COMMERCIAL FISHING VESSEL EMERGENCY INSTRUCTION & DRILL MANUAL

F/V _____

As required by
the Commercial Fishing Industry Vessel Safety Act of 1988
46 CFR 28.265

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WHY THIS BOOK?

This manual was compiled to help commercial fishermen meet two requirements of the Commercial Fishing Industry Vessel Safety Act of 1988: monthly onboard drills and emergency instructions. It provides a foundation for conducting onboard safety training in an easy-to-use format and contains the necessary emergency instructions required to be available to your crew.

As of 1993, documented commercial fishing vessels that fish beyond the boundary line are required to have an emergency instruction & drill manual. However, all mariners, commercial and recreational, will find it useful.

Studies and actual vessel casualties have shown that training increases your chance of survival. The information contained here can help you plan your course of action in case of an emergency. We recommend a hands-on safety-training course as a compliment to the information in this book. For information about port-based training in your community contact AMSEA at the address below. AMSEA also maintains a list of marine safety resources including books and videotapes.

The Alaska Marine Safety Education Association (AMSEA) is a nonprofit, community based information and training network. AMSEA's mission is to reduce injury and death in the marine and freshwater environment through education and training provided by a network of qualified marine safety instructors.

We welcome your comments and suggestions. Please direct them to:

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TABLE OF CONTENTS

How to Use this Book 2

Instructions on How to Orient Newcomers and Conduct Drills

General Instructions 3
Vessel Orientation For Newcomers 4
How to Conduct an Effective Drill 5

Instructions Required to Be Posted*

**Documented commercial fishing vessels operating beyond the boundary line with less than four persons onboard do not have to post instructions but must keep them readily available.*

Emergency Equipment and Abandon Ship 6
Emergency Assignments 7
Distress Broadcast 9
Donning Immersion Suits 10

Instructions Required to Be Readily Available

Emergency Instruction for Anchoring 11
Person Overboard 12
Unintentional Flooding, Rough Weather at Sea, and Crossing Hazardous Bars 13
Fire 14
Abandon Ship 15

Logs

Safety Orientation Log 16
Monthly Drills Log 18
Monthly EPIRB Test Log 20

Additional Information Added by Vessel Owner or Operator:

_____

_____

_____

_____

HOW TO USE THIS BOOK

Captains and drill leaders should use this book as a guide for vessel orientations, drills and debriefs. Every crewmember should be familiar with its contents. This book should be kept readily available at all times.

General Instructions: Explains what all crewmembers are responsible for knowing while onboard your vessel.

Vessel Orientation for Newcomers: A checklist of topics to be covered with every crewmember including vessel layout, safety and survival equipment, and emergency assignments.

How to Conduct an Effective Drill: Onboard safety drills are required to be done monthly. Here you will find tips for conducting drills that are positive experiences for all crewmembers.

***Emergency Equipment Location & Abandon Ship:** An outline is provided to allow for a customized layout of emergency equipment and abandon ship station.

***Emergency Assignments and Signals:** A place to list crewmember names and/or positions with specific responsibilities in case of person overboard, fire, flooding, and abandon ship. Also lists the signals for these emergencies.

***Distress Broadcast:** Outlines proper Mayday format. Write in your boat name, call sign and vessel description.

***Donning Immersion Suits:** Instructions for quick and proper donning of an immersion suit.

Emergency Anchoring: Procedure for emergency anchoring.

Person Overboard: Procedure for person overboard includes key points that should be covered in drill debrief.

Unintentional Flooding/Rough Weather at Sea/Crossing Hazardous Bars: Signal and instructions for unintentional flooding, rough weather at sea and crossing a hazardous bar. Includes key points that should be covered in drill debrief.

Fire: Procedure for an onboard fire. Includes key points that should be covered in drill debrief.

Abandon Ship: Procedure for abandoning ship. Includes key points that should be covered in drill debrief.

****Safety Orientation Log:** A log to be signed by crewmembers to verify their understanding of the emergency instructions contained within this manual and how they pertain to your vessel.

****Monthly Drill Log:** A log to record date and type of drill given.

****Monthly EPIRB Test Log:** A log to record date and time of monthly EPIRB test. Includes space to note EPIRB battery and hydrostatic release expiration dates.

Additional Information: Space for information added by vessel owner or captain.

**Note: Instructions required to be posted on documented fishing vessels operating beyond the boundary line. Vessels with less than four persons onboard do not have to post but must keep instructions readily available.*

***Note: Two pages are provided. Use the second page to make additional copies as needed..*

GENERAL INSTRUCTIONS

F/V _____

Captain _____

1. **All** persons on board shall:
    a. Report to the Captain for an orientation briefing.
    b. Have emergency duties.
    c. Be responsible for knowing their emergency duties.

