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in a state of continuous readiness for launching in not more than 5 min;in a position suitable for launching and recovery;so that neither the rescue boat nor its stowage arrangements will interfere with the operation of any survival craft at any other launching station; andif it is also a lifeboat, in compliance with the requirements of regulation 13: stowage of survival crafts.The rescue boat embarkation and launching arrangements shall be such that the rescue boat can be boarded and launched in the shortest possible time.If the rescue boat is one of the ships survival craft, the embarkation arrangements and launching station shall comply with the requirements ofRegulation 11: embarkation arrangements and Regulation 12 Launching stations.All rescue boats shall be capable of being launched with the ship making headway at speeds up to 5 knots in calm water.Recovery time of the rescue boat shall be not more than 5 min in moderate sea conditions when loaded with its full complement of persons and equipment.Rescue boat embarkation and recovery arrangements shall allow for safe and efficient handling of a stretcher case. All Davit systems must:Be able to lower & recover a fully loaded & equipped r/b against a 10trim & 20 list either wayTankers, chemical tankers & gas carriers at greater anglesOperable only by gravity or stored mechanical powerActuated by one person at deck side with continuous view of boat, or from within the boatSuitable for launch & recovery under severe weather conditionsMinimum maintenance and all parts readily accessibleWinch brake able to withstand static test of not less than 1.5 maximum loadDynamic test of not less than 1.1time maximum loadOther parts of launching system to withstand static proof load test of 2.2 x maximum load shall remain effective, as far as possible, under conditions of icingAll lifting devices must:Be fitted with a powered winch motor of capacity to raise the boat from the water with its full complement of persons & equipment.Hoisting speed of not less than 0.3 m per secondRecovery time (hook on to disembarkation) shall not be more than five (5) minutes.Efficient hand gear to be fitted for recovery.Cranks or hand wheels shall not be rotated by moving parts when rescue boat is lowered or hoisted.Limit or proximity switches, to be fitted if davit arm is recovered by power.Foul weather recovery strops shall be provided for safety if heavy fall blocks constitute a danger.Embarkation and recovery arrangements shall allow for safe & efficient handling of a stretcher case.Release HooksRelease hooks which can be found on rescue boats are of two types:Off-load The load has to be off the falls for the hook to release the boat. This is the more common type of the two and requires very little skill to operate it.Geared Off-load Hook.1On-load: The load can be released with the load on it. Caution is always exercised around these release systems because of premature disengagement. Coxswain and crew should have a thorough knowledge of these systems.On Load release hook.2Hydrostatic Release Some On-load systems have a hydrostatic release on them which will keep them fail safe until the water pressure is great enough to activate it! Which means the boat will only disengage if waterborne. Never Override the HRM mechanism and drop the boat from the falls during a drill!Hydrostatic Release.3SOLAS requires that ships:Shall be fitted with a device to dampen the forces due to interaction with the waves when the fast rescue craft is launched or recovered.The winch shall be fitted with high-speed tensioning device which prevents the wire from going slack in all sea state conditionsLowering speed for a fast rescue craft with its full complement of persons and equipment shall not exceed 1m/sA fast rescue boat launching appliance shall be capable of hoisting the fast rescue boat with 6 persons and its full complement of equipment at a speed not less than 0.8m/s.Many davit systems currently in use feature some kind of high-speed tensioning device. The aim is to reduce the high snatching loads that can occur if the main winch cable comes tight because of the wave motion. When the rescue craft is in the water with the davit cable attached the device has the capability of letting out or taking in a certain amount of winch wire at a fixed, low tension which keeps the rescue craft in contact with the water surface. This has the effect of reducing any loads that would otherwise occur from waves slamming underneath the hull. The winch operator may then wait for the ideal moment before recovering the craft without risking damage to the occupants.On-Board Maintenance of Davits, falls and disengaging gearMSC.1/Circ.1205Seafarers often change ships and sometimes are not familiar with the lifeboats on their ships. Casualties with lifeboat systems are often caused by poor understanding of the lifeboat systems, especially release gear systems. User-friendliness of manuals for lifeboat systems is, therefore, important to help prevent casualties.The purpose of these guidelines is to encourage development