

# CHAPTER 6

## OFFSHORE OPERATIONS

### I. GENERAL

It is very important that all personnel who will be working offshore be thoroughly familiar with the provisions of this section of the Company's Employee Safety Manual. All rules and regulations established by federal, state and municipal agencies must be observed.

Only authorized personnel are allowed on an offshore platform and a record must be kept of all individuals on each facility. While the customer we are working for will keep such a record, each District is expected to record the names of the Company personnel who are offshore and the rig they are on.

Personnel visiting an offshore facility for the first time must receive a safety orientation. This orientation will usually be conducted by the customer and our personnel are expected to attend the training when required by the customer. This training will consist of emergency procedures, no smoking areas, sleeping facilities as well as personnel protective equipment, specifically personal flotation devices (PFD) as required by the U. S. Coast Guard. Additionally, training in procedures such as fires and emergency evacuation plans will be taught in these orientation classes.

Even though the customer will provide most of the required training, it is the responsibility of each person on board the platform to know what to do in the event of an emergency.

#### A. Transportation

1. By boat - the captain of any vessel on which you may ride is in complete charge of that vessel and all passengers. Passengers are expected to ride in the cabin, not in the wheelhouse. When transferring from the boat, all personnel must wear PFD. When loading the boat with our equipment, follow the directions of the boat's crew. When transferring from or to the boat follow the instructions of the Captain and / or the boat's crew.

a. Watch your step. Be sure of the footing and observe the motion of the boat due to wave action prior to boarding. In many cases you find the boat deck to be very slick.

b. Always get help when loading heavy or bulky cargo. It is much more difficult to get good leverage when standing on the moving deck of a boat.

c. When transferring from a boat to a platform the use of a swing rope is acceptable provided it is used safely. A deck hand is necessary to assist personnel boarding and leaving a boat. Transfer by rope should be made as nearly as possible at the peak of the vessel's rise, never while the vessel is falling away. Always use both hands, transfer hand articles and luggage separately.

d. Personnel nets (baskets) may be used to transfer persons when transfer by rope is impractical because of high, rough seas. Such nets must only be used

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with the approval of the rig supervisor. When transferring by personnel net, a deckhand or other competent person must be available to assist loading, to instruct newcomers and to assist the directing of the crane. Personnel are to stand, facing inward, on the outer most rim of the net in the open areas designed in the roping.

e. No matter what type of transfer method is to be used, PFD's are to be worn.

2. By helicopter - the pilot of any aircraft is in complete charge of that aircraft and all passengers. The decision of the pilot about the loading of personnel, materials, weight and distribution of load and flight operation is final. Passengers are to report both their weight and their luggage weight upon arrival at the staging area and be ready to board the helicopter before the scheduled departure time.

a. Always approach and leave the helicopter in a crouched position so that you are well below the rotating rotor tips.

b. Always approach and leave the helicopter at a 90 degree angle, from the sides and in the view of the pilot.

c. Never walk near or under the tail boom or tail rotor of a helicopter. The section around the tail rotor blades is the most dangerous area around the helicopter. The tail rotor blades are at or below head height. Never approach a helicopter from the rear for any reason.

d. At times you may have to load or unload material with rotors still turning. In all cases be aware of your position relative to that of the rotors.

e. Never disembark a helicopter until instructed to do so by the pilot.

f. Hard hat, caps or other light articles can be blown into the rotor blades or intake if care is not taken. Glasses can be blown off your face if you are not careful.

g. PFD's or inflatable life jackets provided on board must be worn during all over-water flights. Keep all straps snug. When leaving the cabin, remove the PFD or life jacket and place it neatly on the seat.

h. Safety belts are to be securely fastened at all times.

i. Never throw anything out of the helicopter.

j. Protect your eyes from flying dust and other debris when standing near a helicopter, especially when it is landing or taking off.

B. Hazardous Materials - The shipment of hazardous materials offshore is regulated by the U.S. Coast Guard, who strictly enforce the regulations. In most cases you find the boat Captain, along with customer personnel, are very familiar with the correct way to ship these items safely and you should follow their instructions.

In most cases hazardous materials will not be shipped offshore on helicopters, especially on those carrying passengers. Crewboats will not transport certain types of hazardous materials with passengers as well.