2. Emergency Duties include knowing:
    a. The location of lifesaving and emergency equipment.
    b. How to operate assigned equipment.
    c. How to make a distress call.
    d. What to do in the event of a person overboard.
    e. What to do in the event of a fire.
    f. What to do in the event of flooding.
    g. What to do in the event of abandon ship order.

VESSEL ORIENTATION FOR NEWCOMERS

Show Vessel Layout

Show Vessel Safety and Survival Equipment
__Immersion suit/PFD: need, stowage, fit, donning
__Liferaft/survival craft: need, location, function, deployment, what not to do
__EPIRB: need, location, function, deployment, what not to do
__Radio(s): need, location, function, use
__Electronic position fixing devices: function, how to find position
__Flares: need, location, function, use, what not to do
__Fire extinguishers: location, function, use, what not to do
__Other equipment: line thrower, person overboard recovery gear, first aid kit, etc.
__Engine: on/off, steering, gear selection, etc
__Shut off and crossover valves
__Alarms: what they are; what they mean; reporting inoperative alarms
__Entrapment: exit routes
__Hazards: hatches, winches, machinery, lines, slippery areas, etc.
__Hypothermia recognition and treatment
__Drug and alcohol policy
__Placards: report all injuries; report all malfunctions; waste disposal
__Emergency instructions: both posted and in book

Emergency Assignments (Station Bill) – Each Crewmember's Specific Duties in:
__Abandoning the vessel
__Fighting fires in different locations onboard the vessel
__Recovering an individual from the water
__Minimizing the effects of unintentional flooding
__Launching survival craft and recovering lifeboats and rescue boats
__Donning immersion suits and wearable PFDs
__Donning fireman's outfit and self-contained breathing apparatus (if so equipped)
__Making a voice radio distress call
__Using visual distress signals
__Activating the general alarm
__Reporting inoperative alarm systems and fire detection systems

HOW TO CONDUCT AN EFFECTIVE DRILL

Be Realistic

- Scenarios should be as realistic as possible.
- Crews should feel some pressure; pressure is normal. However, each crewmember must understand his or her **personal responsibility to be safe. It is part of the job.**

Be Spontaneous

- Don't always announce drills ahead of time, but always announce a drill as a drill
- Don't always conduct drills at the same time or place. Try them at the dock, while underway, at night, in heavy rain. Be creative!

Do Hands-On Drills

- Retention for hands on learning is 90 percent.
- Crewmembers should touch equipment as much as practical.
- Familiarity with equipment during both night and day should be stressed.

Make Drills Progressive

- Start with simple walk-through and build skill and speed, but **never include running.**
- Progress to more complicated scenarios.
- Throw in "curves" to make scenarios more interesting.

Build Teamwork

- Build on the team that you already have for fishing.
- Teamwork will increase efficiency and save lives.
- Crewmembers should cross-train to cover each other's responsibilities in the event of injury. If the skipper is injured is the crew prepared?
- **All** hands should participate in drills.

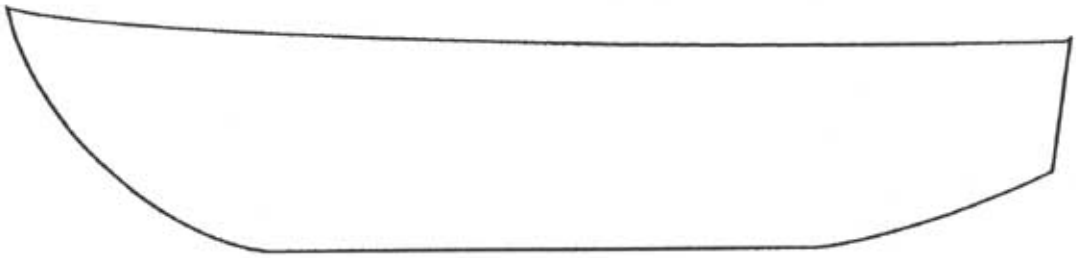
Be Positive

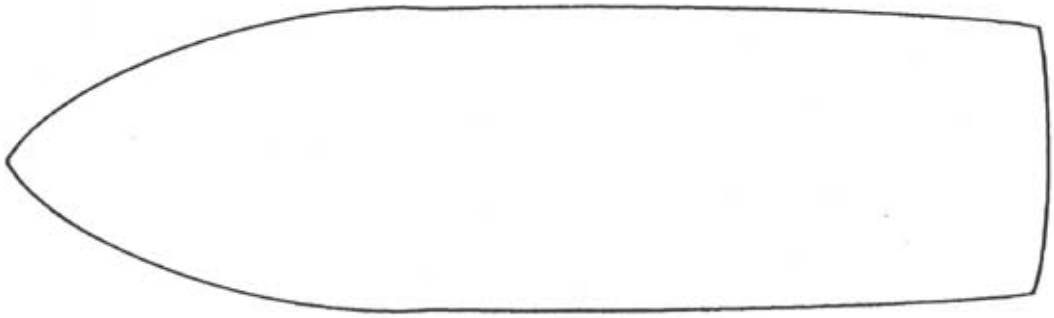
- Drills should not have a punitive cost and should never be used to harass, intimidate or frustrate.
- Drills can be fun . . . a chance to feel good about those you must count on in an emergency.

