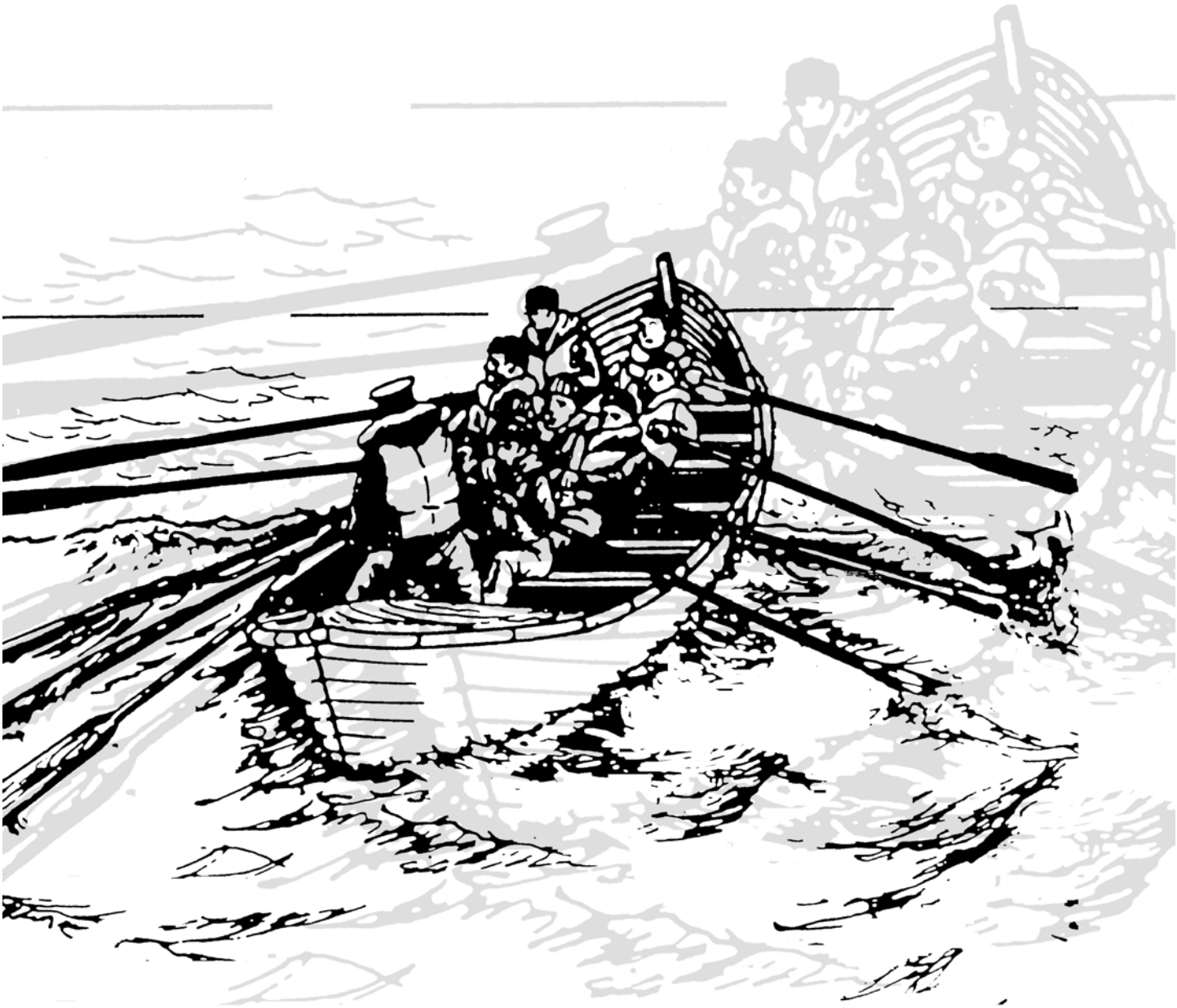
BOAT CREW
Qualification Guide

Vol. IV – Heavy Weather Coxswain

COMDTINST M16114.26

"Train, Maintain, Operate"



U.S. Department of Transportation

United States Coast Guard

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COMDTINST M16114.26

JUL 15 2002

COMMANDANT INSTRUCTION M16114.26

Subj: BOAT CREW QUALIFICATION GUIDE, VOLUME IV – HEAVY WEATHER COXSWAIN

1. PURPOSE. This Manual provides updated standardized performance objectives and guidance for the purpose of training and certifying personnel as heavy weather coxswains on Coast Guard boats.

2. ACTION. Area, district, activities, section and group commanders, and commanding officers/officers-in-charge of all units with boats assigned shall comply with this Manual in the training and certification of heavy weather coxswains. Waivers of specific requirements will not normally be granted. Internet release authorized.

3. DIRECTIVES EFFECTED: Boat Crew Qualification Guide – Surfman, COMDTINST M16114.14, (dated 16 May 1989) is hereby canceled. This newly promulgated Boat Crew Qualification Guide replaces some tasks previously found in the Boat Crew Qualification Guide – Surfman, COMDTINST M16114.14. Conditions and standards have been changed to match readiness requirements.

4. DISCUSSION. The Coast Guard's boat crew training remains a performance based training program. The qualification tasks within this Heavy Weather Coxswain Qualification Guide relate to knowledge and skills necessary to meet the challenges in the heavy weather and surf environment. The command must ensure that a prospective heavy weather coxswain also has the needed attitudes and abilities associated with maturity, sound judgment, and experience. Where the sea state or geographic location present significantly increased hazards for mariners, our boat operators must demonstrate a higher level of seamanship to safely work in this high-risk environment. The experience level of Coast Guard boat crews must be matched with the design capabilities and limitations of our boat resources to meet the readiness and operational requirements demanded of our multi-mission stations. The implementation of this Heavy Weather Coxswain Qualification Guide seeks to better align the boat crew training program with the challenges of the missions.

DISTRIBUTION – SDL No.139

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5. PROCEDURES. Personnel assigned to a unit with surf capable boats and who are already certified as surfman need not re-certify using this manual. Procedures for newly certifying members, currency maintenance, and re-certification due to permanent change of station transfer or lapse of certification will be found in the Boat Crew Training Manual, COMDTINST M16114.9 (series). Any questions should be resolved through discussion with Commandant (G-OCS-1).

H. E. JOHNSON
Director of Operations Capability

RECORD OF CHANGES

CHANGE NUMBER	DATE OF CHANGE	DATE ENTERED	ENTERED BY

Table of Contents

Chapter 1
Introduction

Introduction

The Boat Crew Qualification Guides are an integral part of the boat crew qualification and certification process. Each volume contains a collection of tasks which must be learned, practiced, and performed by the trainee. These tasks represent the minimum elements of skill and knowledge necessary for safe and effective performance of a Coast Guard heavy weather coxswain.

In this chapter

This chapter contains the following sections:

Section A. Steps in the Qualification and Certification Process

Introduction

This section will explain the qualification/certification system requirements and procedures that the trainee should understand before completing specific tasks.

A.1. Designation to the training program

The trainee is designated to the training program by the unit command.

A.2. Assignment of primary instructor

An experienced and certified petty officer is assigned as the trainee's primary instructor.

A.3. Completion of appropriate qualification guide

The trainee completes the appropriate qualification guide. To accomplish this, he/she must follow the procedure below:

Step	Procedure
1	Trainee is assigned task.
2	Trainee completes reading assignment.
3	Task is demonstrated to trainee.
4	Trainee is walked through task.
5	Trainee practices task.
6	Trainee demonstrates proficiency in task up to task standard.
7	Task is signed off.

A.4. Certification process

Upon completion of the qualification process, the trainee completes the certification process as outlined in the steps below:

Step	Procedure
1	Boat Crew Examination Board interviews trainee.
2	Trainee completes a comprehensive check-ride.
3	Boat Crew Examination Board issues recommendation to the command.
4	Command certifies trainee.

NOTE

For a complete discussion of the qualification/certification process, refer to *Boat Crew Training Manual*, COMDTINST M16114.9 (series).

Section B. Description of the Manual

Introduction

This manual is *Volume IV* of the *Boat Crew Qualification Guide*. There are five manuals making up the guide. They are:

- *Volume I* - *Boat Crew Member*
- *Volume II* - *Coxswain*
- *Volume III* - *Engineer*
- *Volume IV* - *Heavy Weather Coxswain*
- *Volume V* - *Surfman*

Each volume is made up of three major chapters:

- *Chapter 1* - *Introduction*
- *Chapter 2* - *Qualification Tasks*
- *Chapter 3* - *Trainee Study Guide*

Chapter 1 consists of:

- Explanations of the qualification/certification system
- Descriptions of the qualification manuals
- Guidance concerning the responsibility of the instructor and the trainee while using the qualification guides

Chapter 2 is made up of the qualification tasks, which are designed to measure the trainee's progress.

Chapter 3 provides guidance for the trainee's reading assignments and is to be removed and retained by the trainee.

In this section

This section contains the following two parts.

Sample Task

TASK HW-02-01-ANY	**Identify the Different Parts of a Line and the Hitches Used in Line Handling**
References	a. *Boat Crew Seamanship Manual*, COMDTINST M16114.5 (series)
Conditions	Task should be performed at any time onboard any of the unit's boats without the use of any references or prompting.
Standards	In response to the instructor, the trainee must, without error, identify different parts of a line and basic knots.

Performance Criteria	Completed (Initials)
1. Correctly identify bitter end of line.	IMU
2. Correctly identify standing part of line.	IMU
3. Make bight in the line.	IMU

Instructor MK2 I. M. UNDERWAY **Date** 25 OCT 99

Comments

Description of Tasks

B.1. Task designation — Tasks are identified by designation. Below are two examples with explanations of the qualification task designations:

B.1.a. Example 1

HW-02-03-ANY

- HW — Volume designation number – Heavy Weather Coxswain
- 02 — Division designation number
- 03 — Task designation number
- ANY — Task can be accomplished on any boat. ANY tasks are considered transferable from boat to boat and, therefore, need only be done once.

B.1.b. Example 2

HW-02-03-TYPE

- HW — Volume designation number – Heavy Weather Coxswain
- 02 — Division designation number
- 03 — Task designation number
- TYPE — Indicates that the task must be done individually for each different boat type for which qualification is desired.

B.2. Task — The knowledge or skill objective to be performed.

B.3. Reference — Information sources used by the trainee and instructor to obtain the background necessary to enhance task performance.

B.4. Conditions — The conditions are the environmental and physical circumstances under which the tasks must be performed. Any tools or special equipment needed for the completion of the task are listed here. The conditions listed with each task must be met. The following definitions describe the terms found in the conditions and standards:

B.4.a. Heavy weather — Heavy weather is defined as seas and swell conditions combining to exceed 8 feet and/or the winds exceeding 30 knots.

B.4.b. Rough bar

A rough bar is a river entrance or inlet where heavy seas or surf conditions exist, and/or whenever there is doubt in the judgment of the coxswain or the Commanding Officer/Officer-in-Charge.

B.4.c. Surf

The waves or swell of the sea breaking on the shore or a reef is defined as surf.

B.4.d. Boat operations

Term	Definition
Slow	Underway and moving ahead at clutch speed or slower
Underway	Not tied to a pier or float and not anchored or moored

B.4.e. Visibility

Term	Definition
Restricted	Visibility less than ¼ mile
Clear	All other states of visibility

B.4.f. Sea conditions

Term	Definition
Calm	Seas less than 4 feet
Moderate	Seas 4 to 8 feet
Heavy	Seas greater than 8 feet
Surf	Waves or swell of the sea breaking on the shore or a reef

B.4.g. Operational guidelines for MLB and SPC (HWX) coxswains

	Sea	Wind	Surf
Coxswain	10 ft	30 kts	None
HW Coxswain	20 ft	40 kts	<8 ft
Surfman	30 ft	50 kts	20 ft

NOTE

Heavy Weather Coxswains shall not attempt operations in surf unless they have demonstrated the proper skills through satisfactory accomplishment of the Surf Operations tasks in *Section D* of the *Boat Crew Qualification Guide*, *Volume IV – Heavy Weather Coxswain*, COMDTINST M16114.26.

NOTE

During the period a member is qualifying, the minimum sea conditions are just that, minimums. This qualifying period should include demonstration of skills during wind and sea conditions appropriate for the area. The unit commander should consider maximum weather limitations in conjunction with Commandant policies to ensure trainees build confidence and platform proficiency gradually. The trainee must practice in varied conditions within the above ranges and not just the minimums prior to certification.

B.5. Standards	Standards describe the expected outcome of the task. Successful task completion is a function of how well a student is able to complete the task without assistance. Generally the task performance standards are as follows:
B.5.a. Knowledge tasks	Trainee must be able to cite, from memory, the required information. Instructors may wish to ask questions concerning particular steps for accomplishment in order to measure the trainee's total comprehension of the subject matter.
B.5.b. Skill tasks	Trainee must be able to perform all performance tasks without prompting or assistance from the instructor. Each task demonstration must follow the correct sequence with little or no hesitation between the steps for accomplishment.
B.6. Performance criteria	These steps delineate the procedure that is best followed for performing each task. They can be utilized two basic ways: • Aid in learning the task. • Serve as a performance check.
B.6.a. Aid in learning the task	Some steps for task accomplishment follow exact procedures which are required for performing a particular operation or using a specific piece of equipment, while others serve as general guidelines for task completion.
B.6.b. Serve as a performance check	Some task steps can serve as a performance checkoff which can be used by the instructor to measure trainee performance when the trainee performs the task.
B.7. Accomplished	The designated instructor must print his/her name and rate, sign and date this line attesting that the trainee successfully performed the task in accordance with the prescribed standards.
B.8. Comments	The comment section can be used to describe circumstances or conditions which might have a bearing on task completion. Failure to perform any element or unsatisfactory performance of an individual element should be noted in the comments section for the task. If the task is completed under more arduous circumstances than those described, a notation should be made.

NOTE *Appendix A* provides a list of all tasks in this instruction with space for the instructor to initial and date when each task has been completed.

NOTE *Chapter 3* lists reading assignments for each division followed by a group of questions that should be used by the trainee as a study guide.

Section C. Instructor Guidance

Introduction

An instructor must be thoroughly familiar with the boat crew training process. Intimate knowledge of the contents of the following manuals is a must prior to commencing training.

- *Boat Crew Training Manual*, COMDTINST M16114.9 (series)
- *Boat Crew Seamanship Manual*, COMDTINST M16114.5 (series)
- Operator's Handbook (Type Specific)
- *Coast Guard Boat Readiness and Standardization Program Manual*, COMDTINST M16114.24 (series)

C.1. Duties

The instructor's duties include:

- Guiding the trainee through the qualification process in accordance with the instructions in *Chapter 1* of each qualification guide
- Teaching skills to trainees
- Observing trainee skill development during operations and training, while ensuring that established conditions and standards are met
- Certification recommendation to unit command upon completion of qualification process
- Maintaining own proficiency training and technical knowledge

C.2. Guiding the trainee through the process

Tasks are meant to be learned through constant practice under the instructor's guidance. This is accomplished by following the procedural steps listed below and provided in **figure 1-1**.

C.2.a. Give Chapter 3 to the trainee

Give the trainee the reading assignment and study guide questions. Remove *Chapter 3* from the manual and give it to the trainee to retain.

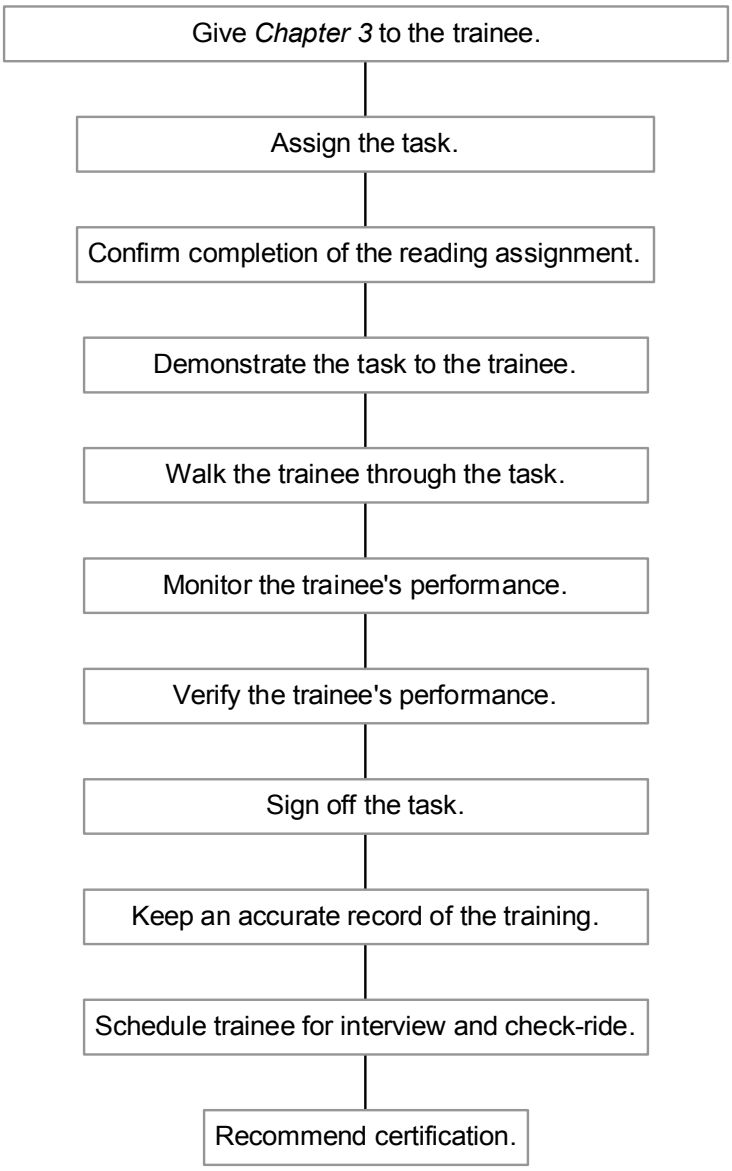

Figure 1-1
Procedures for Guiding Trainees

C.2.b. Assign the task	While divisions may at times be done concurrently, the tasks within each division should normally be accomplished in consecutive order. • Which tasks must be completed depends on the crew position and type of boat for which the trainee is being qualified. Those tasks which must be accomplished to qualify for each particular boat type are listed in *Section E* of this chapter. • Tasks designated as TYPE are considered to be specific to each boat type. These must be completed individually for each desired boat type qualification. • Tasks designated as ANY are considered general in nature. Completion of these tasks on any boat type is sufficient for the qualification process and need not be repeated when qualification is desired on another boat type.
C.2.c. Confirm completion of the reading assignment	Care should be taken at this point to clarify any misunderstandings the trainee might have about the material.
C.2.d. Demonstrate the task to the trainee	Demsonstrate the steps required to complete the task. During the demonstration, the instructor should narrate the procedures. If the task is one of the few that does not require demonstration, proceed to the next step.
C.2.e. Walk the trainee through the task	In order to ensure that the trainee understands, the instructor may want to walk the trainee through the steps more than once. There is no limit to the number of times the instructor performs the walk-through, however, trainee understanding must be ensured before continuing.
C.2.f. Monitor the trainee's performance	Trainee performance should be monitored during both training and operations. Qualification does not end with the first successful completion of the task. It is an ongoing process that ends only when successful task completion can be met consistently.

C.2.g. Verify the trainee's performance

Verify that the trainee's performance meets the standard. This includes two parts:

- The trainee must be able to perform the task subject to established conditions and standards delineated for the task.
- The trainee must be able to perform the task with no assistance.

The trainee is expected to perfrom each task on a consistent basis in accordance with the established standards and conditions.

C.2.h. Sign off the task

The instructor signs the task at the bottom of the page when he/she is confident that the trainee can perform the task consistently, while unsupervised.

C.2.i. Keep an accurate record of the training

The instructor must ensure that all task completions are documented in this manual.

NOTE

As a quick reference of the trainee's progress, the instructor should maintain the task accomplishment record located in *Appendix A*. This is accomplished by entering the start date as each task is assigned and then initialing and entering the completion date as each task is completed.

C.2.j. Schedule trainee for interview and check-ride

Inform the unit commander when all tasks in this manual are completed. When the trainee has completed all of the required tasks for the position and boat type, the qualification process is done. The instructor should inform the Boat Crew Examination Board and schedule the trainee for an interview and certification check-ride.

C.2.k. Recommend certification

When the Boat Crew Examination Board is satisfied with the trainee's performance and abilities, they may recommend to the unit commander that the trainee be certified.

C.3. Proficiency maintenance and technical knowledge

It is imperative that a very high level of professionalism be maintained among all unit instructors. All instructors must ensure that their certification remains current. In addition, instructors must ensure that they retain their proficiency with all installed boat equipment.

Section D. Trainee Guidance

Introduction

It is the trainee's responsibility to proficiently perform the tasks in accordance with the established standards. The tasks that make up *Chapter 2* of this guide represent the skills required to perform in the capacity of a heavy weather coxswain. There are four parts to this learning process:

- Read the assignments and ask questions.
- Pay attention during demonstrations.
- Complete walk-through with instructor.
- Practice the skill.

D.1. Read the assignments and ask questions

First, the trainee must become familiar with each task. All reading assignments must be read carefully. The trainee should seek guidance from the instructor to clear up any uncertainties.

D.2. Pay attention during demonstrations

Second, while the task is being demonstrated by the instructor, the trainee must pay close attention.

D.3. Complete walk-through with instructor

Third, the trainee will complete the task the first time with the instructor walking the trainee through the steps.

D.4. Practice the skill

Fourth, the trainee must practice the skill for consistent success at the task. The instructor will not sign off any task as complete until the trainee can consistently and correctly complete the task unsupervised.

D.5. Certification process

Once all required qualifications are completed, the certification process can begin.

Section E. Boat Types

Introduction

The following sections indicate the current listing of standard and non-standard boat (NSB) types. Where this listing conflicts with other reference documents regarding currently authorized boat types, the *Boat Management Manual*, COMDTINST M16114.4 (series) shall take precedence. To efficiently manage the logistics and training aspects of NSBs, district commanders should make every effort to minimize the number of different types of NSBs within their district. Standard boats remain the primary unit response resource. Consistent with *Response Boats 2010 – The Shore-Based Response Boat Strategic Vision and Transistion Plan*, COMDTINST 16114.20 (series), units shall not substitute NSBs for standard boats, except at stations (small) where units use larger NSBs as the primary response resource.

Standard boats

ATON	
ANB	55' AtoN Boat
BUSL	49' Stern Loading Buoy Boat
Ship-based response	
CB-L	19' – 22' Cutter Boat, large assigned onboard WLB, WHEC, WMEC, WIX, and WAGB
CB-M	17' and 18' Cutter Boat, medium assigned onboard WLM, WPB and WTGB
CB-S	14' and 15' Cutter Boat, small assigned onboard WLI, WLIC, WLR, 82' WPB and WYTL
CB-OTH	24' Cutter Boat - Over the Horizon (Zodiac 733 Interceptor)
MSB	26' Motor Surf Boat
Shore-based response	
MLB	44' and 47' Motor Lifeboat
SPC (HWX)	52' Heavy Weather Special Purpose Craft (previously the 52' MLB)
UTB	41' Utility Boat, big
Training specific	
ATB	41' Aviation Training Boat (same as 41' UTB)

Non-standard boats

Miscellaneous	
DPB	38' Deployable Pursuit Boat (Fountain)
TPSB	25' Transportable Port Security Boat (Boston Whaler)
ATON	
ANB	63' and 64' AtoN Boat
BU	45' Buoy Boat
Cable	Cable Servicing Special Purpose Craft
TANB	Trailerable AtoN Boat
Ship-based response	
ASB	Arctic Survey Boat
LCVP	Landing Craft
MCB	Motor Cargo Boat
Shore-based response	
IMARV	50' and 55' Independent Maritime Response Vessel
Training specific	
CT-64	Cadet Training Boat
DPB	42' Deployable Pursuit Boat (Fountain)
SB	Sailboat
Miscellaneous	
Ferry	Ferry Special Purpose Craft
PWB	Port & Waterways Boat
SKF	Skiff – a trailerable, open construction boat < 19' without installed electronics used for unit tendering, waterborne maintenance, and specialized immediate vicinity SAR response.
SPC	General Special Purpose Craft – a boat that is unique in the performance of an authorized mission requiring specialized capability that cannot be met within the standardized shore-based response boat fleet.
SPC (LE)	Law Enforcement Special Purpose Craft
SPC (surf)	30' Surf Special Purpose Craft (previously the 30' SRB)

TPSB	22' Transportable Port Security Boat (Boston Whaler)
UTL	Utility Boat Light – a 17' – 28' 11" fiberglass or aluminum hulled boat that may have fendering, have installed electronics and engines, and does not fill an STA (sm) primary response boat allowance. The UTL is representative of the secondary response platform at multi-mission stations. UTL encompasses all remaining shore-based response boats (with the exception of skiffs and SPCs). It includes all boats, which previously filled RIBB, RIBM, UTL and RIBL allowances. Due to the variety of boats that make up this designation, a UTL may be funded at one of two possible SSLs based primarily on boat length.
UTM	Utility Boat Medium – a 25' – 40' 11" in length, closed or partially closed cabin, fiberglass or aluminum hulled boat that may have fendering, have installed electronics and engines, and fills an authorized STA (sm) allowance as the unit's primary response boat.

Section F. Task List for Heavy Weather Coxswain

Introduction

Which tasks must be completed depends on the crew position and type of boat for which the trainee is being qualified. Those tasks which must be accomplished to qualify for each particular boat type are listed below.

NOTE

BOAT TYPE

TASK	SKI WP FR	RBM RBS	CBL CBM	OTH	DPB	TPSB	TANB	MSB MCB ASB	SPC	UTL	UTB	MLB 44	MLB 47	BUSL ANB BU IMARV LC
HW-01-01-ANY									X			X	X	
HW-01-02-ANY									X			X	X	
HW-01-03-TYPE									X			X	X	
HW-01-04-ANY									X			X	X	
HW-01-05-ANY									X			X	X	
HW-01-06-ANY									X			X	X	
HW-01-07-ANY									X			X	X	
HW-02-01-ANY									X			X	X	
HW-02-02-ANY									X			X	X	
HW-02-03-TYPE									X			X	X	
HW-02-04-ANY									X			X	X	
HW-02-05-ANY									X			X	X	
HW-03-01-ANY									X			X	X	
HW-03-02-TYPE									X			X	X	
HW-03-03-TYPE									X			X	X	

TASK	SKI WP FR	RBM RBS	CBL CBM	OTH	DPB	TPSB	TANB	MSB MCB ASB	SPC	UTL	UTB	MLB 44	MLB 47	BUSL ANB BU IMARV LC
HW-03-04-TYPE									X			X	X	
HW-03-05-TYPE									X			X	X	
HW-03-06-TYPE									X			X	X	
HW-03-07-TYPE									X			X	X	
HW-03-08-TYPE									X			X	X	
HW-03-09-TYPE									X			X	X	
HW-03-10-TYPE									X			X	X	
HW-03-11-TYPE									X			X	X	
HW-03-12-TYPE									X			X	X	
HW-03-13-ANY									X			X	X	
HW-03-14-ANY									X			X	X	
HW-04-01-ANY									X			X	X	
HW-04-02-TYPE									X			X	X	
HW-04-03-TYPE									X			X	X	
HW-04-04-TYPE									X			X	X	
HW-04-05-TYPE									X			X	X	
HW-04-06-TYPE									X			X	X	
HW-04-07-TYPE									X			X	X	
HW-04-08-TYPE									X			X	X	
HW-04-09-TYPE									X			X	X	
HW-04-10-ANY									X			X	X	

KEY

X = Task required for boat type qualification.
O = Task required, if equipped, for boat type qualification.

NOTE

Tasks required for the SPC may also be required of the boat crew members qualifying on the future Nearshore Lifeboat (NLB) or any other surf capable boat designated by Commandant (G-OCS). However, the operational limitations established for the NLB or any other surf capable boat must be compared to the standards for each task.

Chapter 2
Heavy Weather Coxswain Qualification Tasks

Introduction

The following are the instructions for this chapter:

- This chapter is to be kept by the instructor or in the trainee's training record. Its purpose is to provide guidance on the trainee's progress through the qualification tasks.
- The instructor should present the tasks to the trainee in a logical order using the instructions provided in *Chapter 1*.
- Tasks should be signed, dated and placed in the trainee's training record when the instructor is satisfied that the trainee can consistently perform a task in accordance with all standards and conditions.

