are many examples of effective training methods. One is lectures on various portable and installed damage control equipment. The lecture method of training discusses the basic parts, the functions of each part, and the operation of equipment with limiting parameters. Another method of training is hands-on training, sometimes called demonstration/performance; for example, having the trainee demonstrate the proper setup and operation of the P-100 fire-fighting pump. Also, training could include developing and conducting a simple scenario for in-port fire drills.

Scenarios

Experience has proven that training scenarios provide a good means for training teams to conduct efficient exercises and drills, including integrated training. The ultimate goal is for the ship’s training teams to attain self-sufficiency and to maintain proficiency by conducting realistic, safe, and progressive scenarios designed to meet specific training objectives. To be effective, training must be scheduled and conducted beyond the basic training phase and continue throughout the entire operating cycle.
Effective integrated scenario-based training exercises the ship as a complete system. It affects multi-mission areas, not merely parallel/simultaneous exercises, and demonstrates the intra-dependency and interdependency of systems. Designing and conducting scenarios that demonstrate cause and effect relationships between systems are the essence of integrated training. For example, loss of firemain pressure could also cause the loss of your aqueous film-forming foam (AFFF) stations reducing a ship’s fire-fighting capabilities.

Ship-wide integrated training efforts involve significant commitment of personnel and time, because this training involves more complex development and planning. Functional area training can be conducted independently by each training team as time and resources permit.

**Coordination Between Training Teams**

Senior Damage Controlman personnel find it necessary to coordinate, develop, and conduct intensive training, such as a main space fire or flooding drill. Development of such comprehensive shipboard damage control training programs often requires the development of drills that make coordination between training teams vitally important. These coordination efforts run from simple to complex, depending on the training objective. Some factors that must be considered to complete these coordination efforts include the following:

1. **Props.**
   - What props are required?
   - Has there been a review of the lists of props presented in AWP-3-20.31 or provided by afloat training group (ATG) publications?
   - How much of the requirement can a prop realistically simulate?
2. A logical drill progression.
3. The time allotted.
4. How will this drill impact other divisions, departments, and the ship as a whole, especially electrical drills or drills that impact ships speed or maneuverability?
5. **SAFETY.** Safety is a primary concern during all training events. If an unsafe condition exists, the training event should be STOPPED until a safe condition is established. During training, planning, and operations, the operational risk management (ORM) process must be used. The training team leaders are responsible for ensuring that proper procedures are used in planning training events. A safety walk through must always be conducted before training to ensure no conditions have changed before drills and the results reported to the team leader. Affected spaces and equipment must be checked for things like missing deck plates, damaged or missing handrails, electrical hazards, and so forth. During all training evolutions the trainer must constantly monitor for safety hazards and practices and be ready to correct any discrepancies even if it means stopping training or a drill-in process.

Damage control training effectiveness is directly related to realistic training scenarios. Too many simulations weaken drills, causing personnel to lose interest and enthusiasm, which significantly degrades training effectiveness. DCTT disclosures must be realistic and clear; manipulating indicators, staging realistic props, and generating smoke and standard disclosure techniques will reduce confusion and increase training effectiveness. Table 13-1 provides a list of recommended methods and techniques for the use of props that the DCTT can apply when developing training scenarios.

**DRILL GUIDE DEVELOPMENT**

**Learning Objective:** Recall the requirements and guidance provided for development and implementation of drill guides for damage control training.

Afloat training groups (ATGs) provide Navy ships with examples and packages of recommended damage control drills. An example of the contents of a typical drill scenario is as follows:

1. **DEFINITION:** A drill guide is a standardized procedure for conducting casualty/damage control training.
   2. **NUMBERING:** Each drill guide should be identified with a two-part code. For example: DG01/SLQ-32, DG02/TSSE 7, DG03/DCMS CBR-D, and so on.

Part 1 identifies the drill guide number.