Debrief All Drills

- **A drill is not complete until it is debriefed.**
- Each member should talk about what was learned and **how it could be done better**.

EMERGENCY EQUIPMENT AND ABANDON SHIP
FOR
F/V _____





Codes to Use:

EPIRB	EPIRB
RADIO	Radio
PFD	PFDs
FEX	Fire Extinguishers
ABSTA	Abandon Ship Station
ISUIT	Immersion Suits
O	Life Rings
RAFT	Liferaft
FL	Flares

EMERGENCY ASSIGNMENTS

Note: Alternate signals may be determined and practiced by vessel operator	**PERSON OVERBOARD** Signal: 3 long blasts repeated at least 4 times	**FIRE** Signal: 1 long continuous blast not less than 10 seconds	**FLOODING** Signal: 1 long continuous blast not less than 10 seconds	**ABANDON SHIP** Signal: At least 7 short blasts followed by 1 long blast
Position/Name	**Station/Bring/Duty**	**Station/Bring/Duty**	**Station/Bring/Duty**	**Station/Bring/Duty**
Captain				
All Others				

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DISTRESS BROADCAST

- Make sure communications equipment is on.

- Select 156.8 MHz (VHF channel 16), 2182 kHz or other distress frequency used in your area of operation. Note: VHF channel 16 and 2182 kHz are for emergency and calling purposes only.

- Press microphone button. Speak slowly, clearly and calmly. Say:

  MAYDAY, MAYDAY, MAYDAY

  This is the F/V_____, F/V_____, F/V_____. Over.

- Release microphone button briefly and listen for acknowledgement. If no one answers say:

  MAYDAY, MAYDAY, MAYDAY

  This is the F/V_____, F/V_____, F/V_____.

  My position is _____. (Use latitude/longitude, nearby landmarks, distance from known points, LORAN readings, etc.) Repeat three times.

  I am _____.(Sinking, on fire, listing, etc.)

  I estimate that I can stay afloat _____ hours/minutes.

  I have _____ persons on board.

  My vessel is a _____ type of vessel, _____ feet long, has a
  _____ color hull with _____ color trim, and
  masts.

  I will be listening on channel _____.

  This is the F/V_____. Over.

- Release microphone button. If situation permits, stand by the radio to await further communications with the Coast Guard or another vessel.

- If no answer and situation permits, try another channel and repeat.

DONNING IMMERSION SUITS

Your life may depend on your ability to quickly don an immersion suit in an emergency, so it makes sense to have done it before. Monthly practice should reduce your donning time from minutes to seconds.

Practice donning the suit while sitting on deck. Vessel movement or list often prevents donning while standing.

Sit on the deck and work your legs into the suit, leaving boots or shoes on if possible. Placing plastic bags over your boots or shoes may make suit donning easier. Wear or bring extra warm clothing if possible. Pull the hood over your head, then place one arm into each sleeve of the suit and reset the hood on your head.

OR

Place your weaker arm into the sleeve of the suit. Then reach up and pull the hood over your head with your free hand. Then place your strong arm into the sleeve of the suit.

Hold the zipper below the slide with one hand, and fully close the zipper by pulling on the lanyard. Then secure the flap over your mouth.

WARNINGS

- To prevent possible injury, do not inflate the air bladder until you are in the water.
- Ease or lower yourself into the water. Jump only if necessary.
- Beware of snagging on gear.
- Keep the hood on – it could save your life.

EMERGENCY INSTRUCTION FOR ANCHORING

1. **Choose a location** with protection from the wind and seas if possible, and with a suitable bottom.

2. Anchor in a **maximum water depth** of _____ feet or _____ fathoms. (Note: This vessel has _____ feet or _____ fathoms of line/chain.)

3. **Approach the anchorage location slowly** and head the bow into the wind or current, whichever is stronger.

4. **When the vessel starts to back slowly, ease the anchor to the bottom.**

5. **Quickly pay out a scope** of five (in good weather) to 10 times (in bad weather) times the water depth in anchor line/chain. **Secure the anchor line/chain.** If drift is not rapid, back down with minimum power to set the anchor.

6. **Maintain an anchor watch** to feel the anchor drag and look out for any vessel drift. **Be prepared to get underway** if vessel drags anchor.

PERSON OVERBOARD

1. **Throw** a ring life buoy or flotation as close to the individual as possible.

2. Post a lookout to **keep the individual in the water in sight** and **communicate the distress and position to the pilothouse**.