Prerequisites

A prospective Heavy Weather Coxswain must:

- Be assigned to an operational unit with a standard surf capable boat attached, and
- Be a certified coxswain on the boat type for which they are seeking this higher level of qualification.

In this chapter

This chapter contains the following sections:

Section A. Heavy Weather and Surf Knowledge

Introduction

The following are objectives of Division One:

- **Demonstrate** knowledge of heavy weather and surf conditions and operating boats under these conditions.

In this section

This section contains the following tasks:

TASK HW-01-01-ANY **Identify the Types of Breaking Seas, their Characteristics and Causes**

References

a. *Boat Crew Seamanship Manual*, COMDTINST M16114.5 (series), *Chapter 12, Section B*, and *Heavy Weather Addendum, Section A*

b. Bowditch

c. Chapman Piloting

Conditions

Task performed at any time or place with the aid of visual reference. Trainee must accomplish task without prompting.

Standards

The trainee must identify, without error, the types of breaking seas while observing actual conditions or referring to photo examples.

Performance Criteria	Completed (Initials)
1. State differences between deep-water waves and near shore breaking waves.	_____
2. Identify and describe types of breakers (plunging, spilling, surging).	_____
3. State causes of each type of breaker.	_____
4. State effects of bottom contour, jetties, islands, and obstructions.	_____
5. State effects of winds on sea conditions.	_____
6. Explain the effects of current and tidal conditions on breaking seas.	_____
7. State the definition for the following terms: a. Closeout b. Window c. Saddle d. Shoulder e. Low/high side	_____

Instructor _____ **Date** _____

Comments _____

_____

TASK HW-01-02-ANY **Explain the Geographical Causes of Local Surf Conditions**

References

a. *Boat Crew Seamanship Manual*, COMDTINST M16114.5 (series), *Heavy Weather Addendum*, *Section A*

Conditions

Task performed at any time or place with use of visual reference. Trainee must accomplish task without prompting.

Standards

The trainee must state, without error, the local surf conditions, causes, areas to be avoided, and preferred training areas.

Performance Criteria	Completed (Initials)
1. State description of local surf conditions.	_____
2. State causes of each type.	_____
3. State affects of local contour, jetties, islands and obstructions.	_____
4. State effects of winds.	_____
5. State effects of local tides and currents.	_____
6. State local surf areas to be avoided.	_____
7. State characteristics (depths, shoaling areas, local names) for typical surf zones in operating area.	_____
8. State effects of local weather systems and patterns.	_____

Instructor _____ **Date** _____

Comments _____

_____

TASK HW-01-03-TYPE **Explain the Forces Effecting a Surf Capable Boat Operating in Heavy Weather and Surf**

References

a. *Boat Crew Seamanship Manual*, COMDTINST M16114.5 (series), *Heavy Weather Addendum, Section E*

Conditions

Task performed at any time or place. Trainee must accomplish task without prompting or use of a reference.

Standards

The trainee must state, without error, the forces effecting a surf capable boat operating in heavy weather and surf.

Performance Criteria	Completed (Initials)	Boat Type
1. State how various wind velocities effect boat operations with the bow, stern and beam to the element.	_____ _____ _____	_____ _____ _____
2. State how different types of sea/swell patterns effect boat operations with the bow, stern and beam to the element.	_____ _____ _____	_____ _____ _____
3. State effects of aerated water on rudders and propellers.	_____ _____ _____	_____ _____ _____
4. State effects of shallow water on maneuverability.	_____ _____ _____	_____ _____ _____
5. State how each type of breaker effects boat operations with the bow, stern, and beam to the element.	_____ _____ _____	_____ _____ _____
6. State effects of meeting surf with all power ranges and the effects of excessive speed when meeting a breaker.	_____ _____ _____	_____ _____ _____
7. State effects of meeting a breaker at varying angles to the boat (i.e. bow to, stern to, quartering, square).	_____ _____ _____	_____ _____ _____
8. Describe wave avoidance techniques.	_____ _____ _____	_____ _____ _____
9. State cause of rollover or knockdown.	_____ _____ _____	_____ _____ _____
10. State cause of pitchpoling.	_____ _____ _____	_____ _____ _____
11. State cause of broaching.	_____ _____ _____	_____ _____ _____
12. State effects of changes in center of gravity.	_____ _____ _____	_____ _____ _____

Instructor _____ **Date** _____

Comments _____

_____

TASK HW-01-04-ANY **Explain the Relationship Between Navigation and Piloting as it Pertains to Operations in Heavy Seas or Surf**

References

a. *Boat Crew Seamanship Manual*, COMDTINST M16114.5 (series), *Heavy Weather Addendum, Section E*

b. *Coast Guard Navigation Standards Manual*, COMDTINST M3530.2 (series)

Conditions

Task performed at any time or place. Trainee must accomplish task without prompting or use of a reference.

Standards

The trainee must explain, without error, the difficulties encountered when piloting/navigating in heavy seas and/or surf. The trainee must explain the methods used to overcome these difficulties that would allow the coxswain to be assured of the boat's position and safety.

Performance Criteria	Completed (Initials)
1. State the definition for navigation and piloting.	_____
2. State the safe surf working areas by use of ranges, points of reference, or radar ranges and fathometer.	_____
3. State the use of shore-side (tower/beach) lookouts to keep track of the MLB's position.	_____
4. Explain the importance of frequent operational status communications and when a 15-minute position check would be more appropriate than 30 minutes.	_____
5. State the advantages and disadvantages of using the enclosed bridge versus the open bridge in heavy weather.	_____
6. State the effects of aerated water on the accuracy of the fathometer.	_____

Instructor _____ **Date** _____

Comments _____

_____

TASK HW-01-05-ANY **Explain the Procedures and Safety Concerns Related to Recovery of Personnel from the Water in Heavy Seas or Surf**

References

a. *Boat Crew Seamanship Manual*, COMDTINST M16114.5 (series), *Heavy Weather Addendum, Section E*

Conditions

Task performed at any time or place. Trainee must accomplish task without prompting or use of a reference.

Standards

The trainee must state, without error, the proper procedure for recovery of personnel from the water in heavy weather or surf.

Performance Criteria	Completed (Initials)
1. State the importance of ensuring that proper PPE is used.	_____
2. State the importance of setting up down-swell and using the appropriate steering station.	_____
3. State when to have personnel man the well-deck/recess port.	_____
4. State the appropriate methods for protecting the crew during the recovery phase.	_____
5. State the standard coxswain/crew communications expected during the recovery phase.	_____
6. State first-aid procedures and where to place recovered personnel.	_____
7. State the differences between recovery techniques used for a conscious vice unconscious person.	_____
8. Discuss the use of life rings, throw bags, and boat hooks.	_____
9. State the risks inherent in recovering personnel from the water and methods used to minimize them.	_____

Instructor _____ **Date** _____

Comments _____

_____

TASK HW-01-06-ANY **Explain the Heavy Weather Towing Approach and Key Elements Related to Towing in Heavy Weather**

References a. *Boat Crew Seamanship Manual*, COMDTINST M16114.5 (series), *Chapter 17*

Conditions Task performed at any time or place. Trainee must accomplish task without prompting or use of a reference.

Standards The trainee must state, without error, the heavy weather approach.

Performance Criteria	Completed (Initials)
1. State the importance of setting up down-swell/down-current and using the appropriate steering station.	_____
2. State the importance of being aware of the effect that the wind and seas have on the MLB in relation to the disabled vessel (set and drift).	_____
3. State the definition of optimum position, danger area, and maneuvering zone.	_____
4. State the procedures for maintaining safe distance while station keeping (opening and closing).	_____
5. State the importance of crew control and assigning duties.	_____
6. State the standard coxswain/crew communications expected during each of the following phases: a. Set-up b. Approach c. Hook-up d. Paying-out e. In tow	_____
7. State the different tow rigs available and the advantages of each.	_____
8. State the causes of shock loading and how to correct them.	_____
9. State the purpose, deployment procedures and proper use of the drogue as it relates to towing in heavy seas.	_____
10. State the risks or safety concerns inherent in taking a vessel in stern tow and methods used to minimize them.	_____

Instructor _____ **Date** _____

Comments _____

_____

TASK HW-01-07-ANY **Explain the Procedure for Passing the Pump or Other Gear in Heavy Seas**

References

a. *Boat Crew Seamanship Manual*, COMDTINST M16114.5 (series), *Heavy Weather Addendum, Section E*

Conditions

Task performed at any time or place. Trainee must accomplish task without prompting or use of a reference.

Standards

The trainee must state, without error, the proper procedure for passing a pump or other gear in heavy seas.

Performance Criteria	Completed (Initials)
1. State the importance of using a proper heavy weather approach to the lowest part of the disabled vessel.	_____
2. State proper equipment setup to pass gear in heavy weather including use of tending lines, extra flotation, or messengers.	_____
3. State the importance of station keeping until all gear is delivered.	_____
4. State the risks inherent in passing equipment in heavy seas and methods used to minimize them.	_____

Instructor _____ **Date** _____

Comments _____

_____

Section B. Emergency Procedures or Response in Heavy Weather/Surf

Introduction

The following are objectives of Division Two:

- **Demonstrate** an understanding of the PPE and safety equipment to be used for heavy weather/surf operations.
- **Demonstrate** an understanding of the emergency procedures for operating in heavy weather/surf.

NOTE

Instructors must ensure that trainees reassess risk at appropriate intervals during evolutions, communicate to the crew, and use the results in decision-making.

In this section

This section contains the following tasks:

TASK HW-02-01-ANY **Identify PPE and Safety Equipment for Heavy Weather and Surf Operations**

References

a. *Rescue and Survival Systems Manual*, COMDTINST M10470.10 (series)

b. *Boat Crew Seamanship Manual*, COMDTINST M16114.5 (series), *Chapter 6*

Conditions Task performed on the boat at any time. Trainee must accomplish task without prompting or use of a reference.

Standards The trainee must state, without error, the safety precautions and safety equipment for heavy weather and surf operations.

Performance Criteria	Completed (Initials)
1. State current policies and references for use of PPE and safety equipment on boats.	_____
2. State use of safety belts and seat belts.	_____
3. State the attachment points for the safety belts.	_____
4. State use of helmets.	_____
5. State use of dry suits, anti-exposure coveralls, hypothermia undergarments, gloves, and other protective garments including requirements for wear of each. Include explanation on the dangers of improper attire, such as cotton clothing, non-waterproof gloves, caps, comfort rings, etc.	_____

Instructor _____ **Date** _____

Comments _____

_____

TASK HW-02-02-ANY	**Explain Boat Preparations and Safety Precautions for Operating in Heavy Seas/Surf**
References	a. *Boat Crew Utilization Guidelines*, COMDTINST 5312.16 (series) b. Appropriate sections of the boat operator handbook.
Conditions	Task performed at any time or place. Trainee must accomplish task without prompting or use of a reference.
Standards	The trainee must state, without error, preparations and safety precautions for operating a boat in heavy seas or surf.

Performance Criteria	Completed (Initials)
1. State areas of attention related to conducting safety rounds on the boat prior to heavy weather or surf operations (i.e. watertight integrity, typical missile hazards, equipment stowage, systems checks).	_____
2. State disabling casualties or restrictive discrepancies that would effect decisions to operate in heavy weather or surf.	_____
3. Explain the need for a backup radio and alternatives for communication.	_____
4. State when it is necessary to increase the frequency of ops and position checks (i.e. every 15 minutes).	_____
5. State maximum training conditions.	_____
6. State maximum operational conditions.	_____
7. State affects of fatigue and hypothermia on crew.	_____
8. State procedures for reducing body stress.	_____
9. Explain the boat crew fatigue standards.	_____
10. State concept of offshore crew management (extended sortie, underway rest/relief alternatives).	_____
11. Explain coxswain/surfman level decision criteria related to prosecution of the mission sortie (i.e. Go-No Go points).	_____
12. State procedures for conducting underway rounds during or after operations in heavy weather or surf.	_____
13. Explain how risk assessments are conducted and used to manage inherent risks.	_____

Instructor _____ **Date** _____

Comments _____

_____

TASK HW-02-03-TYPE	**Explain the Procedures to be Taken for a Rollover or Knockdown**
References	a. Appropriate sections of the boat operator handbook.
Conditions	Task performed at any time onboard boat. Trainee must accomplish task without prompting or use of a reference.
Standards	In response to the instructor, the trainee must, without error, state the crew procedures when a boat rolls or is caught by the force of a breaker.

Performance Criteria	Completed (Initials)	Boat Type
1. State the actions of crew in the event a breaker strikes the boat.	_____	_____
2. State force to be expected and effects on crew and boat.	_____	_____
3. State expected length of time for rollover or knockdown.	_____	_____
4. State immediate coxswain/surfman actions including assessment of crew condition and control of the boat.	_____	_____
5. State post rollover/knockdown casualty control procedures.	_____	_____
6. State likely conditions of antennas, mast, electronics, windows, and superstructure.	_____	_____
7. State likely condition of engine room and other compartments.	_____	_____
8. State potential damage control efforts or assistance that may be required as a result of a rollover or knockdown.	_____	_____
9. State the effect flooding in various compartments will have on boat stability and maneuvering.	_____	_____
10. State precedence for securing of electrical system breakers if necessary.	_____	_____
11. State essential information to be reported to operational command and alternatives for communicating status.	_____	_____
12. State deciding factors (i.e. reassessed risk) to determine whether to proceed with mission or return.	_____	_____
13. State potential actions to be performed by the backup safety boat (when available).	_____	_____
14. State immediate dockside procedures.	_____	_____

Instructor _____ **Date** _____

Comments _____

_____

TASK HW-02-04-ANY **Explain the Procedures for Personal Survival if Lost Overboard in a Heavy Weather or Surf Environment**

Reference a. *Rescue and Survival Systems Manual*, COMDTINST M10470.10 (series)

Conditions Task performed at any time or place. Trainee must accomplish task without prompting or use of a reference.

Standards The trainee must state, without error, procedures for personal survival if lost overboard in local area heavy weather or surf conditions.