Part 2 identifies the system/scenario/event. Some examples of these are as follows:
<table>
<thead>
<tr>
<th>TYPE OF SIMULATED TRAINING</th>
<th>EQUIPMENT AND PROPS THAT CAN BE USED</th>
<th>REMARKS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Presence of Fire</td>
<td>Red lens flashlight with red streamers above waist level&lt;br&gt;Red rags&lt;br&gt;Strobe light - used in cableways or on electrical panels to simulate class CHARLIE fire&lt;br&gt;Red flashing beacon - rotating light to simulate flames&lt;br&gt;Activate high temp alarm</td>
<td>Examples of training goals: Increase fire-fighter’s proficiency&lt;br&gt;Simulate flame effectiveness of smoke boundaries, etc.&lt;br&gt;Desmoking procedures&lt;br&gt;Smoke curtain effectiveness&lt;br&gt;NFTI/Fire-finder training</td>
</tr>
<tr>
<td>Heat Source for NFTI/Fire Finder</td>
<td>Hot potato&lt;br&gt;Heat gun&lt;br&gt;Micro waved bag of rice</td>
<td>DCTT DRESS&lt;br&gt;Distinguishing clothing markings include the following: Arm bands, red ball caps, red coveralls, flight deck jerseys, etc.</td>
</tr>
<tr>
<td>Fire Contained</td>
<td>Props at waist level</td>
<td>EMERGENCY EGRESS&lt;br&gt;Use blindfolds for all personnel. Use training EEBDs if sufficient quantities are available.</td>
</tr>
<tr>
<td>Fire Out</td>
<td>Props out of sight, on the deck, or turned off</td>
<td>DISCLOSURES AND SIMULATIONS&lt;br&gt;Halon/CO₂ flooding released: Operate pressure switches for ventilation shutdown and alarms</td>
</tr>
<tr>
<td>Smoke</td>
<td>Smoke machine</td>
<td>CO₂ dumped in module/enclosure: Place white paper over glass window.</td>
</tr>
<tr>
<td>Hang Fire</td>
<td>White rags&lt;br&gt;Place heat source prop in space</td>
<td>Fire/smoke in module/enclosure: Place red and black design/flag over observation window.</td>
</tr>
<tr>
<td>Activation</td>
<td>Allow plugman to open valve, then DCTT secure it</td>
<td>Alarms: Place chem-lights at several locations after fire party has extinguished main fire.</td>
</tr>
<tr>
<td>CO₂</td>
<td>White rag or talcum powder</td>
<td>Exothermic Cutters: Use topside on scrap metal.</td>
</tr>
<tr>
<td>AFFF</td>
<td>White rag or plastic bag full of packing materials (white styrofoam popcorn)</td>
<td></td>
</tr>
<tr>
<td>PKP</td>
<td>Purple rag</td>
<td></td>
</tr>
<tr>
<td>Desmoking</td>
<td>Remove props. Actual removal of smoke using positive ventilation or portable blowers</td>
<td></td>
</tr>
<tr>
<td>TYPE OF SIMULATED TRAINING</td>
<td>EQUIPMENT AND PROPS THAT CAN BE USED</td>
<td>REMARKS</td>
</tr>
<tr>
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<td>-------------------------------------------------------------------------</td>
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<tr>
<td>Jammed WTD/WTH</td>
<td>Large masking tape X on the fitting; DCCT member hold fitting handle to prevent opening</td>
<td>Sparking: Use welder’s sparking tool or strobe light</td>
</tr>
<tr>
<td>Hot Surface</td>
<td>Bubble wrap on fitting, deck, or bulkhead or piece of charred wood</td>
<td>Explosion: Bang on deck plates, the more noise, the better the drills.</td>
</tr>
<tr>
<td>Bulkhead/Deck</td>
<td>Size of hole cut from black sheet rubber and placed in position</td>
<td>REPAIR PARTY ACTION should include:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Charge fire hoses for all drills.</td>
</tr>
<tr>
<td>Gas Free Test</td>
<td>Grease pencil marks on 4 gas analyzer, explosive meter or O2 indicator and Draeger tubes.</td>
<td>Secure hose at the plug. To provide realistic hose handling training depending on drill scenario objectives.</td>
</tr>
<tr>
<td>Electrical Isolation</td>
<td>Actual isolation and hang SECURED signs after watch stander places hands on correct component</td>
<td>No charged fire hose should be allowed into an electronics space for training purposes.</td>
</tr>
<tr>
<td>OBA Activation</td>
<td>Fire-fighter member takes actual canister to scene. A DCTT member takes canister and replaces it with sticker or masking tape with date written on it</td>
<td>Conduct actual shoring and pipe patching.</td>
</tr>
<tr>
<td>AFFF Activation</td>
<td>Post-ACTIVATED sign on control switch after the watch stander attempts to push it (Ensure station is in RECIRC)</td>
<td>Rig P-100—fire fighting or dewatering.</td>
</tr>
<tr>
<td>Use of AFFF (Installed systems)</td>
<td>Grease pencil marks on sight glass. Run magnet down sight glass</td>
<td>Light off OBAs as practical, considering allowance requirements.</td>
</tr>
<tr>
<td>Halon Effective</td>
<td>Hang white or gray streamers from overhead near view ports. Cool boundaries in surrounding spaces. White or gray streamers near main space ventilation outlets and stack</td>
<td>(Never use training canisters in a drill scenario.)</td>
</tr>
<tr>
<td>Halon Ineffective</td>
<td>Hang black streamers from overhead near view ports. Hot boundaries (bubble wrap). Black streamers near main space ventilation outlets and stack</td>
<td></td>
</tr>
</tbody>
</table>
• DG01/USW — Drill guide #1 for the underwater weapons system.

• DG02/T SSE 7 — Drill guide #2 for the total ship survivability exercise #7.

• DG03/CS — Drill guide #3 for combat casualties that involve several systems.

• DG01/DCMS CBR-D — Drill guide #1 for conduct of CBR-D exercise.

3. **TITLE:** Defines the effect desired. Example are as follows:

- Loss of power to an equipment or system caused by “tripped circuit breakers”, “engineering casualty,” or “battle damage,” and so forth.

- Loss of auxiliary support equipment, cooling water system, and air system, due to ruptured pipes, clogged strainers, failed pumps, power losses, and so forth.

- Class BRAVO fire in the emergency diesel generator (EDG) space.

- Chemical/biological attack.

4. **PURPOSE:** Explains the overall goal/purpose of the drill.

Examples are as follows:

- “To exercise the crew in combating damage in a CBR environment and maintain the ability of the ship to conduct its mission.”

- “To exercise and evaluate the watch sections and the at-sea fire party’s response to a class BRAVO fire in an EDG space.”

5. **REFERENCES:** Lists the references used in the development/validation of the casualty/drill, damage control plates. Examples of references are: *Naval Warfare Publications* (NWPs), *Naval Ship’s Technical Manuals* (NSTMs), *Navy Safety Precautions for Forces Afloat*, OPNAVINST 5100.19C, and fleet exercise publications (FXPs)
6. **SAFETY PRECAUTIONS:** Safety precautions should contain at least the following statement: “Forces afloat will comply with *Navy Safety Precautions for Forces Afloat*, OPNAVINST 5100.19 series.” Additional precautions identified during ORM, hot/cold checks, and other means, such as *Naval Ships Technical Manuals (NSTMs)* should also be listed.

An example of a precaution is as follows:

- LP air will be vented in OOD Station #3; all personnel must wear hearing protection.

1. **CAUTIONS:** Identifies any special care or concern associated with insertion points, imposition methodology, and impact of the fault or casualty.

