

CHAPTER 10 – USCG EVACUATIONS AND ASSISTANCE

TIME: One half hour

GOAL: Students will learn methods of obtaining USCG assistance that maximizes the safety of the crew, vessel and USCG personnel.

NEED STATEMENT:

1. An effective helicopter rescue can save lives; a poor one can take lives of rescuers and crew.
2. Since fuel consumption of the helicopter is a major constraint on the time and distance it can fly, the more prepared a fishing crew is for its arrival, the shorter the time the helicopter needs to spend on scene.

OBJECTIVES:

1. State three dangers inherent during a USCG helicopter evacuation.
2. List four steps in preparing a vessel for medical evacuation or delivery of a pump.
3. Describe the preparation of a patient for evacuation.
4. List six steps in hoisting a patient to USCG helicopter.

EQUIPMENT NEEDED:

USCG helicopter rescue basket, if available

TEACHING TIPS:

- *There are excellent videotapes on this subject that can help bring the topic to life. Review and use them!

- *If possible, invite someone from a USCG air station to talk on this topic.

- *Ask if anyone in the class has been involved with assistance from a USCG helicopter. Draw on the experience of your class.

- *If a basket is available, have students practice entering the basket in class.

INSTRUCTIONAL OUTLINE

I. INITIAL CONTACT WITH USCG

A. Radios

1. Channel 16, VHF
2. 4125 MHz, SSB
3. If your radio fails, once on scene the helicopter may:
 - a. Use a chalk board.
 - b. Drop a message block.
 - c. Lower a radio via hoist.

B. Communications

1. Communicate your problem clearly, before the crisis stage. Set up a communication schedule.
2. Decision to evacuate based upon:
 - a. Risk to patient/evacuee.
 - b. Severity of weather.
 - c. Life or limb threatening situation.
 - d. Time of vessel from port.
 - e. Risk to rescuers.
3. Information to rescuers includes:
 - a. Vessel name
 - b. Description
 - c. Length/description
 - d. Call sign
 - e. Location

* Latitude/longitude preferred

* Also provide geographic reference..

f. Weather

* Visibility

* Sea state

* Wind

* Cloud height

* Precipitation

g. Number persons on board.

h. Nature of problem.

* Vessel problem:

- Type of survival equipment, immersion suits, survival craft, EPIRB, and flares.

- Type of assistance needed.

* Medical problem:

- Patient's name, age, sex.

- Nature of illness/injury.

- Vital signs.

- History of illness/injury

- Assistance given.

- Level of medical care on board.

II. PREPARATION FOR EVACUATION

A. Clear Area

1. Evacuation usually from the work deck.
2. Secure loose items and debris – there will be a 80 - 100 knot rotor wash from aircraft.
3. Lower poles and rigging if possible.
4. KEEP COMMUNICATION OPEN – do not lower antennae.
5. Illuminate hoisting area, NO lights at helicopter.
6. Brief crew on procedure.
7. NO flash cameras.

B. Position Vessel

1. Maintain forward progress.
2. Keep bow 35 - 45 degrees to right off wind-line to maximize visibility for helicopter pilot.

C. Prepare Patient/Evacuees

1. Provide eye/ear protection.
2. Provide warm clothing/secure blankets/PFD.
3. Secure medical records inside clothes or blankets of patient.
4. Position patient on/near deck just before helicopter arrival.

D. Prepare for Hoist.

III. HELICOPTER ARRIVAL AND HOIST:

A. From Vessel:

1. Arrange for hand/visual signals by radio
2. Allow trail line to touch deck first to avoid static charge.
3. Guide litter (for patient)/basket (for evacuation) to vessel with trail line.
4. Allow litter/basket to touch deck first to avoid static charge.

5. DO NOT secure trail line or hoist hook to vessel or take into cabin while still connected to aircraft.
 6. Strap patient/evacuee into basket – one per basket.
 7. Have patient/evacuee keep hands, arms inside basket.
 8. Assure hoist line is clear of rigging (and feet!)
 9. Never stand outboard of basket/litter.
 10. Give helicopter a hand signal when ready to hoist.
 11. Use trail line to guide and stabilize during hoist.
- B. From Life Raft Or Water
1. If directed, swim away from the raft, one at a time, to be picked up. Raft may be blown by rotor wash.
 2. Use basket or hoisting strap delivered by helicopter; USCG will not use hoisting straps on immersion suits to lift.
 3. Follow directions given by rescue swimmer.

IV. OTHER CONSIDERATIONS

- A. Find out the number of crew in the helicopter – you may end up saving helicopter crew if engine failure.
- B. Keep USCG apprised of situation:
 1. Changes in weather.
 2. Changes in patient's condition and vitals; if the patient has died you may save the crew a dangerous flight.

V. DELIVERY AND USE OF USCG DEWATERING PUMPS

- A. Follow the same procedures listed above for communications and preparing for evacuation.

- B. Two methods of delivery:
 - 1. Direct – pump delivered directly to the deck of your vessel.
 - a. Decision made by the helicopter pilot after evaluating conditions on scene.
 - b. Follow the same procedure for receiving a basket or litter.
 - c. Unhook the cable and keep it free for the helicopter to haul back in.
 - d. DO NOT secure the cable to vessel.
 - 2. Indirect – used when vessel dead in the water.
 - a. Trail line delivered to vessel.
 - b. Jet or helo moves off from vessel and drops pump container into water (it floats).
 - c. Crew pulls in the pump using the trail line and lifts it on board.
- C. Operation
 - 1. Two pumps in most common use.
 - a. Pumps from USCG helicopters smaller in pumping capacity due to size and weight restrictions.
 - b. Pumps from USCG vessels are larger capacity.
 - 2. Follow the checklist of instructions on placard with pump.
 - 3. If a demonstration from a USCG airstation is not possible:
 - a. Use videotape on the subject to demonstrate.
 - b. Distribute instruction placards to class (see appendix) to use during discussion or video demonstration. Items to note during viewing: o-ring suction; rubber sleeve discharge; don't over choke; prime pump; caution using inside (carbon monoxide fumes)

VI. SUMMARY

- A. Helicopter evacuations and assistance can be dangerous to vessel and helicopter crews.

- B. Be prepared to provide rescuers with information about the nature of the emergency.
- C. Prepare the vessel before the helicopter arrives.
- D. Follow hoisting procedures.

REVIEW QUESTIONS:

1. State 3 dangers present during helicopter evacuation.

ANS:1) static charge from cables/litters, 2) rotor wash, 3) entanglement in vessel gear, 4)weather.

2. List 4 steps in preparing a vessel medivac or helicopter assistance.

ANS:1) Clear the deck, 2) position vessel, 3) prepare victims/survivors, 4) prepare for hoist/delivery.

3. Describe preparation of patient for evacuation.

ANS: Provide eye/ear protection, warm clothing, secure medical records on patient, position on deck prior to helicopter arrival.

4. List 6 steps involved in patient hoist.

ANS:1) Arrange for signals to helicopter, 2) allow trail line and litter to touch deck first, 3) guide trail line to deck, 4) strap patient securely into litter, 5) give hoist signal, 6) use trail line to guide litter to helicopter.

SKILLS CHECKLIST: