Lifeboat release and retrieval systems: handle with care

This article is aimed at giving practical advice to crew before carrying out a lifeboat drill. It might be an overstatement to say that lifeboats have caused more fatalities than they have saved lives, but reading the regular incident reports certainly raises this question. The majority of lifeboat incidents occur during a lifeboat drill.

Training, training, training
Before a crew member takes part in a lifeboat drill featuring an on-load release and retrieval system (RRS), they should be thoroughly trained in its operation. Crew members should know the associated hazards and the logical sequence of events that should occur during a successful launching procedure. Proper training equips crew members with a shared mental model of how lifeboat drills should be conducted and enables them to challenge actions that diverge from proper procedure. Remember that neither briefings nor drills should be conducted at such times as to induce fatigue by unduly disrupting hours of rest.

Areas to include in this training are:

1. Equipment knowledge
   a. The state of the mechanism at all stages of the launch.
   b. Purpose of the hydrostatic plate and emergency release mechanism.
   c. Operation of the release handle, removable pin, etc.
   d. Operation of the hooks.
   e. Removal/insertion of locking pins (if applicable).
   f. The catastrophic occurrence that may result from a hook failure or premature hook release.
   g. How to operate the brake release wire.
   h. The function of fall prevention devices (FPD).

2. Drill familiarity
   a. Roles and responsibilities of each team member.
   b. Safety checks to make prior to entering the lifeboat.
   c. Safe sequence of actions required to launch/recover the lifeboat.
   d. Safety checks to make prior to retrieval.
   e. The procedure to follow if a crew member witnesses an unsafe act.
   f. How and when to rig fall prevention devices.

Initial familiarisation does not have to take place on board the lifeboat. Explaining the procedures and talking crew through the steps using diagrams or pictures will impart an understanding of a safe way to conduct lifeboat drills.

Some ships are equipped with a mock-up of the hook mechanism mounted on a bulk head, which allows crew to practise the operation of the mechanism and view its results safely. All drills should be conducted in such a way as to encourage learning, rather than just carrying out the launching actions – crewmembers need to know the whys as well as the hows of what they are doing.
Lifeboat release and retrieval systems: handle with care continued

Advice for a safe launch and recovery

Launch
1. Conduct a briefing for all personnel involved. This should not be done on board a lifeboat rigged outboard.
2. Check crew personal protective equipment (PPE). Do not allow the crew to ease their PPE, even to relieve heat/discomfort.
3. Conduct visual checks of the fore and aft hooks prior to boarding to ensure that they are correctly set and are positioned identically.
4. Keep the number of persons on board the lifeboat to a minimum until the time of launch.
5. Confirm that fall prevention devices are properly rigged.
6. Check that the emergency release is situated in the green zone and that the release handle is in the safe/locked position, with pin present. This should be done by a single crew member.
7. Board the lifeboat in an orderly manner only after all checks have been completed.
8. Before descent, all personnel should be seated and secured with the restraints provided, with steps taken to evenly distribute weight.
9. After entering the water, reset and check the hooks at the earliest opportunity.

Recovery
1. Visually confirm that hooks have been reset.
2. Ensure that boat hooks and other necessary equipment required for recovery are ready and near-at-hand.
3. Crew responsible for reattaching the falls should ensure that they give positive confirmation when the falls are reattached.
4. Reattach fall prevention devices.
5. Initially raise the lifeboat to a position just above the water line and check that the emergency release has returned to the green zone.
6. In the event that the emergency release handle fails to return to the green sector, do not hoist the lifeboat further.
7. Ensure that personnel depart the lifeboat calmly and carefully.
8. Conduct post-drill debriefing to ensure that any lessons learned can be incorporated into the SMS.

Safety first, safety always
A successful lifeboat drill is not only one in which nobody was injured, but also one in which the participating crew gained a better understanding of the launching and recovery procedures. In the unfortunate event that the crew needs to abandon ship, successful drills are what will have prepared them for the emergency and what will save their lives. To that end, seafarers need to be trained to know their RRS, recognise potential dangers and raise the alarm in the face of a dangerous action by another crewmember or if they are in any doubt as to the task they are being asked to undertake. Crewmembers who stick to these principles when conducting drills will see a reduction in preventable accidents and a corresponding rise in the ability of the crew to operate the equipment when it matters most, in a real emergency.

Conclusion
Release and retrieval systems have been the subject of much debate amongst mariners. The IMO’s action to improve the safety of launching systems should go some way to improving seafarers’ confidence, but seafarers must also take ownership of the problem by enhancing their own knowledge and handling of their survival craft’s RRS. The combination of improved systems and following safer procedures should help to improve the perception of this most essential piece of survival equipment.