Examples of cautions are as follows:

- Drill insertion will secure firemain flow. Do not allow impacted equipment to be damaged.
- Sonar dome pressure may be affected due to isolation of the firemain system. A static FM pressure (150 psi) should effectively maintain sonar dome pressure (39.5 +2/-0 psi) throughout the scenario.
- SSGTG cooling, CIWS cooling, and VLS deluge and sprinkling system may be affected due to firemain isolation.
- Chilled water casualty will effect the following equipment: (list equipment).
- HP air will be lost to the AFT VLS launcher, no tactical impact.
- Loss of MER #2 drill execution will require emergency shutdown of the gas turbine modules. Shutdown of the gas turbine, without the normal 5 minutes of operation at idle and when T5.4 temperature during operation was 1250°F or higher, may cause uneven cooling of the power turbine which could adversely affect operation.

8. **PREREQUISITES:** Identifies any special system setup before drill/fault/casualty insertion

Examples of prerequisites are as follows:

- Close valve ALP-V-576 in OOD Station #3 (1-366-I-Q).
- Remove quick-disconnect fitting at LP air pneumatic tool outlet outside of OOD Station #3 (1-366-I-Q).

9. **DESCRIPTION OF PROCEDURE:** The description of a procedure should identify the following:

- Crew watch condition (if applicable).

- Specific instructions for casualty/fault insertion and alternate if applicable.

Examples of procedures are as follows:

- Casualty Insertion: Damage is simulated by the use of standard disclosure methods and visual aids.
- See EOSS Firemain System Diagram DFM and Firemain and Drainage Damage Control Plates for associated piping information.
- Pipe ruptures will be simulated by isolating the port and starboard firemain pressure gauges in repair two, three, and five, and in CCS.
- At the hit, close the following globe isolation valves for damage control central (DCC) remote port and starboard pressure transducers:

<table>
<thead>
<tr>
<th>Transducer</th>
<th>Valve</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Port</td>
<td>FM-V-343</td>
<td>Passage (2-370-2-L)</td>
</tr>
<tr>
<td>Starboard</td>
<td>FM-V-339</td>
<td>Passage (1-78-01-L)</td>
</tr>
</tbody>
</table>

- Open the cap for the transducer test/isolation connection and release the pressure. Retighten the cap and verify the test/isolation connection valve is open.
- Verbal disclosure of lost or degraded final protective lines (FPLs), sprinkler systems, CM wash down, and so forth, will be given upon activation of the system and will be done at the activation site, if remotely operated, or on site if locally operated.
- The training team member monitoring ship’s force actions will determine when firemain isolation occurs as well as which equipment has been affected.

10. **EXPECTED ACTIONS:** Describes how or where the casualty/fault will manifest itself.

Examples of expected actions are as follows:

- CCS personnel will respond to low-pressure reading in DCC by sending investigators to identify break location.
- Repair party investigators will identify firemain leak and flooding, and report to the repair locker.
- The isolation team will isolate damaged firemain piping in crew living space 5 (3-310-2-L) by closing valves FM-V-319 (3-337-2) and FM-V-318 (3-339-2).
11. EXPECTED/POSSIBLE PROBLEMS: Describes the impact of casualty/fault during the period of the drill and actions that should be taken to restore systems after the drill is completed.

Examples of expected/possible problems are as follows:
- Loss of weapons systems capabilities during loss of cooling water drill.
- Ensure normal firemain valve alignment is restored once exercise is completed.
- Remove all ship’s standard disclosures and visual aids from the assigned damage locations.

DRILL GUIDE VALIDATION

Drill guide validation is accomplished in three parts and must be conducted before its use in a drill package.

1. “Walk-Thru” is the process of verifying:
   - Location
   - Numbers
   - Materials
   - Fault/casualty does not pose a hazard to personnel or equipment

2. “Cold Checking” A cold-checked exercise is conducted on prior to starting operational equipment to validate the drill. It includes the following:
   - Insertions procedures
   - Symptoms
   - Restoration/reconfiguration procedures
   - Fault/casualty does not pose a safety hazard

3. “Hot Checking” A function of abbreviated checks conducted operating equipment to validate proper operational parameters.
   - System alignment
   - System parameters
   - Safety devices

SAMPLE DRILL GUIDE

An example of a drill guide used on Navy ships is as follows:

DRILL GUIDE       CSCCE
DAMAGE TO LP AIR PIPING (VITAL AIR AND NON-VITAL) DG 3/SC #7

REFERENCE TO: DSSA
COLD CHECKED_____  HOT CHECKED_____

PURPOSE: Use to train ship’s force in integrated casualty control and evaluate shipboard system response to damaged low-pressure air piping passing through the bulkhead, at frame_______ for training scenario 7.

REFERENCES:
None

SAFETY PRECAUTIONS:

Forces afloat will comply with Navy Safety Precautions for Forces Afloat, OPNAVINST 5100 series.

CAUTIONS:
- Drill insertion will vent vital LP air into power conversion room (3-319-O-Q) and non-vital LP air into QOD Station #3 (1-366-1-Q). All personnel in the space must wear hearing protection.
- Drill will result in the loss of the vent damper for SSGTG #3, causing high temperatures.

PREREQUISITES:
- Close valve ALP-V-576 in QOD Station #3 (1-366-I-Q).
- Remove quick-disconnect fitting at LP air pneumatic tool outlet outside of QOD Station #3 (1-366-I-Q). (NOTE: Discharge of air from quick-disconnect fitting will be directed in such a way as to prevent hazard to either personnel or equipment.)

DESCRIPTION OF PROCEDURE: (Watch Condition III)

Casualty Insertion (Damage is imposed by securing the vital and non-vital LP air main aft of frame 300, and venting non-vital LP air into QOD Station #3 and vital LP air into power conversion room.)
- See compressed air system damage control plate, fiber-optic sensor system (FOSS) LP air system diagram DSSA for LP air system piping information.
- Use the ship’s standard disclosure methods and visual aids to inform investigators and watch standers of damage.