3. Pilothouse watch to **sound alarm and maneuver as necessary**. Mark position electronically.

4. Launch a **rescue boat or platform** to recover the individual, **if appropriate**.

5. Have a **crew member put on a PFD or immersion suit**, attach a **safety line** to the crew member and have crew member stand by to enter the water to **assist** in recovery **if appropriate**.

6. **If** individual overboard is **not immediately located, notify the Coast Guard and other vessels** in the vicinity; and **continue searching** until released by the Coast Guard.

UNINTENTIONAL FLOODING, ROUGH WEATHER AT SEA, AND CROSSING HAZARDOUS BARS

Signal: 1 long continuous blast not less than 10 seconds.

1. a. **If unintentional flooding: notify pilothouse immediately** to **sound alarm & call Mayday.**

   b. If rough weather at sea or crossing a hazardous bar is anticipated, notify the entire crew.

2. Close all watertight and weather-tight doors, hatches, ports, and air vents to **prevent taking water aboard or further flooding** in vessel.

3. Keep bilges dry to **prevent loss of stability due to water** in bilges. Use power driven bilge pumps, hand pumps, fire pumps and buckets to **dewater**.

4. **Check all intake and discharge lines that penetrate the hull for leakage.** All crewmembers should know the location and operation of all through-hull lines.

5. On a small vessel, crew should keep their collective weight evenly distributed.

6. Personnel should **don immersion suits/PFDs** if the going becomes very rough, the vessel is about to cross a hazardous bar, or **when** otherwise **instructed by the master** or individual in charge of the vessel.

WARNING

If immersion suits/PFDs are worn inside the vessel, their buoyancy may hamper escape during a sudden capsizing.

FIRE

1. **Notify pilothouse immediately** to **sound alarm and call Mayday.**

2. **Shut off air supply to fire:** close hatches, ports, doors, vents, etc.

3. **De-energize electrical systems supplying the affected space**, if possible.

4. **Assemble portable fire fighting equipment.**

5. **Account for personnel** and **fight fire**. Do not use water on electrical fires.

6. If fire is in machinery space, **shut off fuel supply** and use fixed extinguishing system if appropriate.

7. Maneuver vessel to **minimize effect of wind** on the fire.

8. **Move survival gear that could be damaged by fire.**

9. Check adjoining spaces to prevent spread of fire.

10. Once fire is extinguished, **begin dewatering to avoid stability problems.**

11. **If unable to control fire, notify Coast Guard and nearby vessels.** Prepare to abandon ship.

ABANDON SHIP

1. **Preparations** should include the following as time and circumstances permit:

    a. **General alarm and mayday**

    b. **All personnel don immersion suits/PFDs** and warm clothing

    c. **Prepare to launch liferaft**; attach sea painter to vessel above weak link

    d. **Get abandon ship kit** including signals (EPIRB, flare signal smoke, flashlights, hand-held radios, etc.), first aid kit, water and food

    e. Gather other useful items

2. **Meet** at abandon ship station

3. **When sinking is imminent** or when remaining onboard is inappropriate:

    a. **Close watertight openings**

    b. **Launch and board liferaft**

    c. **Keep sea painter attached to vessel but be prepared to cut it** immediately if there is risk to raft or if vessel begins to sink

    d. **Activate EPIRB** and **begin Seven Steps to Survival** (see last page)

SAFETY ORIENTATION LOG

FOR

F/V _____

This certifies that I have read and received a safety orientation briefing on this vessel including the instructions, emergency assignments and diagrams contained herein and understand the above.

Date	Printed Name	Signature

SAFETY ORIENTATION LOG

FOR

F/V _____

This certifies that I have read and received a safety orientation briefing on this vessel including the instructions, emergency assignments and diagrams contained herein and understand the above.

Date	Printed Name	Signature

MONTHLY DRILLS LOG

Drill Performed	Date	Date	Date	Date	Date	Date	Date	Date	Date	Date	Date	Date
1. Abandoning vessel												
2. Fighting fires in different locations												
3. Person overboard												
4. Minimizing the effects of flooding												
5. Launching survival craft & recovering life boats and rescue boats												
6. Donning immersions suits & PFDs												
7. Donning fire-fighting outfit & SCBA												
8. Mayday; using visual distress signals												
9. Activating general alarm												
10. Reporting inoperative alarms and fire												

All personnel onboard must receive a safety orientation that includes the above PLUS the contents of the vessel's emergency instruction manual.

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MONTHLY EPIRB TEST LOG

FOR

F/V _____

Battery Expiration Date		
Hydrostatic Release Expiration Date		

Date	Time	Comments	Date	Time	Comments

Note: 406 MHz EPIRBs can be tested any time. All other EPIRBs can be tested the first 5 minutes of any hour. Batteries and hydrostatic release are dated and should be changed as indicated.

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