Performance Criteria	Completed (Initials)
1. Discuss local area hazards (i.e. cold water, warm water, ice), rescue response (from where), signaling, and survival choices (i.e. swim to beach, stay with boat).	_____
2. Explain the techniques for swimming in beach surf areas and hazards that may be encountered (i.e. wave force, rip currents, long shore currents, shoals, debris).	_____
3. Explain reasons for use of a beach (shore-side) rescue party including limitations and alternatives to Coast Guard response.	_____
4. Explain emergency procedures (as established locally) and emergency signals to be used by rescue swimmers.	_____
5. Discuss notification of other units or agencies, as appropriate, to ensure timely support resources are available. (Potential cross-training opportunity)	_____

Instructor _____ **Date** _____

Comments _____

_____

Section C. Heavy Weather Operations

Introduction

The following are objectives of Division Three:

- **Demonstrate** ability to properly plan for heavy weather operations.
- **Demonstrate** ability to operate boat(s) in heavy weather conditions, during various missions.

NOTE

Instructors must ensure that trainees reassess risk at appropriate intervals during evolutions, communicate to the crew, and use the results in decision-making.

In this section

This section contains the following tasks:

Task Number	Task	See Page
HW-03-01-ANY	Conduct Pre-Mission Sortie Planning for Heavy Weather Operations	2-21
HW-03-02-TYPE	Conduct Safety Rounds, Vessel Systems Checks, and Crew Brief Related to Heavy Weather Operations	2-22
HW-03-03-TYPE	Operate a Boat in Heavy Seas	2-24
HW-03-04-TYPE	Pilot a Boat in Heavy Seas	2-26
HW-03-05-TYPE	Conduct a Person-in-the-Water (PIW) Recovery in Heavy Seas	2-27
HW-03-06-TYPE	Maintain a Stationary Position (Station Keep) Relative to Another Vessel (or Drifting Object) in Heavy Seas*	2-28
HW-03-07-TYPE	Conduct a Direct Pass of Equipment (Drogue, Pump, Radio, etc.) to Another Vessel in Heavy Seas*	2-29
HW-03-08-TYPE	Take a Boat in Tow in Heavy Seas Using Heavy Weather Approach (Bow-to Seas)*	2-30
HW-03-09-TYPE	Take a Boat in Tow in Heavy Seas Using "Stern-to Seas" Approach*	2-32
HW-03-10-TYPE	Counteract Shockloading During Tow of a Vessel in Heavy Seas and Demonstrate Use of a Drogue*	2-34
HW-03-11-TYPE	Shorten Tow in Heavy Seas*	2-36
HW-03-12-TYPE	Tow a Vessel Inbound Across an Inlet or Bar in Heavy Weather*	2-38
HW-03-13-ANY	Illuminate a Bar, Inlet or Surf Zone at Night Using Pyrotechnics from a Boat and from Shore	2-39
HW-03-14-ANY	Conduct a Post-Mission Standdown and Crew Debrief	2-41

* ***Task must be accomplished with another vessel***

TASK HW-03-01-ANY **Conduct Pre-Mission Sortie Planning for Heavy Weather Operations**

References

a. *Team Coordination Training (TCT)*, COMDTINST 1541.1 (series)

b. *Operational Risk Management (ORM)*, COMDTINST 3500.3 (series)

Conditions Task performed prior to getting underway. Trainee must accomplish task without prompting or use of a reference.

Standards Trainee must coordinate all mission planning and establish objectives for the sortie. Trainee must lead the shore-side pre-mission safety brief to include all involved crew (i.e. comms watchstander, boat crews, tower watch, beach party).

Performance Criteria	Completed (Initials)
1. Identify safe operating area and hazards.	_____
2. Evaluate sea/surf conditions, tides, currents, winds, and anticipated changes that may occur during the sortie.	_____
3. Brief crew on sortie objectives and the area where operations will be conducted.	_____
4. Brief crew on communications plan encompassing boat-to-boat, boat-to-shore, shore-to-boat. Include discussion of backup radio use and location.	_____
5. Brief crew on principle use of tower watch/beach party in providing critical information to the participating boats.	_____
6. Solicit and evaluate safety concerns including knockdown/rollover brief and proper use of PPE.	_____
7. Conduct risk assessment for sortie using appropriate risk management tools (SPE, GAR or other) from TCT/ORM and include discussion of risk as part of crew briefs.	_____

Instructor _____ **Date** _____

Comments _____

_____

TASK HW-03-02-TYPE **Conduct Safety Rounds, Vessel Systems Checks, and Crew Brief Related to Heavy Weather Operations**

References

a. *Boat Crew Seamanship Manual*, M16114.5 (series), *Chapter 1*

Conditions

Task performed on boat prior to leaving protected waters and upon return to protected waters. Trainee must accomplish task without prompting or use of a reference.

Standards

Trainee must complete a visual safety round prior to getting underway. Trainee must check operation of the boat key systems and brief crew prior to leaving protected waters. Trainee must coordinate safety rounds of the boat after returning to protected waters.

Performance Criteria	Completed (Initials)	Boat Type
1. Conduct visual inspection through all compartments prior to getting underway (i.e. stowage, missile hazards, watertight integrity, leaks or signs of system problems).	_____ _____ _____	_____ _____ _____
2. Monitor conditions and hazards in operating area.	_____ _____ _____	_____ _____ _____
3. Check engines and controls for full power ahead and astern (both open bridge stations on 47' MLB).	_____ _____ _____	_____ _____ _____
4. Check steering system for full, even rudder control port and starboard (both open bridge stations on 47' MLB).	_____ _____ _____	_____ _____ _____
5. Ensure engineer made round of engine room prior to leaving protected waters.	_____ _____ _____	_____ _____ _____
6. Assign crew positions and check PPE and all safety equipment.	_____ _____ _____	_____ _____ _____
7. Brief crew on methods to be used in moving about the deck, if necessary, and who will authorize movement.	_____ _____ _____	_____ _____ _____
8. Brief crew on natural ranges, points of reference, radar ranges, and depth of water to be used.	_____ _____ _____	_____ _____ _____
9. Brief crew on knockdown/rollover procedures.	_____ _____ _____	_____ _____ _____
10. Brief crew on procedure in the event the coxswain becomes incapacitated.	_____ _____ _____	_____ _____ _____
11. Brief crew on procedure to remain together and use appropriate signaling device in the event that they have fallen overboard.	_____ _____ _____	_____ _____ _____
12. Check communications with backup safety boat and/or shore party.	_____ _____ _____	_____ _____ _____
13. Coordinate safety rounds of boat after safely returning to protected waters.	_____ _____ _____	_____ _____ _____
14. Ensure clear communications and coordination among crew and other resources.	_____ _____ _____	_____ _____ _____
15. Maintain situational awareness and total control of the boat.	_____ _____ _____	_____ _____ _____
16. Brief crew on risk assessment results.	_____ _____ _____	_____ _____ _____

Instructor _____ **Date** _____

Comments _____

_____

_____

TASK HW-03-03-TYPE **Operate a Boat in Heavy Seas**

References

a. *Boat Crew Seamanship Manual*, COMDTINST M16114.5 (series), *Chapter 1*, and *Heavy Weather Addendum, Section B*

Conditions

Task performed while underway in 8- to 15-foot seas. Trainee must accomplish task without prompting or use of a reference. Trainee must also demonstrate vessel control in high wind conditions with gusts greater than 30 knots. During single engine operations for the simulated engine casualty, the second engine will remain on line.

Standards

Task must be accomplished without excessive risk to the boat or crew. Boat must operate with bow to, stern to, and beam to seas while both making way and maintaining stationary position.

Performance Criteria	Completed (Initials)	Boat Type
1. Brief crew and assign duties.	_____ _____ _____	_____ _____ _____
2. Test engine and steering controls prior to departing protected waters.	_____ _____ _____	_____ _____ _____
3. Observe sea conditions and evaluate.	_____ _____ _____	_____ _____ _____
4. Identify safe operating area and hazards.	_____ _____ _____	_____ _____ _____
5. Avoid breaking waves, if possible.	_____ _____ _____	_____ _____ _____
6. Use proper power to meet seas when required.	_____ _____ _____	_____ _____ _____
7. Maintain proper communications between coxswain and crew.	_____ _____ _____	_____ _____ _____
8. Maintain full control of boat while transiting with bow to seas.	_____ _____ _____	_____ _____ _____
9. Maintain full control of boat while transiting with stern to seas.	_____ _____ _____	_____ _____ _____
10. Adjust speed and/or angle to the seas to allow a stable, comfortable ride for conditions.	_____ _____ _____	_____ _____ _____
11. Maintain full control of boat while station keeping.	_____ _____ _____	_____ _____ _____
12. Maintain full control of boat while maneuvering in winds gusting to greater than 30 knots.	_____ _____ _____	_____ _____ _____
13. Maintain full control of boat while backing (minimum of 500 yards without yawing more than 10 degrees off heading).	_____ _____ _____	_____ _____ _____
14. Maintain full control while operating/maneuvering with one engine, during a simulated engine casualty.	_____ _____ _____	_____ _____ _____

Instructor _____ **Date** _____

Comments _____

_____

TASK HW-03-04-TYPE **Pilot a Boat in Heavy Seas**

References

a. *Boat Piloting and Navigation Standards*, COMDTINST 3530.3 (series)

b. *Boat Crew Seamanship Manual*, COMDTINST M16114.5 (series), *Heavy Weather Addendum, Section C*

Conditions

Task performed while underway in 8- to 15-foot seas. Trainee must accomplish task without prompting or use of a reference.

Standards

Task must be accomplished without excessive risk to the boat or crew. Boat preparations must be accomplished prior to getting underway or leaving protected waters. Boat must be piloted at least eight miles with all installed navigation equipment used competently by the trainee.

Performance Criteria	Completed (Initials)	Boat Type
1. Brief crew and assign duties.	_____ _____ _____	_____ _____ _____
2. Conduct pre-launch preparations including plotting of dead reckoning positions, tracklines, ranges, and waypoints.	_____ _____ _____	_____ _____ _____
3. Inspect boat ensuring all loose gear is stowed and watertight integrity is maintained.	_____ _____ _____	_____ _____ _____
4. Assign crew positions and check PPE and all safety equipment.	_____ _____ _____	_____ _____ _____
5. Observe sea conditions and evaluate safest course against planned dead reckoning plot.	_____ _____ _____	_____ _____ _____
6. Identify safe operating area and hazards and pilot boat with adjustments for surrounding dangers.	_____ _____ _____	_____ _____ _____
7. Consistently determine speed over ground and actual course made good.	_____ _____ _____	_____ _____ _____
8. Demonstrate awareness of the effects of current, swell, and wind on the boats heading.	_____ _____ _____	_____ _____ _____
9. Adjust heading and/or speed to compensate for set and drift as needed to maintain safe transit.	_____ _____ _____	_____ _____ _____
10. Integrate information from all available electronics to consistently determine position.	_____ _____ _____	_____ _____ _____
11. Demonstrate advantages and shortcomings of all available electronics.	_____ _____ _____	_____ _____ _____
12. Promote continuous communication and use of crew as integral part of piloting effort.	_____ _____ _____	_____ _____ _____
13. Maintain situational awareness and crew control throughout evolution.	_____ _____ _____	_____ _____ _____

Instructor _____ **Date** _____

Comments _____

_____

TASK HW-03-05-TYPE **Conduct a Person-in-the-Water (PIW) Recovery in Heavy Seas**

References

a. *Boat Crew Seamanship Manual*, COMDTINST M16114.5 (series), *Heavy Weather Addendum, Section D*

Conditions

Task performed while underway in 8- to 15-foot seas. Trainee must accomplish task without prompting or use of a reference. A life-like dummy (Oscar) will be used if performed during a training sortie.

Standards

Task must be accomplished without excessive risk to the boat or crew. The direct pickup method must be used. Task must be accomplished without injury or excessive risk to the person (life-like dummy) in the water.

Performance Criteria	Completed (Initials)	Boat Type
1. Brief crew and assign duties.	_____ _____ _____	_____ _____ _____
2. Station pointer on open steering station or nearby coxswain to effectively communicate.	_____ _____ _____	_____ _____ _____
3. Throw life ring if appropriate to assist PIW.	_____ _____ _____	_____ _____ _____
4. Maneuver boat down sea into position for final approach.	_____ _____ _____	_____ _____ _____
5. Make ready appropriate standard retrieval equipment.	_____ _____ _____	_____ _____ _____
6. Position crew for recovery ensuring safe movement and clear communications.	_____ _____ _____	_____ _____ _____
7. Conduct recovery from recess port or well-deck only.	_____ _____ _____	_____ _____ _____
8. Maneuver boat into safe position for recovery with regard to crew and PIW.	_____ _____ _____	_____ _____ _____
9. Properly use sea and wind conditions in adjusting approach during pickup.	_____ _____ _____	_____ _____ _____
10. Complete safe recovery of PIW.	_____ _____ _____	_____ _____ _____
11. Move PIW from recess port or well-deck to position of safety and protection from elements.	_____ _____ _____	_____ _____ _____
12. Ensure clear communications and coordination among crew.	_____ _____ _____	_____ _____ _____
13. Maintain situational awareness and total control of the boat throughout evolution.	_____ _____ _____	_____ _____ _____

Instructor _____ **Date** _____

Comments _____

_____

TASK HW-03-06-TYPE **Maintain a Stationary Position (Station Keep) Relative to Another Vessel (or Drifting Object) in Heavy Seas**

References

a. *Boat Crew Seamanship Manual*, COMDTINST M16114.5 (series), *Heavy Weather Addendum, Section B*

Conditions

Task performed while underway in 8- to 15-foot seas. Trainee must accomplish task without prompting or use of a reference. Use of another vessel is preferred as a relative target, but a suitable drifting object may be substituted.

Standards

Task must be accomplished without excessive risk to the boat or crew. Boat must maintain stationary position for at least five minutes with limited movement relative to the other vessel (object). Boat must maintain bow/stern to the seas attitude at all times except when lateral movement is necessary. The task must be accomplished without endangering the other vessel (object) and without getting close enough for the vessels to collide.