## II. WATER SAFETY AND SURVIVAL

### A. Falls From Vessels Or Structures

1. Orient yourself - once you are in the water. Move under the platform and away from any boats.
2. Rescue equipment - immediately look for rescue equipment and listen for instructions.
3. Avoid swimming - let rescuers come to you. Do not swim distances if possible because survival may depend on conservation of energy.

B. Water Entry From A Height - Abandonment of a platform or vessel by jumping into the water can be hazardous and should only be done if there is no other means of escape. If you must jump, observe the following procedures.

1. Before jumping - get as close to the water as possible.
2. Remove hard hat.
3. Personal flotation device - put on and firmly secure your PFD, if time permits.
4. Check landing area - look at your targeted landing area and see if it is clear of other personnel, protruding objects and debris.
5. Protect mouth and nose - place the palm of your hand directly over your mouth and pinch the nose with the thumb and finger.
6. Secure your PFD - by clamping your free arm across your chest and grasping the shoulder strap of the PFD.
7. Do not dive - look directly ahead at the horizon and stand straight. Take a deep breath. Jump feet first, keeping your body erect and your ankles crossed or your legs together.

C. Unfavorable Water Conditions Without A PFD - Under certain emergency conditions, you may have to abandon a platform or vessel without a PFD. You should therefore be familiar with swimming conditions in unfavorable water.

1. Rough water - when swimming in rough water, turn your back to the wind or the waves. Keep your head out of the water and use the breast stroke.

2. Oil or fuel fires - on the water will cause you to have to swim under the water. Before you surface, use your hands to splash a breathing hole above your head then surface with your eyes closed. Take a breath and re-submerge feet first.

3. Oil and debris - keep your head up and out of the water when swimming through oil and debris. Push oil or debris away from you by crossing your hands in front of you. Sweep your hands to the side as you swim forward with a modified breast stroke. Protect your eyes, nose and mouth.

4. Cold water - conserve body heat to prevent immersion hypothermia by minimizing movement.

D. Helicopter Emergencies - When a helicopter must set down in the water because of an emergency or ditching, the following procedures should be observed.

1. Follow orders of the pilot.

2. Tighten seat belt - remove and secure glasses, dentures, pens and other personal items. Note the location of life rafts and survival kits. Be prepared to deploy them should the pilot not be in position to do so.

3. Orient yourself - select an orientation point. This will be a fixed part of the helicopter such as the bracing underneath the seat. Grasp this tightly during the emergency so that you will maintain a reference point. This cannot be a movable part such as a door handle.

4. Brace for impact - a second strong jolt will be felt as the rotor blades hit the water. Do not attempt to exit until the blades have stopped completely.

5. Stay strapped in - keep one hand firmly on your seat belt, near the buckle, not on it. Keep the other hand on your orientation point.

6. Wait for pilot's instructions - the pilot will tell you when to open doors and to deploy life rafts. In no case should these be opened in flight.

7. Sinking helicopter - should the helicopter not stay upright or if it begins to sink, survival becomes an individual responsibility. Do not panic or hamper the survival of others.

a. As water fills the cabin, take and hold a normal breath.

b. After the initial rush of water has ceased, normally five to ten seconds, release the belt buckle with one hand, keeping your hand on the orientation point. The persons seated nearest to the doors should open the doors by the regular method or turn or pull emergency jettison handles, and push the emergency door or window out. Pull yourself hand over hand over the pre-planned escape route. Do not let go and attempt to swim with both hands. Maintain contact with the craft.

c. If wearing an inflatable life jacket, exit the craft completely before inflating the jacket to avoid being snagged.

8. Life raft - enter a life raft if possible. Stay with a group of people if it is impossible to enter the life raft. The helicopter may stay afloat for hours even if the emergency flotation gear has not been deployed. If possible, crawl up on the helicopter but do not tie yourself to it as it may sink without warning. Under rough conditions, it may be advantageous to move away from the helicopter to avoid bodily injury.

9. Assist others - be prepared to assist others who may be injured or disoriented.

E. Rescue Actions For Persons Overboard - Person-overboard procedures should be posted, and all individuals should be familiar with these procedures. Individuals should also be able to recognize a person-overboard audio alarm.

1. Watch the person - keep an eye on the person overboard while someone else sounds the alarm.

2. Drop a life saving device - straight down to the person overboard. This device will mark the spot if the person submerges. Do not hit the person that is overboard.

3. Reaching for the person - if you reach out for the person that is overboard, be sure you stretch without losing your balance.