“BROKEN PIPE”

1. LP air vital air main in power conversion room (3-319-O-Q) at frame 337 in the aft starboard corner.
2. LP air vital air main in passage (3-326-1-L) at frame 338 behind firemain pipe.
3. LP air non-vital air main in crew living space 3 (2-300-01-L) above Rack #46.
4. LP air non-vital air pipe in A/C mach and pump room (5-300-01-E) against bulkhead 338.
5. LP air non-vital air pipe in AFF Station #2 (1-330-1-Q).

- Close the following vital LP air valve to simulate damage and tag “OPEN”:
  
  **LOCATION**  | **VALVE NO.**
  --- | ---
  MER #2 (4-254-0-E) | ALP-V-157 (3-298-4)

- Close the following non-vital LP air valve to simulate damage and tag “OPEN”:
  
  **LOCATION**  | **VALVE NO.**
  --- | ---
  Passage (1-254-5-L) | ALP-V-17-1

**NOTE**

These actions will result in partial pressure degradation of the entire vital and non-vital LP air system and affect system capability until the air piping is isolated.

- Remove drain cap and open the following vital LP air valve to simulate damage and tag “CLOSED”:
  
  **LOCATION**  | **VALVE NO.**
  --- | ---
  Power Conv. Rm. (3-319-O-Q) | ALP-V-380 (Drain)

- Open the following non-vital LP air valve to simulate damage and tag “CLOSED”:
  
  **LOCATION**  | **VALVE NO.**
  --- | ---
  OOD Station #3 (1-366-1-Q) | ALP-V-57-6

**NOTE**

These actions will result in loss of pressure of the vital and non-vital LP air system aft of frame 300 and affect the system capability until the air piping rupture is isolated. This will close the SSGTG #3 vent damper, resulting in high SSGTG #3 temperatures.

**EXPECTED ACTIONS:**

- Repair party investigators or combat system technician(s) will identify LP air piping damage and report to repair leader/DCA/EOOW/area supervisor/CSOOW.
- Technicians should either shut down SSGTG #3 or manually open vent dampers.
- The isolation team will isolate damaged vital LP air piping by closing valve ALP-V-157 (3-298-4) in MER #2 (4-254-0-E). (**NOTE:** This action will result in a loss of vital LP air supply to the following shipboard equipment.)
  1. SSGTG #3 bleed pressure regulating valve control air, SSGTG #3 starting air, SSGTG #3 moisture separator air. This will result in loss of SSGTG #3 within 15 minutes.
  2. CIWS magazine #2 (01-300-2-M) ammo hoist.
  3. Ventilation system closures/toxic gas dampers Nos. 20, 21, 22, 23, 409, 410. Other equipment damage and the tactical situation should preclude immediate casualty response.
  4. Torpedo magazine (2-370-8-M) pi-rail hoist and door actuator.
  5. Stern tube seals LP air hose connection.
- The isolation team will isolate damaged non-vital LP air piping by closing valve ALP-V-171 in passage (1-254-5-L). (**NOTE:** Other equipment damage and the tactical situation should preclude immediate casualty response, with the exception of the SPY cooling skid expansion tank.)
  1. SPY cooling skid expansion tank charging in AMR #1 (4-126-0-E)
  2. Pneumatic tool outlets aft of frame 300
  3. Sprinkling system dry piping blowout aft of frame 300
  4. Electrical machinery cleaning equipment aft of frame 300
  5. Chilled water expansion tank #4 charging in A/C machinery and pump room (5-300-01-E)
  6. Sea chest blowout connections in A/C machinery and pump room (5-300-01-E) and generator room (3-370-0-E)
DRILL PLAN CONSTRUCTION

This is the point at which individual drills are incorporated into a tactical scenario. Items to include in the drill plan are as follows:

- **Date/Scenario #/watch team**, that is, yymmdd/ASUW 1/ASUW Blue

- **Purpose.** The overall purpose of the drill, that is, train/evaluate the watch team’s response to USW/AAW threats to include such skills as threat detection, threat evaluation, engagement, and communications procedures. Or, to train/evaluate the electronic repair team’s response to casualties/faults in the combat systems to include casualty/fault recognition, reporting, and repair/reconfiguration in a hostile environment.

- **Requirements:** Necessary equipment and the operational state of that equipment at commencement of the drill.

- **Remarks:** A brief outline of the major events that occur during the drill, that is, SUW threat turns AW at T+30, or cascading equipment casualties occur at T+35, and so forth.

- **Training team member positions.**
  - By name, who will be where.
  - One individual may observe several positions.
  - Problem control positions.

- **Casualties.**
  - Time to be imposed: that is, T+15.
  - Who will impose the casualty?

- **Drill/Training Event #:** CSCCE DG01/SLQ-32; ITT TSSE #3, and so forth.

- **Drill/Training Event Description:** “SLQ-32 computer failure”, KILO/FPB attack with hit A and B.

Submit the drill plan for the commanding officer’s approval. Once approved, the drill plan and all associated materials make up a completed drill package.

SAMPLE ITT DRILL PLAN/BRIEFING GUIDE

USS____________________

ITT EXECUTIVE BRIEF

DATE:
START TIME: __________SECURE TIME: __________

TRAINING MODE:

<table>
<thead>
<tr>
<th>CSTT</th>
<th>TRAINING</th>
<th>EVALUATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>STT</td>
<td>TRAINING</td>
<td>EVALUATION</td>
</tr>
<tr>
<td>MTT</td>
<td>TRAINING</td>
<td>EVALUATION</td>
</tr>
<tr>
<td>DCTT</td>
<td>TRAINING</td>
<td>EVALUATION</td>
</tr>
<tr>
<td>ETT</td>
<td>TRAINING</td>
<td>EVALUATION</td>
</tr>
<tr>
<td>ATT</td>
<td>TRAINING</td>
<td>EVALUATION</td>
</tr>
</tbody>
</table>

Communications between training teams will be via hand-held radios on Channel “A.”

Overview: The overall objective of this scenario is to train/evaluate the watch team in responding to a small boat attack, which caused topside damage and a man overboard. The training team will be evaluating/training the watch standers in the following areas:

Geopolitical Situation: ITT leaders read geopolitical situation for the drill and refer team members to order of battle, include current readiness condition of ship, OOC or degraded.