Performance Criteria	Completed (Initials)	Boat Type
1. Brief crew and assign duties.	_____ _____ _____	_____ _____ _____
2. Identify safe operating area and hazards.	_____ _____ _____	_____ _____ _____
3. Use proper helm and throttle control to establish a safe position near the other vessel.	_____ _____ _____	_____ _____ _____
4. Use swells and/or wind to assist in maneuvering and holding position.	_____ _____ _____	_____ _____ _____
5. Use appropriate steering station.	_____ _____ _____	_____ _____ _____
6. Maintain position within 75 feet of the other vessel or drifting object for 5 minutes with bow/stern to seas.	_____ _____ _____	_____ _____ _____
7. Ensure clear communications and coordination among crew.	_____ _____ _____	_____ _____ _____
8. Maintain situational awareness and total control of the boat throughout evolution.	_____ _____ _____	_____ _____ _____

Instructor _____ **Date** _____

Comments _____

_____

TASK HW-03-07-TYPE **Conduct a Direct Pass of Equipment (Drogue, Pump, Radio, etc.) to Another Vessel in Heavy Seas**

References a. *Boat Crew Seamanship Manual*, COMDTINST M16114.5 (series), *Chapter 18*

Conditions Task performed while underway for training in daytime in 8- to 15-foot seas. Trainee must accomplish task without prompting or use of a reference.

Standards Task must be accomplished without excessive risk to the boat or crew. The task must be accomplished without endangering the other vessel or crew. The boat must maintain a safe standoff distance while conducting the direct pass. Control of the equipment must be maintained without loss.

Performance Criteria	Completed (Initials)	Boat Type
1. Brief crew and assign duties.	_____ _____ _____	_____ _____ _____
2. Evaluate condition of disabled boat.	_____ _____ _____	_____ _____ _____
3. Establish communications with disabled boat.	_____ _____ _____	_____ _____ _____
4. Set up to pass standard equipment using messenger, tending, or recovery lines as appropriate.	_____ _____ _____	_____ _____ _____
5. Evaluate relative rates of drift.	_____ _____ _____	_____ _____ _____
6. Identify safest transfer point on MLB and receiving point on disabled boat.	_____ _____ _____	_____ _____ _____
7. Make proper approach to disabled boat.	_____ _____ _____	_____ _____ _____
8. Maintain relative position with drifting vessel.	_____ _____ _____	_____ _____ _____
9. Ensure crew maintains control of gear during pass to disabled boat.	_____ _____ _____	_____ _____ _____
10. Ensure clear communications and coordination among crew.	_____ _____ _____	_____ _____ _____
11. Maintain situational awareness and total control of the boat throughout evolution.	_____ _____ _____	_____ _____ _____

Instructor _____ **Date** _____

Comments _____

_____

TASK HW-03-08-TYPE **Take a Boat in Tow in Heavy Seas Using Heavy Weather Approach (Bow-to Seas)**

References

a. *Boat Crew Seamanship Manual*, COMDTINST M16114.5 (series), *Chapter 17*

b. *47' MLB Operator's Handbook*, COMDTINST M16114.25 (series), *Chapter 6*

Conditions Task performed while underway in 8- to 15-foot seas. Trainee must accomplish task without prompting or use of a reference.

Standards Task must be accomplished without excessive risk to the boat or crew. Boat must take another boat in stern tow and maintain tow for at least fifteen minutes.

Performance Criteria	Completed (Initials)	Boat Type
1. Brief crew and assign duties.	_____ _____ _____	_____ _____ _____
2. Observe sea conditions and evaluate.	_____ _____ _____	_____ _____ _____
3. Establish communications with disabled boat.	_____ _____ _____	_____ _____ _____
4. Evaluate condition of disabled vessel.	_____ _____ _____	_____ _____ _____
5. Describe evolution and safety procedures to disable vessel.	_____ _____ _____	_____ _____ _____
6. Locate towing appendages and evaluate for strength.	_____ _____ _____	_____ _____ _____
7. Use appropriate towing equipment for vessel type, vessel size, and sea conditions.	_____ _____ _____	_____ _____ _____
8. Evaluate relative rates of drift while station keeping near disabled vessel.	_____ _____ _____	_____ _____ _____
9. Make heavy weather approach to disabled vessel while keeping bow square to seas.	_____ _____ _____	_____ _____ _____
10. Safely pass towline while station keeping in optimum position relative to vessel.	_____ _____ _____	_____ _____ _____
11. Transition into stern tow after towline is safely made fast to the vessel and the crew has control at the tow bitt.	_____ _____ _____	_____ _____ _____
12. Smoothly and slowly pay out towline without shockloading.	_____ _____ _____	_____ _____ _____
13. Choose angle to the seas (during pay out) to provide safest working conditions for crew and least strain on towing equipment and appendages.	_____ _____ _____	_____ _____ _____
14. Adjust length of tow, speed, and final course to give disabled vessel the safest/best ride.	_____ _____ _____	_____ _____ _____
15. Maintain consistent communications with disabled vessel to verify status.	_____ _____ _____	_____ _____ _____
16. Ensure clear communications and coordination among crew.	_____ _____ _____	_____ _____ _____

Performance Criteria	Completed (Initials)	Boat Type
17. Maintain situational awareness and total control of the boat throughout evolution.	_____ _____ _____	_____ _____ _____
18. Tow disabled boat for minimum of fifteen minutes.	_____ _____ _____	_____ _____ _____

Instructor _____ **Date** _____

Comments _____

_____

_____

TASK HW-03-09-TYPE **Take a Boat in Tow in Heavy Seas Using "Stern-to Seas" Approach**

References

a. *Boat Crew Seamanship Manual*, COMDTINST M16114.5 (series), *Chapter 17*

b. *47' MLB Operator's Handbook*, COMDTINST M16114.25 (series), *Chapter 6*

Conditions Task performed while underway in 8- to 12-foot seas. Trainee must accomplish task without prompting or use of a reference.

Standards Task must be accomplished without excessive risk to the boat or crew. Boat must take another boat in stern tow and maintain tow for at least fifteen minutes.

Performance Criteria	Completed (Initials)	Boat Type
1. Brief crew and assign duties.	_____ _____ _____	_____ _____ _____
2. Observe sea conditions and evaluate.	_____ _____ _____	_____ _____ _____
3. Establish communications with disabled vessel.	_____ _____ _____	_____ _____ _____
4. Evaluate condition of disabled boat.	_____ _____ _____	_____ _____ _____
5. Describe evolution and safety procedures to disable vessel.	_____ _____ _____	_____ _____ _____
6. Locate towing appendages and evaluate for strength.	_____ _____ _____	_____ _____ _____
7. Use appropriate towing equipment for vessel type, vessel size, and sea conditions.	_____ _____ _____	_____ _____ _____
8. Evaluate relative rates of drift while station keeping near disabled vessel.	_____ _____ _____	_____ _____ _____
9. Make heavy weather approach to disabled boat while keeping stern square to seas.	_____ _____ _____	_____ _____ _____
10. Safely pass towline while station keeping in optimum position relative to vessel.	_____ _____ _____	_____ _____ _____
11. Transition into stern tow after towline is safely made fast to the vessel and the crew has control at the tow bitt.	_____ _____ _____	_____ _____ _____
12. Smoothly and slowly pay out towline without shockloading.	_____ _____ _____	_____ _____ _____
13. Choose angle to the seas (during pay out) to provide safest working conditions for crew and least strain on towing equipment and appendages.	_____ _____ _____	_____ _____ _____
14. Adjust length of tow, speed, and final course to give disabled vessel the safest/best ride.	_____ _____ _____	_____ _____ _____
15. Maintain consistent communications with disabled vessel to verify status.	_____ _____ _____	_____ _____ _____
16. Ensure clear communications and coordination among crew.	_____ _____ _____	_____ _____ _____

Performance Criteria	Completed (Initials)	Boat Type
17. Maintain situational awareness and total control of the boat throughout evolution.	_____ _____ _____	_____ _____ _____
18. Tow disabled boat for fifteen minutes.	_____ _____ _____	_____ _____ _____

Instructor _____ **Date** _____

Comments _____

_____

TASK HW-03-10-TYPE	**Counteract Shockloading During Tow of a Vessel in Heavy Seas and Demonstrate Use of a Drogue**
References	a. *Boat Crew Seamanship Manual*, COMDTINST M16114.5 (series), *Chapter 17*
Conditions	Task performed while underway in 8- to 15-foot seas in open waters. Task performed after safely taking a vessel in stern tow.
Standards	Task must be accomplished without excessive risk to the boat or crew. Task will be performed utilizing standard equipment and procedures. Vessel must be towed for at least 15 minutes without excessive strain on the towing appendages or shockloading of the towline.

Performance Criteria	Completed (Initials)	Boat Type
1. Evaluate conditions with relation to sea state, towed vessel, towing rig, intended destination, and expected changes or hazards.	_____ _____ _____	_____ _____ _____
2. Brief crew and assign duties.	_____ _____ _____	_____ _____ _____
3. Brief towed vessel on procedures and intended actions.	_____ _____ _____	_____ _____ _____
4. Demonstrate proper method to counteract shockloading based on conditions (i.e. course change, adjust speed, use of a drogue, adjust scope of towline).	_____ _____ _____	_____ _____ _____
5. State the appropriate method for passing a drogue and the best time to accomplish it.	_____ _____ _____	_____ _____ _____
6. State safety precautions to be observed when selecting and using a drogue.	_____ _____ _____	_____ _____ _____
7. Explain where a drogue should be secured when towing in a heavy following sea.	_____ _____ _____	_____ _____ _____
8. Explain how a vessel is affected when being towed with a drogue.	_____ _____ _____	_____ _____ _____
9. State how to judge the proper scope of drogue line to be used in various sea states.	_____ _____ _____	_____ _____ _____
10. State when to have towed vessel recover drogue and what actions will be taken.	_____ _____ _____	_____ _____ _____
11. Demonstrate use of a drogue.	_____ _____ _____	_____ _____ _____
12. Maintain consistent communications with disabled vessel to verify status.	_____ _____ _____	_____ _____ _____
13. Ensure clear communications and coordination among crew.	_____ _____ _____	_____ _____ _____
14. Maintain situational awareness and total control of the boat throughout evolution.	_____ _____ _____	_____ _____ _____
15. Tow disabled vessel for fifteen minutes.	_____ _____ _____	_____ _____ _____

Instructor _____ **Date** _____

Comments _____

_____

_____

TASK HW-03-11-TYPE **Shorten Tow in Heavy Seas**

References

a. *Boat Crew Seamanship Manual*, COMDTINST M16114.5 (series), *Chapter 17*

Conditions

Task performed while underway in 8- to 15-foot seas in open waters.

Standards

Task must be accomplished without excessive risk to the boat or crew. Task must be accomplished without allowing either the towed vessel or the MLB to be set over the towline at any time.

Performance Criteria	Completed (Initials)	Boat Type
1. Brief crew and assign duties.	_____ _____ _____	_____ _____ _____
2. Brief towed vessel on procedures and intended actions.	_____ _____ _____	_____ _____ _____
3. Select appropriate heading approximately quartering the seas based on wind conditions.	_____ _____ _____	_____ _____ _____
4. Slow both vessels to a stop (no headway).	_____ _____ _____	_____ _____ _____
5. Square into the seas with towed vessel down swell.	_____ _____ _____	_____ _____ _____
6. Set up to recover towline off the windward quarter.	_____ _____ _____	_____ _____ _____
7. Ensure tow bitt is broke and line is tended by crew off the quarter.	_____ _____ _____	_____ _____ _____
8. Back square to the seas with appropriate power until desired amount of towline is recovered.	_____ _____ _____	_____ _____ _____
9. Ensure bight of towline does not get forward of the coxswain.	_____ _____ _____	_____ _____ _____
10. Safely take excess towline aboard to length established by coxswain.	_____ _____ _____	_____ _____ _____
11. Make tow bitt and tend towline as necessary.	_____ _____ _____	_____ _____ _____
12. Maneuver to transition back into stern tow.	_____ _____ _____	_____ _____ _____
13. Explain precautions when towing across a bar/inlet at short tow.	_____ _____ _____	_____ _____ _____
14. Maintain consistent communications with disabled vessel to verify status.	_____ _____ _____	_____ _____ _____
15. Ensure clear communications and coordination among crew.	_____ _____ _____	_____ _____ _____
16. Maintain situational awareness and total control of the boat throughout evolution.	_____ _____ _____	_____ _____ _____

Instructor _____ **Date** _____

Comments _____

_____

_____

TASK HW-03-12-TYPE **Tow a Vessel Inbound Across an Inlet or Bar in Heavy Weather**

References a. *Boat Crew Seamanship Manual*, COMDTINST M16114.5 (series), *Chapter 17*

Conditions Task performed while underway in heavy weather. Maximum sea state will be at command discretion based on area of operation but not to exceed 15 feet (swells or wind generated chop, no surf). Trainee must accomplish task without prompting or use of a reference.

Standards Task must be accomplished without excessive risk to the boat or crew. Task must be accomplished with minimum shock loading of the towline. The MLB must maintain control over the towed vessel throughout the transit.

Performance Criteria	Completed (Initials)	Boat Type
1. Brief crew and assign duties.	_____ _____ _____	_____ _____ _____
2. Brief towed vessel of crossing and safety procedures prior to evolution.	_____ _____ _____	_____ _____ _____
3. Explain precautions when towing across a bar/inlet at short tow.	_____ _____ _____	_____ _____ _____
4. Discuss risk control alternatives (i.e. safety backup boat, tower manned, beach party).	_____ _____ _____	_____ _____ _____
5. Discuss safety concerns (i.e. loss of tow, taking on water, MOB, break on the stern, tow overtaking towline).	_____ _____ _____	_____ _____ _____
6. State and demonstrate appropriate procedures and standard equipment to counteract shockloading when towing a vessel across a bar or inlet.	_____ _____ _____	_____ _____ _____
7. Successfully transit bar/inlet with tow.	_____ _____ _____	_____ _____ _____
8. Maintain consistent communications with disabled vessel to verify status.	_____ _____ _____	_____ _____ _____
9. Ensure clear communications and coordination among crew.	_____ _____ _____	_____ _____ _____
10. Maintain situational awareness and total control of the boat throughout evolution.	_____ _____ _____	_____ _____ _____

Instructor _____ **Date** _____

Comments _____

_____

TASK HW-03-13-ANY	**Illuminate a Bar, Inlet or Surf Zone at Night Using Pyrotechnics from a Boat and from Shore**
References	a. *Boat Crew Seamanship Manual*, COMDTINST M16114.5 (series), *Chapter 6*
Conditions	Task performed while underway during a period of darkness in 8- to 15-foot seas. The MLB (or surf capable boat) may be inside or outside the bar/inlet at the commencement of the operation. Trainee must accomplish task without prompting or use of a reference.
Standards	Task must be accomplished without excessive risk to the boat or crew. The trainee must coordinate the necessary resources to illuminate an area adequately for nighttime MLB (or surf capable boat) operations.

