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Saving Lives on the Water

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Type I Capsizing Review

The RCM-SAR strives to ensure the highest safety standards are in place for all vessels and crew. The following guidelines have been established based on the principles taught at RHIOT as well as additional considerations relating to the design characteristics of the Type I vessel.

Capsizing

In the unlikely event of a capsizing, all crew are to swim out from under the vessel and muster near the stern. Once all crew have been accounted for the re-righting system should then be activated by pulling the cord on the vessels stern.

Additional procedures for capsizing can be found in the 'Capsizing Reversal Procedures' section below.

Location and design of release mechanism

The re-righting release mechanism shall be located on the vessels stern in its originally designed location. It shall be a manually released mechanism.

Evacuation training

Stations may pursue supplementary underwater egress training if they feel they require it, provided such training is aligned with the RCM-SAR's procedure for immediately escaping a capsized vessel.

Re-Boarding Ladder

A practical re-boarding ladder must be established and installed on each Type I vessel.

Arm Rests

The armrests will remain on the Type I vessels. They serve a critical role in the safety of the crew given the associated lateral forces experienced while underway.

Exterior Flaps

The primary functions of the exterior snap on flaps are for stowage. The flaps are to remain up while underway on training and missions unless the extent of the weather is such that the safety of the vessel and crew is in question.

Capsizing Reversal Procedures

While underway:

- Hang on as tight as possible while underway and making way.
- Ensure that all personal protective equipment is properly fastened and secured.
- Additional gear onboard should be kept to a minimum to increase stability of the vessel.
- Ensure that no equipment is stored in close proximity to the bag inflation area.

Capsized:

- Many factors can affect the expected air space beneath an overturned vessel; including the marine environment and additional weights onboard.
- In heavy sea conditions, the air space will compress and expand as the vessel moves in relation to the water. Additional weights onboard the vessel including equipment, electronics and fuel will also affect the allowable air space. Focus on making your escape as quickly as possible.
- If trapped in or beneath the vessel, seek out an air pocket near the bow. Gather the crew together and quickly and efficiently plan a safe escape from the vessel.
- Oil and gas fumes that are released from the vessel may limit visibility. Look down; light may be visible. The oil and gas fumes may also make the air space toxic; **escape from beneath the overturned vessel as soon as possible**.

Post capsize:

- All crew should assemble at the stern.
- Make a head count to ensure all those who were onboard are present and none remain in the capsized vessel, have been lost overboard or have drifted away.
- Immediate first aid should be given to anyone in a serious life-threatening condition.
- Attempt to notify JRCC by handheld radio as soon as possible.
- The first crewmember should deploy the safety line and swim it out the complete distance (length of the line). The remaining crew should assist with deployment of the safety line, and then follow the line out. The coxswain should remain at the transom.
- After the crew is safely out of the way, the coxswain activates the re-righting system by pulling firmly on the handle. As soon as the system is

activated, the coxswain will swim/pull themselves down the safety line and out of the way.

- After the vessel has righted itself, the crew can begin re-boarding the vessel from the most effective place (re-boarding ladder).
- Once the re-righting system has been activated, do not deflate the bag until the vessel has returned to base and is safely secured alongside.
- In the event of a re-righting failure, muster the crew and notify JRCC by handheld radio as soon as possible. Stay together and with the vessel. If possible, climb onto the overturned hull. The EPIRB has a hydrostatic release unit and will activate automatically when submerged.

<u>Once crew are onboard:</u>

- Test your VHF radio. Make a radio call to JRCC with an update of the situation.
- If the radios are dead, locate the EPIRB and keep it close. It will have been activated from water contact when the vessel overturned.
- Remember, the EPIRB has to escape from the overturned vessel and reach the surface in order to transmit a distress signal.
- Deploy the sea anchor or drogue.
- Continue to administer first aid to any crew that require it.
- Recover the safety line.
- Retrieve pyrotechnics and emergency equipment and keep them nearby in case needed.
- Stay with the vessel. It is easier to locate a vessel than it is individuals in the water. All crew should stay with the vessel providing it is not in imminent danger of destruction or becoming an unacceptable risk to life. Where possible, all crew members should attempt to keep out of the water.
- Wait for the Coast Guard to respond. Once in port, notify your Station Leader and a member of the Management Team. Record as much detail of the event as possible immediately.