Equipment Configuration: Review equipment necessary for the conduct of the scenario/timeline and the operational state of that equipment at commencement of the drill. Additionally, significant changes to equipment configuration.

Timeline Review: ITT leader will review timeline, as he/she notes the start of an individual training team drill within the scenario. Each team leader will provide the following information:

1. Objective (to train/evaluate repair three damage control team in combating hull damage and flooding).
2. How the drill will be evaluated.
3. Who is going to impose drill.
4. How drill will be imposed (simulation and deviations).
5. Cascading effects of drill, if any (that is, CASREP equipment, ETRs, battle damage).
6. Safety concerns. **Safety Considerations:** State any safety concerns that the ITT must be aware of. Examples are as follows:

- Fuel fill and transfer system seawater compensating control valve air in generator room (3-370-0-E).
- Rudder stock inflatable seal connections (port and starboard) in steering gear room (4-442-0-E).

**EXPECTED/POSSIBLE PROBLEMS:**

- Ensure normal LP air system valve alignment is restored once exercise is completed.
- Remove all ship’s standard disclosures and visual aids from the assigned damage locations.

Examples of two different types of damage control scenarios are provided below. These examples will give you an idea of the considerations and the coordination that is involved in the development of a major drill scenario:

---

**USS McKinney (DDG 50)**

**CLASS BRAVO FIRE**

**MAIN ENGINEERING SPACE**

**DRILL SCENARIO SAMPLE**

<table>
<thead>
<tr>
<th>AFFECTED SPACE</th>
<th>DATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>MER 1</td>
<td></td>
</tr>
</tbody>
</table>

**DAMAGE CONTROL TRAINING TEAM:**

<table>
<thead>
<tr>
<th>RANK/RATE NAME</th>
<th>POSITION</th>
<th>PRD</th>
</tr>
</thead>
<tbody>
<tr>
<td>LCDR SAILOR-Q</td>
<td>DCTT LEADER</td>
<td>SEP 05</td>
</tr>
<tr>
<td>LCDR-Q</td>
<td>CCS/DCC</td>
<td>OCT 07</td>
</tr>
<tr>
<td>DCCS-Q</td>
<td>DCTT COORDINATOR/SAFETY</td>
<td>NOV 08</td>
</tr>
<tr>
<td>HT1-Q</td>
<td>AFFF MONITOR</td>
<td>JAN 05</td>
</tr>
<tr>
<td>DC1-Q</td>
<td>SPACE UPPER LEVEL</td>
<td>APR 08</td>
</tr>
<tr>
<td>EM1-Q</td>
<td>ELECTRICAL ISOLATION</td>
<td>DEC 05</td>
</tr>
<tr>
<td>FCCM-Q</td>
<td>INVESTIGATOR</td>
<td>JUL 08</td>
</tr>
<tr>
<td>GMC-Q</td>
<td>FIRE BOUNDARIES</td>
<td>JAN 05</td>
</tr>
<tr>
<td>MSC-Q</td>
<td>FIRE BOUNDARIES</td>
<td>JAN 06</td>
</tr>
<tr>
<td>ET1-Bluejacket-Q</td>
<td>FIRE BOUNDARIES</td>
<td>MAY 09</td>
</tr>
<tr>
<td>DK1-Q</td>
<td>HALON/PLUGMAN</td>
<td>JUN 05</td>
</tr>
<tr>
<td>LT-Q</td>
<td>INVESTIGATOR</td>
<td>JUN 07</td>
</tr>
<tr>
<td>EN1-Q</td>
<td>MECHANICAL ISOLATION</td>
<td>JUL 08</td>
</tr>
<tr>
<td>NC1-Q</td>
<td>OBA CHANGEOUT STATION</td>
<td>OCT 08</td>
</tr>
<tr>
<td>BMC-Q</td>
<td>REPAIR 2</td>
<td>JUN 05</td>
</tr>
<tr>
<td>GSMC-Q</td>
<td>REPAIR 5</td>
<td>FEB 05</td>
</tr>
<tr>
<td>EMC-Q</td>
<td>REPAIR 3</td>
<td>JUL 07</td>
</tr>
<tr>
<td>HMC-Q</td>
<td>SAFETY/MEDICAL</td>
<td>JUL 08</td>
</tr>
<tr>
<td>SKC-Q</td>
<td>SCENE LEADER</td>
<td>JUL 05</td>
</tr>
<tr>
<td>LTJG-Q</td>
<td>TORCH/FIRE</td>
<td>OCT 05</td>
</tr>
</tbody>
</table>

Q = PERSONNEL QUALIFIED FOR DCTT POSITION
GENERAL DESCRIPTION:
Following the watch standers' completion of initial actions in response to the leak on the fuel oil purifier inlet strainer. Vapors get into contact with 1A LOSP motor controller and flash into a Class BRAVO fire. Watch standers are forced to evacuate when Class BRAVO fire becomes uncontrollable. Primary Halon will be GOOD, depending on the watch standers’ actions. Secondary Halon will be GOOD, depending on the watch standers’ actions. The fire team enters the space to combat the fire, establish a reflash watch, and overhaul the fire.

DRILL BASIS:
WALK THRU/TALK THRU  DCTT GRADING  DCTT GRADING
MINIMAL INTERVENTION  NO INTERVENTION

DRILL COORDINATION DETAILS:
1. ETT and DCTT will use Channel 4 on ESRS.
2. CCS DCTT will use 1MC in CCS to pass actua
3. Heat stress survey will be conducted at: 1330. The follow-up survey, if required after the drill, will be conducted according to Navy Safety Precautions for Forces Afloat, OPNAVINST 5100.19 series.
4. DC1 Sailor and SKC Navy will conduct safety walk through 1 hour before drill. Report any uncorrectable discrepancies to DCTT coordinator.
5. DCTT members on station time: 1450.
6. NR 1 AFFF will be in recirc with casualty isolation cov closed. NR 2 AFFF will have casualty isolation cov closed.
7. ELECTRICAL DCTT will re-energize the in space 115 VAC circuit LC11-4P-(3-219-2) located in 2-53-1-C after the electrician has successfully demonstrated electrical isolation of that circuit according to Main Space Fire Doctrine.