Performance Criteria	Completed (Initials)
1. Conduct unit pre-mission brief including safety procedures, risk management issues, position assignments, individual roles and responsibilities.	_____
2. Explain the reasons and techniques that may be used for illuminating an area such as a bar, inlet, or surf zone at night in order to improve safety of operations.	_____
3. Identify safe operating area and hazards.	_____
4. Determine whether backup safety boat or helo support was necessary to ensure safety.	_____
5. Coordinate resources to ensure all equipment and personnel were on scene prior to commencement of operations.	_____
6. Establish communications between all resources involved including shore-side party.	_____
7. Brief crew and assign duties.	_____
8. Maintain a stable platform during launch of pyrotechnics for illumination.	_____
9. Keep bow or stern square to the seas as appropriate for conditions.	_____
10. Coordinate illumination of the operating area to allow clear observations from boat and/or shore.	_____
11. Determine if conditions were safe for transit into or through the bar, inlet or surf zone.	_____
12. Provide clear, accurate assessment of sea conditions in area and report to unit.	_____
13. Use safety backup boat (if applicable) or shore-side safety watch to provide additional information as appropriate.	_____
14. Ensure clear communications and coordination among crew and other resources.	_____
15. Maintain situational awareness and total control of the boat.	_____

Performance Criteria	Completed (Initials)
16. Conduct unit post-mission debrief including lessons learned and recommendations to command related to improvement in unit response strategy for near shore operations.	_____

Instructor _____ **Date** _____

Comments _____

_____

TASK HW-03-14-ANY **Conduct a Post-Mission Standdown and Crew Debrief**

References

a. *Team Coordination Training (TCT)*, COMDTINST 1541.1 (series)

b. *Operational Risk Management (ORM)*, COMDTINST 3500.3 (series)

Conditions Task performed after underway for heavy weather operations. Trainee must accomplish task without prompting or use of a reference.

Standards Trainee must lead the shore-side post-mission safety debrief to include all involved crew (i.e. comms watchstander, boat crews, tower watch, beach party).

Performance Criteria	Completed (Initials)
1. Stand down all unit resources involved with heavy weather operations and ensure safe return to unit.	_____
2. Ascertain condition of participating crews.	_____
3. Ascertain condition of unit boats and ensure they remained fully mission capable (any disabling or restrictive discrepancies report to command).	_____
4. Ascertain condition of any other resources utilized (i.e. tower, vehicles, radios, safety gear) and ensure their continued readiness.	_____
5. Coordinate and lead unit post-mission debrief in appropriate setting.	_____
6. Debrief crew, encouraging input from juniors first (least experienced), seniors last (most experienced).	_____
7. Review objectives, communications, lessons learned, safety issues observed, ideas for improvement, and reinforcement of good seamanship practices and teamwork.	_____
8. Provide lessons learned and recommendations to command related to improvement in unit response strategy for near shore operations.	_____
9. Determine if the lessons learned or the actions during the mission warrant further reporting via the boat mishap reporting system.	_____
10. Discuss crew's ability to react to changes in risk levels encountered during debrief.	_____

Instructor _____ **Date** _____

Comments _____

_____

Section D. Surf Operations (up to 8 feet)

Introduction

The tasks in this section are not required for certification as heavy weather coxswain. Unit commands that have surf (up to 8 feet) in their respective areas of responsibility shall use these tasks to prepare coxswains and heavy weather coxswains for missions in or near these areas. Coxswains and heavy weather coxswains shall not attempt operations in surf unless they have demonstrated the proper skills through satisfactory accomplishment of these tasks.

These are the objectives for this section:

- **Demonstrate** ability to properly plan for surf operations.
- **Demonstrate** ability to operate boat(s) in surf conditions up to 8 feet, during various missions.

NOTE

Instructors must ensure that trainees reassess risk at appropriate intervals during evolutions, communicate to the crew, and use the results in decision-making.

In this section

This section contains the following tasks:

TASK HW-04-01-ANY **Conduct Pre-Mission Sortie Planning for Surf Operations**

References

a. *Team Coordination Training (TCT)*, COMDTINST 1541.1 (series)

b. *Operational Risk Management (ORM)*, COMDTINST 3500.3 (series)

Conditions Task performed prior to getting underway. Trainee must accomplish task without prompting or use of a reference.

Standards Trainee must coordinate all mission planning and establish objectives for the sortie. Trainee must lead the shore-side pre-mission safety brief to include all involved crew (i.e. comms watchstander, boat crews, tower watch, beach party).

Performance Criteria	Completed (Initials)
1. Identify safe operating area and hazards.	_____
2. Evaluate surf conditions, tides, currents, winds, and anticipate changes that may occur during the sortie.	_____
3. Brief crew on sortie objectives and the area where operations will be conducted.	_____
4. Brief crew on communications plan encompassing boat-to-boat, boat-to-shore, shore-to-boat, reporting necessary to safety. Include discussion of backup radio use and location.	_____
5. Brief crew on principle use of tower watch/beach party in providing critical information to the participating boats.	_____
6. Solicit and evaluate safety concerns including knockdown/rollover brief and proper use of PPE.	_____

Instructor _____ **Date** _____

Comments _____

_____

TASK HW-04-02-TYPE **Conduct Safety Rounds, Vessel Systems Checks, and Crew Brief Related to Surf Operations**

References

a. *Boat Crew Seamanship Manual*, COMDTINST M16114.5 (series), *Chapter 1*

b. *Boat Crew Seamanship Manual*, COMDTINST M16114.5 (series), *Heavy Weather Addendum, Section E*

Conditions

Task performed on boat prior to entering and immediately after exiting a surf zone. Trainee must accomplish task without prompting or use of a reference.

Standards

Trainee must complete a visual safety round prior to getting underway. Trainee must check operation of the boat key systems and brief crew prior to entering surf zone. Trainee must coordinate safety rounds of the boat after exiting the surf zone.

Performance Criteria	Completed (Initials)	Boat Type
1. Conduct visual inspection through all compartments prior to getting underway (i.e. stowage, missile hazards, watertight integrity, leaks or signs of system problems).	_____ _____ _____	_____ _____ _____
2. Monitor conditions and hazards in operating area.	_____ _____ _____	_____ _____ _____
3. Check engines and controls for full power ahead and astern (both open bridge stations on 47' MLB).	_____ _____ _____	_____ _____ _____
4. Check steering system for full, even rudder control port and starboard (both open bridge stations on 47' MLB).	_____ _____ _____	_____ _____ _____
5. Ensure engineer made round of engine room prior to entering the surf zone.	_____ _____ _____	_____ _____ _____
6. Assign crew positions and check PPE and all safety equipment.	_____ _____ _____	_____ _____ _____
7. Brief crew on methods to be used in moving about the deck if necessary and who will authorize movement.	_____ _____ _____	_____ _____ _____
8. Brief crew on natural ranges, points of reference, radar ranges, and depth of water to be used.	_____ _____ _____	_____ _____ _____
9. Brief crew on knockdown/rollover procedures.	_____ _____ _____	_____ _____ _____
10. Brief crew on procedure in the event the surfman becomes incapacitated.	_____ _____ _____	_____ _____ _____
11. Brief crew on procedure to remain together and use appropriate signaling device in the event that they have fallen overboard.	_____ _____ _____	_____ _____ _____
12. Check communications with backup safety boat and/or shore party.	_____ _____ _____	_____ _____ _____
13. Coordinate safety rounds of boat after safely exiting the surf zone.	_____ _____ _____	_____ _____ _____
14. Ensure clear communications and coordination among crew and other resources.	_____ _____ _____	_____ _____ _____

Performance Criteria	Completed (Initials)	Boat Type
15. Maintain situational awareness and total control of the boat.	_____ _____ _____	_____ _____ _____
16. Brief crew on risk assessment results.	_____ _____ _____	_____ _____ _____

Instructor _____ **Date** _____

Comments _____

_____

TASK HW-04-03-TYPE **Determine the Position of a Boat in Surf up to 8 Feet**

References

a. *Coast Guard Navigation Standards Manual*, COMDTINST M3530.2 (series)

Conditions

Task performed while underway in surf up to 8 feet. Trainee must accomplish task without prompting or use of a reference.

Standards

Task must be accomplished without excessive risk to the boat or crew. Using local knowledge, available electronics and seaman's eye, trainee must determine boat's position relative to the closest hazards with an accuracy of 100 yards. Trainee must maintain a safe distance from known hazards at all times. Task must be accomplished while station keeping in the surf zone.

Performance Criteria	Completed (Initials)	Boat Type
1. Brief crew and assign duties.	_____ _____ _____	_____ _____ _____
2. Ensure safety rounds and checks were complete.	_____ _____ _____	_____ _____ _____
3. Assign crew positions and check PPE and all safety equipment.	_____ _____ _____	_____ _____ _____
4. Brief crew on natural ranges, points of reference, radar ranges, and depth of water to be used.	_____ _____ _____	_____ _____ _____
5. Identify safe operating area and hazards and pilot boat with adjustments for surrounding dangers.	_____ _____ _____	_____ _____ _____
6. Observe sea and surf conditions and evaluate safest course through surf zone.	_____ _____ _____	_____ _____ _____
7. Demonstrate awareness of the effects of current, swell, and wind on the boat's heading and movements.	_____ _____ _____	_____ _____ _____
8. Avoid breaking waves (when possible) using windows, saddles, and shoulders.	_____ _____ _____	_____ _____ _____
9. Choose safe position in which to station keep with relation to depth of water, hazards, and useful ranges.	_____ _____ _____	_____ _____ _____
10. Determine boat's position in relation to known hazards using available electronics.	_____ _____ _____	_____ _____ _____
11. Demonstrate advantages and shortcomings of all available electronics.	_____ _____ _____	_____ _____ _____
12. Determine boat's position using fixed geographical references and seaman's eye.	_____ _____ _____	_____ _____ _____
13. Use other available resources to assist in determining position (i.e. tower, beach party, other boats, aircraft, watchstander).	_____ _____ _____	_____ _____ _____
14. Pass accurate position to operational command and verify by shore-side plotting.	_____ _____ _____	_____ _____ _____
15. Promote continuous communication and use of crew as integral part of piloting effort.	_____ _____ _____	_____ _____ _____
16. Maintain situational awareness and total control of the boat.	_____ _____ _____	_____ _____ _____

Instructor _____ **Date** _____

Comments _____

_____

_____

TASK HW-04-04-TYPE **Maintain Stationary Position ("Station Keep") Using Both the Bow-To and Stern-To Methods in Surf up to 8 Feet**

References

a. *Boat Crew Seamanship Manual*, COMDTINST M16114.5 (series), *Heavy Weather Addendum, Section E*

Conditions

Task performed while underway in surf up to 8 feet. Trainee must accomplish task without prompting or use of a reference.

Standards

Task must be accomplished without excessive risk to the boat or crew. Boat must maintain stationary position for at least five minutes with limited movement. Boat must maintain square bow-to/stern-to attitude at all times except when lateral movement is necessary. When necessary, boat must meet breakers squarely and with enough power to get the boat through/over the wave.

Performance Criteria	Completed (Initials)	Boat Type
1. Brief crew and assign duties.	_____ _____ _____	_____ _____ _____
2. Identify safe operating area and hazards.	_____ _____ _____	_____ _____ _____
3. Maintain square bow-to/stern-to aspect while station keeping in surf.	_____ _____ _____	_____ _____ _____
4. Use proper amount of power to meet breakers and hold position.	_____ _____ _____	_____ _____ _____
5. Use proper helm, throttle commands to achieve a bow/stern position to the seas.	_____ _____ _____	_____ _____ _____
6. Use small swells and surf to maneuver and hold position.	_____ _____ _____	_____ _____ _____
7. Ensure clear communications and coordination among crew and other resources.	_____ _____ _____	_____ _____ _____
8. Maintain situational awareness and total control of the boat throughout evolution.	_____ _____ _____	_____ _____ _____
9. Maintain position for 5 minutes.	_____ _____ _____	_____ _____ _____

Instructor _____ **Date** _____

Comments _____

_____

TASK HW-04-05-TYPE **Transit Outbound on an Inlet or Bar Through Surf up to 8 Feet**

References

a. *Boat Crew Seamanship Manual*, COMDTINST M16114.5 (series), *Heavy Weather Addendum, Section E*

Conditions

Task performed while underway in surf up to 8 feet. Trainee must accomplish task without prompting or use of a reference.

Standards

Task must be accomplished without excessive risk to the boat or crew. If possible, transit through the surf zone should be accomplished without meeting a breaker. When necessary, boat must meet breakers squarely and with enough power to get the boat through/over the wave.

Performance Criteria	Completed (Initials)	Boat Type
1. Brief crew and assign duties.	_____ _____ _____	_____ _____ _____
2. Identify safe operating area and hazards.	_____ _____ _____	_____ _____ _____
3. Provide accurate bar report to operational command concerning existing conditions.	_____ _____ _____	_____ _____ _____
4. Time series to transit through surf zone on the lull.	_____ _____ _____	_____ _____ _____
5. Avoid breaking waves (when possible) using windows, saddles, and shoulders.	_____ _____ _____	_____ _____ _____
6. Use appropriate, safe speed without launching.	_____ _____ _____	_____ _____ _____
7. Meet breakers with appropriate power.	_____ _____ _____	_____ _____ _____
8. Identify the high/low sides and maneuver toward the low side.	_____ _____ _____	_____ _____ _____
9. Use safety backup boat or shore-side safety watch to provide additional information as appropriate.	_____ _____ _____	_____ _____ _____
10. Ensure clear communications and coordination among crew and other resources.	_____ _____ _____	_____ _____ _____
11. Maintain situational awareness and total control of the boat throughout evolution.	_____ _____ _____	_____ _____ _____

Instructor _____ **Date** _____

Comments _____

_____

TASK HW-04-06-TYPE **Transit Inbound on an Inlet or Bar Through Surf up to 8 Feet**

References

a. *Boat Crew Seamanship Manual*, COMDTINST M16114.5 (series), *Heavy Weather Addendum, Section E*

Conditions

Task performed while underway in surf up to 8 feet. Trainee must accomplish task without prompting or use of a reference.

Standards

Task must be accomplished without excessive risk to the boat or crew. Maximum effort should be taken to keep the boat from being overtaken by a breaker. Boat must be maneuvered in adequate time to avoid a breaker on the stern.

Performance Criteria	Completed (Initials)	Boat Type
1. Brief crew and assign duties.	_____ _____ _____	_____ _____ _____
2. Identify safe operating area and hazards.	_____ _____ _____	_____ _____ _____
3. Provide accurate bar report to operational command concerning existing conditions.	_____ _____ _____	_____ _____ _____
4. Time series to transit through surf zone on the lull.	_____ _____ _____	_____ _____ _____
5. Avoid breaking waves (when possible) using windows, saddles, and shoulders.	_____ _____ _____	_____ _____ _____
6. Use appropriate, safe speed to avoid overtaking the crest of a swell or breaker.	_____ _____ _____	_____ _____ _____
7. Evaluate overtaking surf and avoid taking a breaker on the stern.	_____ _____ _____	_____ _____ _____
8. Use proper technique and timing to turn and meet breakers squarely when needed.	_____ _____ _____	_____ _____ _____
9. Meet breakers with appropriate power.	_____ _____ _____	_____ _____ _____
10. Use proper techniques to avoid getting caught on the face of a swell and avoid being caught on a hard chine.	_____ _____ _____	_____ _____ _____
11. Identify the high/low sides and maneuver toward the low side.	_____ _____ _____	_____ _____ _____
12. Use safety backup boat (if applicable) or shore-side safety watch to provide additional information as appropriate.	_____ _____ _____	_____ _____ _____
13. Ensure clear communications and coordination among crew and other resources.	_____ _____ _____	_____ _____ _____
14. Maintain situational awareness and total control of the boat throughout evolution.	_____ _____ _____	_____ _____ _____

Instructor _____ **Date** _____

Comments _____

_____

_____

TASK HW-04-07-TYPE **Lateral Across a Surf Zone Beam to Surf up to 8 Feet**

References

a. *Boat Crew Seamanship Manual*, COMDTINST M16114.5 (series), *Heavy Weather Addendum, Section E*

Conditions

Task performed while underway in surf up to 8 feet. Trainee must accomplish task without prompting or use of a reference.

Standards

Task must be accomplished without excessive risk to the boat or crew. Boat must not be overtaken by a breaker on the beam. When necessary, boat must meet breakers squarely and with enough power to get the boat through/over the wave.

Performance Criteria	Completed (Initials)	Boat Type
1. Brief crew and assign duties.	_____ _____ _____	_____ _____ _____
2. Identify safe operating area and hazards.	_____ _____ _____	_____ _____ _____
3. Identify and used natural ranges, reference points or radar ranges.	_____ _____ _____	_____ _____ _____
4. Avoid breaking waves (when possible) using windows, saddles, and shoulders.	_____ _____ _____	_____ _____ _____
5. Use appropriate, safe speed.	_____ _____ _____	_____ _____ _____
6. Evaluate approaching surf, avoid or meet squarely as appropriate.	_____ _____ _____	_____ _____ _____
7. Time series and transit on the lull.	_____ _____ _____	_____ _____ _____
8. Use safety backup boat or shore-side safety watch to provide additional information as appropriate.	_____ _____ _____	_____ _____ _____
9. Ensure clear communications and coordination among crew and other resources.	_____ _____ _____	_____ _____ _____
10. Maintain situational awareness and total control of the boat throughout evolution.	_____ _____ _____	_____ _____ _____

Instructor _____ **Date** _____

Comments _____

_____

TASK HW-04-08-TYPE **Enter and Depart a Beach (Shoal Area) Surf Zone in Surf up to 8 Feet**

References

a. *Boat Crew Seamanship Manual*, COMDTINST M16114.5 (series), *Heavy Weather Addendum, Section E*

Conditions

Task performed while underway for in surf up to 8 feet. Trainee must accomplish task without prompting or use of a reference.

Standards

Task must be accomplished without excessive risk to the boat or crew. Boat must not be overtaken by a breaker on the beam. When necessary, boat must meet breakers squarely and with enough power to get the boat through/over the wave. Boat must station keep shoreward of the surf zone (if possible).

Performance Criteria	Completed (Initials)	Boat Type
1. Brief crew and assign duties.	_____ _____ _____	_____ _____ _____
2. Identify and evaluate effects of shore currents and rips.	_____ _____ _____	_____ _____ _____
3. Identify and use natural ranges reference points or radar ranges.	_____ _____ _____	_____ _____ _____
4. Time series and make shoreward approach turn during lull.	_____ _____ _____	_____ _____ _____
5. Use appropriate, safe speed without launching or moving over the crest of a swell onto the face.	_____ _____ _____	_____ _____ _____
6. Evaluate approaching surf, avoid or meet as appropriate.	_____ _____ _____	_____ _____ _____
7. Meet breakers with appropriate power.	_____ _____ _____	_____ _____ _____
8. Avoid breaking waves if possible.	_____ _____ _____	_____ _____ _____
9. Maintain bow/stern aspect in surf using appropriate technique or power.	_____ _____ _____	_____ _____ _____
10. Consistently monitor depth and do not allow boat to go aground or touch bottom.	_____ _____ _____	_____ _____ _____
11. Safely hold position inside or shoreward of surf zone (long enough to accomplish a PIW recovery if needed).	_____ _____ _____	_____ _____ _____
12. Use safety backup boat or shore-side safety watch to provide additional information as appropriate.	_____ _____ _____	_____ _____ _____
13. Ensure clear communications and coordination among crew and other resources.	_____ _____ _____	_____ _____ _____
14. Maintain situational awareness and total control of the boat throughout evolution.	_____ _____ _____	_____ _____ _____

Instructor _____ **Date** _____

Comments _____

_____

_____

TASK HW-04-09-TYPE **Conduct a Person-in-the-Water (PIW) Recovery in Surf up to 8 Feet**

References

a. *Boat Crew Seamanship Manual*, COMDTINST M16114.5 (series), *Heavy Weather Addendum, Section D*

Conditions

Task performed while underway in surf up to 8 feet. Trainee must accomplish task without prompting or use of a reference. A life-like dummy (Oscar) will be used.

Standards

Task must be accomplished without excessive risk to the boat or crew. The direct pickup method must be used. Task must be accomplished without injury or excessive risk to the person (life-like dummy) in the water.

Performance Criteria	Completed (Initials)	Boat Type
1. Brief crew and assign duties.	_____ _____ _____	_____ _____ _____
2. Station pointer appropriately to communicate effectively.	_____ _____ _____	_____ _____ _____
3. Throw life ring if appropriate to assist PIW.	_____ _____ _____	_____ _____ _____
4. Use lulls, shoulders, windows, and saddles for maneuvering and turns.	_____ _____ _____	_____ _____ _____
5. Maneuver boat down sea into position for final approach.	_____ _____ _____	_____ _____ _____
6. Make ready appropriate standard retrieval equipment.	_____ _____ _____	_____ _____ _____
7. Position crew for recovery ensuring safe movement and clear communications.	_____ _____ _____	_____ _____ _____
8. Conduct recovery from recess port or well-deck only.	_____ _____ _____	_____ _____ _____
9. Maneuver boat into safe position for recovery with regard to crew and PIW.	_____ _____ _____	_____ _____ _____
10. Use lulls between series of breakers for making final approach.	_____ _____ _____	_____ _____ _____
11. Ensure boat is stopped and kept square while PIW is recovered.	_____ _____ _____	_____ _____ _____
12. Safely recover PIW/Oscar.	_____ _____ _____	_____ _____ _____
13. Use safety backup boat or shore-side safety watch to provide additional information as appropriate.	_____ _____ _____	_____ _____ _____
14. Ensure clear communications and coordination among crew.	_____ _____ _____	_____ _____ _____
15. Maintain situational awareness and total control of the boat throughout evolution.	_____ _____ _____	_____ _____ _____

Instructor _____ **Date** _____

Comments _____

_____

_____

TASK HW-04-10-ANY **Conduct a Post-Mission Standdown and Crew Debrief**

References
a. *Team Coordination Training (TCT)*, COMDTINST 1541.1 (series)
b. *Operational Risk Management (ORM)*, COMDTINST 3500.3 (series)

Conditions Task performed after underway for surf operations. Trainee must accomplish task without prompting or use of a reference.

Standards Trainee must lead the shore-side post-mission safety debrief to include all involved crew (i.e. comms watchstander, boat crews, tower watch, beach party).

Performance Criteria	Completed (Initials)
1. Stand down all unit resources involved with surf operations and ensure safe return to unit.	_____
2. Ascertain condition of participating crews.	_____
3. Ascertain condition of unit boats and ensure they remain fully mission capable (any disabling or restrictive discrepancies reported to command).	_____
4. Ascertain condition of any other resources utilized (i.e. tower, vehicles, radios, safety gear) and ensure their continued readiness.	_____
5. Coordinate and lead unit post-mission debrief in appropriate setting.	_____
6. Debrief crew, encouraging input from juniors first (least experienced), seniors last (most experienced).	_____
7. Review objectives, communications, lessons learned, safety issues observed, ideas for improvement, and reinforcement of good seamanship practices or teamwork.	_____
8. Provide lessons learned and recommendations to command related to improvement in unit response strategy for near shore operations.	_____
9. Determine if the lessons learned or the actions during the mission warrant further reporting via the boat mishap reporting system.	_____
10. Discuss crew's ability to react to changes in risk levels encountered during debrief.	_____

Instructor _____ **Date** _____

Comments _____

_____

Chapter 3
Heavy Weather Coxswain Trainee Study Guide

Introduction

This chapter should be removed and given to the trainee for keeping. Its purpose is to provide guidance for the trainee's reading assignments and is not a part of the training record.

The trainee should read the appropriate reading assignment and answer the related questions prior to beginning training in each new task. The instructor should then discuss the trainees answers to ensure understanding of the subject matter prior to beginning instruction for each new task.

In this chapter

This chapter contains the following sections:

Section A. Reading Assignments - Division One

Introduction

The reading assignments in this section are designed to aid the trainee in developing the knowledge and skills to adequately fulfill the requirement.

In this section

This section contains the following reading assignments:

NOTE

If there is no reading assignment assigned for a specific task, then the task will not have a page number to reference.

Task Number	Reading Assignment	See Page
HW-01-01-ANY	• *Boat Crew Seamanship Manual*, COMDTINST M16114.5 (series), *Addendum A, Section A* • *Boat Crew Seamanship Manual*, COMDTINST M16114.5 (series), *Chapter 12, Section B*	3-4
HW-01-02-ANY	• None Assigned	
HW-01-03-TYPE	• *Boat Crew Seamanship Manual,* COMDTINST M16114.5 (series), *Addendum A, Section E* • *Boat Crew Seamanship Manual*, COMDTINST M16114.5 (series), *Chapter 12, Section B*	3-4
HW-01-04-ANY	• *Boat Crew Seamanship Manual*, COMDTINST M16114.5 (series), *Addendum A, Section C*	3-5
HW-01-05-ANY	• *Boat Crew Seamanship Manual,* COMDTINST M16114.5 (series), *Addendum A, Section D*	3-5
HW-01-06-ANY	• *Boat Crew Seamanship Manual*, COMDTINST M16114.5 (series), *Chapter 17*	3-5
HW-01-07-ANY	• *Boat Crew Seamanship Manual*, COMDTINST M16114.5 (series)*, Heavy Weather Addendum, Section E*	3-6

TASK HW-01-01-ANY: Identify the Types of Breaking Seas, their Characteristics and Causes

1. There are three basic types of breaking waves. They are _____, _____ and _____.
2. By understanding how _____ form and behave, coxswains know what to expect and how to minimize the danger to both boat and crew.
3. _____ gives the curl of breakers its tremendous force.
4. _____ is the unobstructed distance over which the wind blows across the surface of the water.
5. _____ breakers are the most dangerous kind of wave for boat operations.
6. _____ breakers result from waves of low steepness moving over a gentle sloping ocean floor.
7. _____ waves result when there is a sudden lack of water ahead of the wave, such as in a steep rise of the ocean floor.
8. A surging break occurs on very _____ beaches.

TASK HW-01-03-TYPE: Explain the Forces Effecting a Surf Capable Boat Operating in Heavy Weather and Surf

1. An _____ or _____ current running across a bar builds up a more intense sea than the _____ or _____ current.
2. _____ currents run parallel to the shore and inside the breakers.
3. When crossing the current to compensate for the set, a boat may be put into a _____, i.e., the boat may be forced off course by the current or wind.
4. Operation in very shallow water can be complicated by serious effect on a boat's _____.
5. The primary external force for surf operations is the _____ itself.
6. The shifting of _____ or _____ inside a boat can have a great effect on stability and handling.

TASK HW-01-04-ANY: Explain the Relationship Between Navigation and Piloting as it Pertains to Operations in Heavy Seas or Surf

1. The wise coxswain "_____" the boat during fair weather so that he or she can acquire the skills to navigate in poor weather without fear or nervous strain.
2. The primary tool to ensure success in any piloting evolution is _____ _____.
3. Have the right _____ for every mission.
4. One of the most under used methods of piloting is _____ _____.
5. If you have predetermined _____ laid out, you will be able to see at a glance how far left or right of track you are, well before you reach the D.R. position.
6. _____ and _____ ranges are also critical in computing speed over ground using the three-minute rule and its variations.
7. If the urgency of the case puts you on a boat heading to sea in heavy weather, take time to _____ your chart so that it is useable.
8. If a _____ _____ is not below plotting and relaying information to the coxswain, then the coxswain is either below where he cannot _____ the crew, or he is working the radar and cannot _____ the plots.

TASK HW-01-05-ANY: Explain the Procedures and Safety Concerns Related to Recovery of Personnel from the Water in Heavy Seas or Surf

1. The coxswain will _____ _____ a safe distance from the man overboard and _____ _____ until the opportunity to turn presents itself.
2. If needed, the turn to run down swell and approach will be planned differently in _____ _____.
3. Do not allow any crew to go _____ at any time during this evolution.
4. Ideally, the boat should be _____ with the man overboard at arm's length from the recovery area.
5. On a CG standard boat, the crew must stay out of the _____ area until the turn is completed, the bow is back into the swell, and the coxswain gives the command.