SEQUENCE OF EVENTS:
1. When all TT members report on station and they are ready to commence the drill, the DCTT will direct ETT to initiate the drill.
2. The ETT will disclose the leak as briefed.
3. TORCH flash fuel to fire immediately. Impose fire out of control immediately.
4. When the watch stander(s) attempt(s) to activate the AFFF bilge sprinkler, do/do not allow him/her to press the activation push button. AFFF DCTT will secure it upon sprinkler deactivation. AFFF DCTT discloses AFFF concentrate tank level decreasing. Flow rate GPM=31.
5. One SPACE ETT will follow the watch stander(s) out of the space. Second SPACE ETT will remain in the space and secure any remaining operating equipment if required to prevent harm to personnel or machinery.
6. HALON DCTT, when notified by TORCH that a watch stander has actuated HALON, lift the plunger for alarm, vent the shutdown and motorized damper valve pressure switches, wait 60 seconds, and lift the discharge pressure switch plunger. TORCH disclose HALON GOOD by displaying a gray rag at the main access and ellison door, depending on initial actions. If HALON is BAD, CCS DCTT will inform all DCTT and BOUNDARY DCTT. Place bubble wrap on the deck of general workshop. HALON DCTT will not operate the pressure switches if HALON activation was not attempted. TORCH place two hot spots in the area of seat of the fire. Human error that causes HALON BAD will include the following:
• Failure to close watertight doors when evacuating the affected space.
• Failure to activate the HALON system.
• Entering affected space before elapse of 15-minute soak time.

7. PLUGMAN DCTT will close fire station cutout valve after the hose has been charged and disclose satisfactory agent test after agent test has been attempted. BOUNDARYMAN DCTT will ensure that boundarymen identify all locked spaces while setting boundaries and mark with Boundary Set sign after boundaryman attempts to gain access.

8. TORCH will disclose fire contained when the hose team has demonstrated aggressive hose handling by attacking the fire.

9. TORCH will disclose fire out when the hose team demonstrates hose handling techniques that can be expected to extinguish a fire.

GENERAL DRILL PRECAUTIONS:
1. Observe personnel dressed in fire-fighter’s ensembles for signs of heat stress. Pay particular attention to personnel who activate OBAs.
2. Ensure that when hoses are charged they are secured at the plug and that equipment is not inadvertently sprayed. Tie wrap nozzle in the SHUT position.
3. Ensure that EEBDs and OBA canisters are properly handled and disposed of.
4. One person on a ladder at a time and one hand should be on the handrail at all times.
5. Ensure overhaul equipment is handled carefully.
6. Ensure DCTT is positioned to prevent activation of unauthorized equipment.

OBA ACTIVATION and OBSERVATION:
An example of an observation is as follows:

• Boundaryman in CPO mess/galley observed by ET1 Bluejacket.

SELF-SIMULATIONS:

<table>
<thead>
<tr>
<th>SIMULATED ACTION</th>
<th>SELF-SIMULATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>OBA</td>
<td>“I am removing the canister’s cover, inserting canister, lifting bail assembly</td>
</tr>
<tr>
<td></td>
<td>to seat canister, and pulling the lanyard to activate canister.”</td>
</tr>
<tr>
<td>HALON</td>
<td>“I am pulling the pin and actuating the lever assembly to activate HALON.”</td>
</tr>
<tr>
<td>PKP</td>
<td>“I am actuating the CO2 cartridge to charge the PKP bottle.”</td>
</tr>
<tr>
<td>Reentry AFFF H/R COV</td>
<td>“I am unlocking lock device to rotate valve to OPEN position charging hose.”</td>
</tr>
<tr>
<td>NOZZLES</td>
<td>“I am actuating the nozzle bail assembly.”</td>
</tr>
</tbody>
</table>

NOTE: Self-simulation shall be used by the watch stander to prevent inadvertent activation of damage control equipment during drills. This shall be as described or words to that effect which effectively describe the watch stander’s actions.
AUTHORIZED SIMULATIONS:

- X Smoke
- Smoke machine will be used
- X Fire and fire damage
- X Hang fires
- ___ Electrical isolation
- ___ Mechanical isolation
- X Charred controllers
- X Energizing or activating fire-fighting equipment
- X Tag out and clearing of tags
- X Repair of equipment or casualty
- X Actual overhaul of the space
- X Inserting OBA canisters into OBA
- X Taking overhaul gear into the space except rake
- X Gas freeing of buffer zone and the space
- X Breaking of Draeger tubes
- X Atmospheric test results, including but not limited to: % oxygen, % explosive, type of toxins, carbon monoxide, carbon dioxide, hydrocarbons, hydrogen chloride, hydrogen cyanide, phosgene, hydrogen fluoride
- ___ Smoke and fire detection alarm indications in CCS
- X Opening of repair lockers by force
- X Dewatering
- X Soak time

SAFETY:

The responsibilities of the DCTT members when on station are greater than those of their assigned trainees. Safety is his/her primary concern. The training of the watch stander or repair party personnel, although an important objective, must be secondary to safety. The team member is ultimately responsible for unsafe actions of any watch standers under his/her charge. He/she has the authority to relieve his/her assigned watch stander/repair party personnel at any time and take over assignments when safety is jeopardized. He/she may allow his/her watch standers to take actions, even in the event of actual casualties, provided personnel or equipment are not placed in a hazardous situation. The DCTT member must walk a fine line between allowing those mistakes to be made and preventing unsafe conditions. Whenever there is doubt, drills must be terminated immediately.