TASK HW-01-06-ANY: Explain the Heavy Weather Towing Approach and Key Elements Related to Towing in Heavy Weather

1. A _____is deployed from the stern of the towed vessel to help control the towed vessel's motions.
2. For the drogue towline, use ___ feet of ___-inch double-braided nylon.
3. When deploying a drogue, _____ of the tow is more important than _____.
4. Though optimal to make your approach from down wind and down sea, the _____ and _____ of the distressed vessel may determine the approach.
5. The most common towing technique is to tow the distressed vessel from _____ of the rescue vessel.
6. The _____ _____ is the location that allows the crew of the towing vessel to maximize use of the best deck work area on the vessel for passing and working the tow rig.
7. _____ _____ maintains the position and heading relative to the weather and seas, outside of the danger zone.
8. To moor an alongside tow safely and skillfully, make the approach into _____ and _____ if possible.

TASK HW-01-07-ANY: Explain the Procedure for Passing the Pump or Other Gear in Heavy Seas

1. _____ _____ is necessary to hold position while waiting for a window or a lull, or holding position prior to and during recovery of a person in the water.
2. There are several techniques to deal with breaking seas on the beam. _____ _____ is still the preferred technique.
3. In addition to present surf conditions, consider the _____ of the water before entering the surf.
4. A _____ or _____ is never routine, but always possible in heavy seas.

Section B. Reading Assignments - Division Two

Introduction

The reading assignments in this section are designed to aid the trainee in developing the knowledge and skills to adequately fulfill the requirement..

In this section

This section contains the following reading assignments:

Task Number	Reading Assignment	See Page
HW-02-01-ANY	• *Coast Guard Rescue and Survival Systems Manual,* COMDTINST M10470.10 (series), *Chapter 3, Section A* • *Boat Crew Seamanship Manual,* COMDTINST M16114.5 (series), *Addendum A, Section E* • *47' Motor Life Boat Operator's Handbook,* COMDTINST M16114.25 (series), *Chapter 4, Section G*	3-9
HW-02-02-ANY	• *Boat Crew Seamanship Manual,* COMDTINST M16114.5 (series), *Addendum A, Section E* • *Station Operations Manual*, COMDTINST 3100.6 (series), *Chapters 5 and 7* • *Boat Crew Utilization*, COMDTINST 5312.16, *Enclosures 1and 2*	3-9
HW-02-03-TYPE	• *Boat Crew Seamanship Manual,* COMDTINST M16114.5 (series), *Addendum A, Section E*	3-10
HW-02-04-ANY	• *Coast Guard Rescue and Survival Systems Manual*, COMDTINST M10470.10 (series), *Chapter 3, Chapter 6*, and *Chapter 7*	3-10
HW-02-05-TYPE	• None Assigned	

TASK HW-02-01-ANY: Identify PPE and Safety Equipment for Heavy Weather and Surf Operations

1. When can the uniform be worn under a PFD?

2. When must a dry suit be worn?

3. First layer hypothermia protective clothing must _____ moisture away from the body.
4. The _____ is responsible for ensuring all required equipment is worn and worn correctly.
5. When seated in a seat, the _____ _____ for the seat must be worn in addition to the _____ safety belt.

TASK HW-02-02-ANY: Explain Boat Preparations and Safety Precautions for Operating in Heavy Seas/Surf

1. Pre-surf checks should include. T or F

Stow all gear	True	False
Engine room	True	False
Steering	True	False
Tow Line	True	False
Search Lights	True	False
Throttle and reduction gear	True	False

2. _____ communications (handheld VHF) should be aboard the boat in case the antennas are lost, or the main radio is damaged.
3. While underway, boats will provide position reports and operations normal reports to the station at _____ intervals not to exceed _____ minutes.
4. Environmental limits for surf training are set at breaking seas less than _____ feet, winds less than _____kts, visibility greater than ____ NM and _____ only.
5. Maximum underway limits are set at _____ hours for seas less than 4 feet, ____ hours for seas greater than 4 feet and _____ hours for heavy weather.
6. Some factors contributing to fatigue are _____ loss, exposure to _____ extremes, and motion sickness.

TASK HW-02-03-TYPE: Explain the Procedures to be Taken for a Rollover or Knockdown

1. A 20-foot breaker can drop _____ tons of water on the boat, and exert a force of up to _____PSI.
2. Immediately upon re-righting, _____ the situation, as you are still in the surf and must take quick action to _____ the next wave correctly or you may roll again.
3. _____ your crew to ensure that no one was lost overboard or seriously injured.
4. Once in _____ _____, the Engineer should go below to check for damage.
5. The shifting of fuel or _____ inside a boat can have a great effect on stability and handling.
6. Any situation that places the center of gravity over the center of _____ can result in a roll.
7. The following factors should be considered in determining whether to continue or return after a roll over. Condition of the crew members, overall material and operating condition of engines, condition of electronics, particularly _____, urgency of mission, and availability of backup _____.

TASK HW-02-04-ANY: Explain Procedures for Personal Survival if Lost Overboard in a Heavy Weather or Surf Environment

1. Units may issue either the _____ _____ _____ suit or the _____ _____ _____ _____ _____ _____ to unit personnel. One or the other is required to be issued.
2. Dry suits alone provide inadequate insulation for _____ protection.
3. The primary use for this suit would be for very cold water environments where immediate retrieval of a person overboard is necessary to prevent death:

4. The _____ _____ _____ is used aboard cutters for electronic transmission of a data signal that will aid vessel/crew relocation in the event of capsizing, sinking, or abandoning ship.

Section C. Reading Assignments - Division Three

Introduction

The reading assignments in this section are designed to aid the trainee in developing the knowledge and skills to adequately fulfill the requirement.

In this section

This section contains the following reading assignments:

NOTE

Task Number	Reading Assignment	See Page
HW-03-01-ANY	• None Assigned	
HW-03-02-TYPE	• None Assigned	
HW-03-03-TYPE	• *Boat Crew Seamanship Manual*, COMDTINST M16114.5 (series), *Addendum A, Section A & Section B*	3-13
HW-03-04-TYPE	• *Boat Crew Seamanship Manual*, COMDTINST M16114.5 (series), *Addendum A, Section C*	3-13
HW-03-05-TYPE	• *Boat Crew Seamanship Manual*, COMDTINST M16114.5 (series), *Addendum A, Section D*	3-13
HW-03-06-TYPE	• None Assigned	
HW-03-07-TYPE	• None Assigned	
HW-03-08-TYPE	• None Assigned	
HW-03-09-TYPE	• None Assigned	
HW-03-10-TYPE	• None Assigned	
HW-03-11-TYPE	• None Assigned	
HW-03-12-TYPE	• None Assigned	
HW-03-13-ANY	• None Assigned	
HW-03-14-ANY	• None Assigned	

TASK HW-03-03-TYPE: Operate a Boat in Heavy Seas

1. The factors that determine the characteristics of wind waves are: _____ _____, _____ and _____.
2. The three basic motions that a boat experiences while operating are _____, _____, and _____.
3. _____ is caused by a wave lifting up one side of the boat, rolling under the boat and dropping that side then lifting the other side and dropping it in turn.
4. _____ is caused when the boat is operating in following seas.
5. _____ occurs when the boat is running bow into the waves.
6. Running stern-to in heavy seas requires _____, as steering corrections must be made the instant you feel the stern of the boat being lifted by the oncoming swell.
7. Wind affects the boat _____ the swell.
8. If you keep your bow _____ to the swell of the most predominate force and use proper amounts of _____ for different situations, the boats can be handled without a lot of difficulty.

TASK HW-03-04-TYPE: Pilot a Boat in Heavy Seas

1. Using _____ or _____ chartlets makes them easy to correct.
2. If you have _____ ranges laid out, you will be able to see at a glance how far left or right of track you are, well before you reach the dead reckoning position.
3. Take the time to develop your _____ piloting kit. Coast Guard standard boats are required to have all the necessary _____ in the chart box as per the type manual, but think of this as _____ gear.

TASK HW-03-05-TYPE: Conduct a Person-in-the-Water (PIW) Recovery in Heavy Seas

1. If needed, the turn to run down swell and approach will be planned differently in _____ _____.
2. The Coxswain will push ahead a _____ distance from the man overboard and _____ _____ until the opportunity to turn presents itself.
3. Do not allow any of the crew to go _____ at any time during this evolution. It puts them in great danger and _____ the crew's ability to communicate.
4. Once down swell, turn _____ and avoid getting caught broadside to the surf/swell.
5. Ideally, the boat should be stopped with the man overboard at _____ _____ from the recovery area.

Section D. Reading Assignments - Division Four

Introduction

The reading assignments in this section are designed to aid the trainee in developing the knowledge and skills to adequately fulfill the requirement.

In this section

This section contains the following reading assignments:

NOTE

If there is no reading assignment assigned for a specific task, then the task will not have a page number to reference.

Task Number	Reading Assignment	See Page
HW-04-01-ANY	• None Assigned	
HW-04-02-TYPE	• None Assigned	
HW-04-03-TYPE	• None Assigned	
HW-04-04-TYPE	• *Boat Crew Seamanship Manual*, COMDTINST M16114.5 (series), *Addendum A, Section E*	3-17
HW-04-05-TYPE	• *Boat Crew Seamanship Manual*, COMDTINST M16114.5 (series), *Addendum A, Section E*	3-17
HW-04-06-TYPE	• *Boat Crew Seamanship Manual*, COMDTINST M16114.5 (series), *Addendum A, Section E*	3-17
HW-04-07-TYPE	• *Boat Crew Seamanship Manual*, COMDTINST M16114.5 (series), *Addendum A, Section E*	3-17
HW-04-08-TYPE	• None Assigned	
HW-04-09-TYPE	• None Assigned	
HW-04-10-ANY	• None Assigned	

TASK HW-04-04 TYPE: Maintain Stationary Position ("Station Keep") Using Both the Bow-To and Stern-To Methods in Surf up to 8 Feet

1. Never allow the boat to be caught _____ a breaking wave. Either allow it to break before it reaches you, or get to the top _____ it falls on you.
2. Use only enough _____ to maintain position and counteract the force of the oncoming wave.
3. Keep the bow as _____to the seas as possible.
4. Environmental factors such as surf, wind, or currents can make station-keeping _____, and good backing skill and proper application of _____ are essential.

TASK HW-04-05-TYPE: Transit Outbound on an Inlet or Bar Through Surf up to 8 Feet

1. The operator should practice wave avoidance by picking a course through the _____ and _____, if available, minimizing risk to the boat and crew.
2. Any breakers that cannot be avoided should be taken _____. Slow down and allow your _____ to carry you through. Do not meet breakers at _____ speed or you may plow into the face, or launch off the back, risking injuries or boat damage.

TASK HW-04-06-TYPE: Transit Inbound on an Inlet or Bar Through Surf up to 8 Feet

1. It is preferable to transit the surf during any _____ period that may exist.
2. The operator should attempt to work through the surf zone by driving through _____ and _____, thus avoiding the majority of the breakers.
3. If operating in an area of limiting maneuverability, such as a narrow inlet or bar, the operator may have to rely strictly on _____ the waves and make the transit during _____ periods.
4. Reducing speed after the wave has already picked up the boat will likely result in a loss of _____ and/or _____. _____ must be reduced before the wave arrives.
5. _____ a breaker is an advanced emergency procedure which can easily result in personnel injures or boat damage. It is a last resort maneuver for _____ operators.

TASK HW-04-07-TYPE: Lateral Across a Surf Zone Beam to Surf up to 8 Feet

1. In the absence of lulls, great care and patience must be exercised, because you will be dealing with nearly constant _____ surf, and the boat is very _____ in the position.
2. Speed may be _____ to allow waves to pass ahead of the boat, or _____ to avoid a breaker.
3. Good _____, and ability to read several waves back are critical.
4. Any significant waves that cannot be avoided must be taken _____.

Appendix A. Task Accomplishment Record for Heavy Weather Coxswain

NOTE Instructor should remove this section and place it in the trainee's training record.

TRAINEE NAME: _____ RATE: _____

INSTRUCTOR NAME: _____ RATE: _____

POSITION/QUALIFICATION CODE TO BE TRAINED FOR: _____

NOTE Instructors should line through those tasks not applicable to this qualification.

Task	Date Started	Date Completed	Instructor's Initials
HW-01-01-ANY			
HW-01-02-ANY			
HW-01-03-TYPE			
HW-01-04-ANY			
HW-01-05-ANY			
HW-01-06-ANY			
HW-01-07-ANY			
HW-02-01-ANY			
HW-02-02-ANY			
HW-02-03-TYPE			
HW-02-04-ANY			

Task	Date Started	Date Completed	Instructor's Initials
HW-03-01-ANY			
HW-03-02-TYPE			
HW-03-03-TYPE			
HW-03-04-TYPE			
HW-03-05-TYPE			
HW-03-06-TYPE			
HW-03-07-TYPE			
HW-03-08-TYPE			
HW-03-09-TYPE			
HW-03-10-TYPE			
HW-03-11-TYPE			
HW-03-12-TYPE			
HW-03-13-ANY			
HW-03-14-ANY			
HW-04-01-ANY			
HW-04-02-TYPE			
HW-04-03-TYPE			
HW-04-04-TYPE			
HW-04-05-TYPE			
HW-04-06-TYPE			

Task	Date Started	Date Completed	Instructor's Initials
HW-04-07-TYPE			
HW-04-08-TYPE			
HW-04-09-TYPE			
HW-04-10-ANY			

Appendix B. List of Acronyms

Introduction

This appendix contains a list of the acronyms used throughout the handbook.

In this appendix

This appendix contains the following information:

ACRONYM	DEFINITION
ANB	AtoN Boat
ASB	Arctic Survey Boat
ATB	Aviation Training Boat
BU	Buoy Boat
BUSL	Buoy Utility Stern Loading
CB-L	Cutter Boat-Large
CB-M	Cutter Boat-Medium
CB-OTH	Cutter Boat Over the Horizon
CB-S	Cutter Boat-Small
DPB	Deployable Pursuit Boat
IMARV	Independent Maritime Response Vessel
LCVP	Landing Craft
MCB	Motor Cargo Boat
MLB	Motor Lifeboat
MSB	Motor Surf Boat
NLB	Nearshore Life Boat
NSB	Non-Standard Boat
ORM	Operational Risk Management
PWB	Port and Waterways Boat
SB	Sailboat
SKF	Skiff
SPC	Special Purpose Craft
SPC (LE)	Law Enforcement Special Purpose Craft
SSL	Standard Support Level
TANB	Trailerable AtoN Boat
TCT	Team Coordination Training
TPSB	Transportable Port Security Boat
UTB	Utility Boat
UTL	Utility Boat Light
UTM	Utility Boat Medium

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