Submitted By: ______________________________  DCTT Coordinator
Reviewed By: ______________________________  Chief Engineer
Reviewed By: ______________________________  Executive Officer
Approved By: ______________________________  Commanding Officer
USS *McINTIRE* (DDG 49)

**GENERAL QUARTERS**

**DRILL SCENARIO SAMPLE**

**DAY MONTH YEAR**

<table>
<thead>
<tr>
<th>REPAIR LOCKER(S)</th>
<th>AFFECTED SPACE(S)</th>
<th>CASUALTY</th>
</tr>
</thead>
<tbody>
<tr>
<td>TWO</td>
<td></td>
<td></td>
</tr>
<tr>
<td>THREE</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>FIVE</th>
<th>MER 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>MER 2</td>
<td>FLOODING/RUPTURED FM</td>
</tr>
</tbody>
</table>

**FIRE/FLOODING**

**DAMAGE CONTROL TRAINING TEAM:**

<table>
<thead>
<tr>
<th>RANK/RATE NAME</th>
<th>POSITION</th>
<th>PRD</th>
</tr>
</thead>
<tbody>
<tr>
<td>LCDR BUTTERCUP-Q</td>
<td>DCTT LEADER</td>
<td>MO/YR</td>
</tr>
<tr>
<td>LCDR-Q</td>
<td>CHIEF ENGINEER</td>
<td>JUL 07</td>
</tr>
<tr>
<td>HTC-Q</td>
<td>DCTT COORDINATOR/SAFETY</td>
<td>JUL 08</td>
</tr>
<tr>
<td>DC1-Q</td>
<td>Main 1</td>
<td>JUN 08</td>
</tr>
<tr>
<td>HT1-Q</td>
<td>DCCO</td>
<td>JUL 08</td>
</tr>
<tr>
<td>LT-*Q</td>
<td></td>
<td>APR 09</td>
</tr>
<tr>
<td>GMCM-Q</td>
<td>Main 2</td>
<td>JUL 09</td>
</tr>
<tr>
<td>NC1-Q</td>
<td>Bridge</td>
<td>JUL 09</td>
</tr>
<tr>
<td>LT-Q</td>
<td></td>
<td>JUL 07</td>
</tr>
<tr>
<td>BMC-Q</td>
<td>R-2</td>
<td>JUL 07</td>
</tr>
<tr>
<td>GMC-Q</td>
<td></td>
<td>JAN 09</td>
</tr>
<tr>
<td>MA1-Q</td>
<td>Main 1</td>
<td>JUL 08</td>
</tr>
<tr>
<td>EMC-Q</td>
<td>R-3</td>
<td>JUL 09</td>
</tr>
<tr>
<td>FCCM-Q</td>
<td></td>
<td>OCT 08</td>
</tr>
<tr>
<td>LT-Q</td>
<td>Main 1</td>
<td>JUN 08</td>
</tr>
<tr>
<td>EMCS-Q</td>
<td>Main 2</td>
<td>JAN 09</td>
</tr>
<tr>
<td>GSMC-Q</td>
<td>R-5</td>
<td>FEB 09</td>
</tr>
<tr>
<td>SKC-Q</td>
<td>Main 2</td>
<td>JUL 08</td>
</tr>
<tr>
<td>ENS-Q</td>
<td>Main 2</td>
<td>OCT 08</td>
</tr>
<tr>
<td>HMC-Q</td>
<td>Medical</td>
<td>JUL 09</td>
</tr>
</tbody>
</table>

*Assigned to DCTT only when not involved with CSTT exercises.
Q = PERSONNEL QUALIFIED FOR DCTT POSITION
GENERAL DESCRIPTION:
USS *MCKINNEY* and USS *McINTIRE* are in company with USS *MILLER*. The battle group has been ordered to enter the Eastern Mediterranean to escort friendly ships and join the UN force. USS *MILLER* has been assigned to the group to ensure a mine-free operating area in littoral waters. Macadamia poses a limited surface and air threat to Navy vessels. Surface-to-surface missile sites have been sighted along the shorelines in increasing numbers.

DRILL BASIS:
FAMILIARIZATION AND TRAINING                      DCTT OBSERVATION          DCTT GRADING
WALK THRU/TALK THRU                                         MINIMAL                        NO INTERVENTION

DRILL COORDINATION DETAILS:
1. DCTT will use Channel 11 (ESRS) on walkie-talkies.
2. DCA/EOOW will use 1MC in CCS to pass actual casualties. The on-scene leader, locker leader, and CCS will use NETS 80, 81, 82, and 86 to pass drill information.

SEQUENCE OF EVENTS:
1. Incoming missiles will drive ship to general quarters. Hit ALPHA, Hit BRAVO will penetrate the skin of the ship at the waterline, port side, and frames 215 and 259. The main machinery rooms will sustain major structural damage. Communication to the sea and firemain piping causes progressive flooding in both spaces, and in Main 2, lube oil leaking from the storage tanks will erupt into a class BRAVO fire involving the entire port side of the space.
2. Three DCTT members will be in Main 1 disclosing (a) large boom at Hit ALPHA and Hit BRAVO, (b) 4 feet 6-inch hole in port bulkhead mid level, frame 215, (c) firemain rupture at frame 215, (d) progressive flooding.
3. Four DCTT members will be in Main 2 disclosing (a) large boom at Hit ALPHA and Hit BRAVO, (b) 4 feet 6-inch hole in port bulkhead mid level at frame 259, (c) firemain rupture at frame 259, (d) progressive flooding, (e) large class BRAVO fire.

PREVIOUS DRILL’S DISCREPANCIES:
Locker communications
Lockers over responding to size of casualty
DCTT communications
Setting ZEBRA (+16)

OBA LIGHTOFF: NONE
Following personnel will actually lightoff OBA
N/A

Following DCTT member will observe OBA lightoff:
N/A
BRIEFING NOTES:
1. Expect initial response to come from main spaces with augmentation from repair five. Damage control problem might also drive DCA to use repairs two and three to help.
2. We are actually setting ZEBRA PHASE ONE. Emphasis must be placed on setting ZEBRA quickly and correctly.

AUTHORIZED SIMULATIONS:

_____ Smoke
_____ Smoke Machine
_____ Fire
_____ Hang Fires
_____ Charred Controllers
_____ Energizing or activating fire-fighting equipment
_____ Tag out procedures
_____ Repair of equipment or casualty
_____ Opening power panels doors
_____ Actual overhaul of the space
_____ Inserting OBA canisters into OBA
_____ Taking overhaul gear into the space. (Only the rake prop will be taken into space.)
_____ Gas freeing of buffer zone and the space
_____ Atmospheric test results
_____ Smoke and fire detection indications
_____ Breaking of Draeger tubes
_____ Alarm indications in CCS
_____ Actual electrical isolation
_____ Sagging overhead
_____ Hole in bulkhead
_____ Flood water
_____ Waterspray/ruptured pipe

AUTHORIZED SELF-SIMULATIONS:
1. Authorized self-simulations will be done according to published self-simulation table.

NOTE: Self-simulation shall be used by the watch stander to prevent inadvertent activation or discharge of certain damage control equipment during drills. The self-simulation shall be as described or words to that effect which effectively describe the watch stander’s actions.
GENERAL DRILL PRECAUTIONS:
1. Observe personnel for signs of heat stress.
2. One person on a ladder at a time and one hand should be on the handrail at all times.
3. Ensure overhaul equipment is handled carefully.
4. Ensure DCTT is positioned to prevent activation of unauthorized equipment.

SAFETY:
All DCTT members are safety observers. Do not permit any action that endangers personnel or machinery. In the event of an actual casualty, ensure the words ACTUAL CASUALTY are used and are passed to CCS. Allow the EOOW to pass the word over the 1MC “Actual casualty (description), freeze the drill”; followed by additional instructions, if required. DCTT will assist the watch stander and relieve him/her, if necessary, to prevent harm to personnel or machinery.

All DCTT members shall monitor personnel for signs of heat stress and may at any time question personnel as to their ability to continue training. If personnel become incapacitated, they shall be tended to as necessary without interrupting the drill unless additional assistance is required.

Submitted By: ______________________________  DCTT Coordinator
Reviewed By: ______________________________  Chief Engineer
Reviewed By: ______________________________  Executive Officer
Approved By: ______________________________  Commanding Officer

DRILL CRITIQUE:
Always after each training evolution the training team must conduct a debrief. It is necessary for the training team to discuss and document a list of “Lessons Learned.” This list assists the team in improving their training skills and in the training of their personnel. It also enables the team to make corrections and improve the effectiveness of their training. The information must be passed on to all hands so the ship’s crew can understand the errors that were made during the drill. This may reduce the possibilities of the same mistakes from reoccurring in future drills.

REVIEW QUESTIONS

Q6. Which of the following is NOT an objective of damage control training?
   1. Writing and developing various damage control exercises
   2. Developing the ability to meet training objectives as briefed
   3. Developing the ability to assess repair parties in all DC exercises.
   4. Developing training reports for the engineer officer

Q7. Specific training for the damage control repair parties includes developing the ability to set material conditions.
   1. True
   2. False

Q8. Which one of the following is NOT an objective of the in-port damage control training team?
   1. Training in rescue and assistance
   2. Training in covering the duties of an in-port fire party
   3. Providing exercises in fire, underwater hull damage, and toxic gas drills
   4. Provide training in crash and salvage drills
Q9. Which of the following training requirements is provided by the damage control training team for the ship’s damage control petty officers?

1. Setting requirements for material condition ZEBRA
2. Setting requirements for material condition CIRCLE X-RAY
3. Setting requirements for material condition YOKE
4. Setting requirements for material condition WILLIAM

Q10. What type of training discusses the basic parts, the functions of each part, and the operation of equipment with limiting parameters?

1. Hands-on
2. Lecture
3. Demonstration
4. Performance

SUMMARY

This chapter has introduced you to the organization and responsibilities of the damage control training team and the objectives of DCTT training. Also, the need for damage control training programs and the organization and responsibilities of the shipboard training team and the damage control training team and examples of training scenarios were provided.

For detailed information about shipboard training and development of scenarios, you should refer to Naval Ship’s Technical Manual (NSTM), chapter 555; NSTM, chapter 079, volume II; NSTM, chapter 470; NSTM, chapter 070; NSTM, chapter 077; “Repair Party Manual,” Naval Warfare Publication (NWP) 3-20.31; Surface Force Training Manual (SFTM), COMNAVSURFLANT/PACINST 3502.2E; and Ship’s Organization and Regulations Manual (SORM), OPNAVINST 3120.32C.
REVIEW ANSWERS

A1. What person is responsible for the training teams? (1) Team leader

A2. One of the responsibilities of the training team is to assess the readiness and effectiveness of watchteam performance of watchstation specific tasks. (1) True

A3. What person is designated chairman of the planning board for training and is also the team leader for the Damage control training team (DCTT)? (2) Executive officer

A4. What person serves as overall manager of the training event briefs, performance, and debriefs? (2) DCTT team coordinator

A5. What person is responsible to complete a safety walk-thru and pre-event check prior to drill? (4) All team members

A6. Which of the following is NOT an objective of damage control training? (4) Developing training reports for the engineer officer

A7. Specific training for the damage control repair parties includes developing the ability to set material conditions. (1) True

A8. Which one of the following is NOT an objective of the in-port damage control training team? (4) Provide training in crash and salvage drills

A9. Which of the following training requirements is provided by the damage control training team for the ship’s damage control petty officers? (3) Training on setting requirements for material condition yoke

A10. What type of training discusses the basic parts, the functions of each part, and the operation of equipment with limiting parameters? (2) Lecture