of user-friendly manuals for operation and maintenance of lifeboat systems including launching appliances. These manuals should be easy to understand. The guidelines demonstrate the appropriate level of detail and use of illustrations in explaining the safe use of critical systems. Manufacturers of lifeboats and launching/recovery appliances are invited to make manuals easy to understand, taking into account these guidelines. The use of video materials in conjunction with printed manuals can be an effective tool for mariners who may not be inclined to read a manual.Outline of Information contained in the training manualMethod of checking proper closure of release hooksLaunching operationPreparation before launchingSetting painterRelease of safety pin for winch hand brake leverRelease of davit arm stopBoarding the lifeboatLaunching procedureRelease gear operationPainter release and lifeboat operationRecovery operationResetting procedure of release hookRecovery procedureStowage procedureOn-load/off-load release gear systemGeneralFore and aft hook unitsRelease handle unitHydrostatic interlock unitInspection and maintenanceGeneral precautionsInspection and maintenance of lifeboat and release gear systemInspection and maintenance of launching appliances (davits and winches)4.2 Safety Precautions during Launching and Recovery LaunchingPre-Launching checks:Painter is secured and in good conditionSponsons are fully inflatedGrips are securedIf it has a stern has a line ensure its in good condition.All equipment is in the boatFall wires and release are in good conditionIf it has a rigid re-righting float, make sure plug is installedCylinder and arming head for capsize has safety pin removedNo debris in boat.Hazards during Launch and RecoveryAs in any drill or exercise, there is a potential risk of injury; a complete hazard assessment should be done for launching and recovery. Some of the Risks that may be encountered are:Launching Hazards and Prevention HazardPreventionRisk of injury getting into the boat.Use proper method for enteringViolent rocking of the boat at the Davit headHold grab railsThe pendulum effect while being lowered, higher freeboard has more risk.Dont stop the brake until waterborneShips rubbing strake can cause personal injurySlow decent before the rubbing strakeReleasing the fallsWear gloves and watch the floating blockReleasing the painterTake strain off painterBow Wave sending you under the bowStay clear of the bowRecovery Hazards and PreventionHazardPreventionColliding with hullCome in at slight anglesRetrieving PainterHave bows man kneel down to get painterHooking up fallsHave a spotter and someone to hook upPendulum effectAll crew members holding grab railsViolent Rocking at the davit headAll crew members holding grab railsPersonal Preparation when called to Rescue CraftAny emergency will have its risk but planning for the worst is better than not being prepared. After hearing the ALARM muster with your PPE which should be dry suit or immersion suit, take extra PFDs for casualties, put on helmet and gloves. SART and EPIRB should be taken with you and stored in the rescue boat. In extreme cases it may be impossible to launch the FRB, due to weather, fire collision etc.Do not take unnecessary risks to the crew if it is life threatening.ResponsibilitiesCoxswain: overall in charge of the FRB but has the responsibility of seeing the other crew members are adequately dressed. Stay in communication with the ship to keep the master informed.Bows man: Release painter, lookout duties and casualty retrieval.Sterns man: Release falls, lookout duties and casualty retrieval.FRBs are designed to have hand holds, grab rails, seat belts, bucketed lines and toe holds, these should be used during all evolutions of Boat work. Always have one hand for you and one for the boat!Safety is everyones responsibility.Launching ProceduresRig painter remove gripesStart Engine (except outboards)Communications established (Boats ready for letting go)Wait for masters word for lowering then (lower the Boat)All crew hold grab rails inboard for lowering in designated positions.Release fallsPower up and release painter.Turn outboard 10-20Pull away at slight angles, avoid bow and stern.Recovery ProceduresSART and EPIRB put in boatCommunications (FRB coming alongside Ask to alter course for a lee)Pace with ship coming in at slight angles.Move forward of the falls to retrieve the painter line.Ease off power to hook up falls.Radio bridge all hooked upFRB crew hold on to grab rails for hoisting, shut engine downDisembark, children, elderly, ladies, men, and crew members.Install GripesHave fuel topped off return EPIRB and SARTOther procedures may be involved on your FRB and Davit system, make sure you know them!4.3 Launching and Recovery in Rough SeasThe same as launching in other conditionsThe crew will have to remain vigilant because the vessel may roll heavilyNon persistent / Nontoxic oil can be used to quell breaking seas.With on-load systems, arm the system just above the wave and release when on the top of the swell. Off-load systems may require the boat to hit the valley of the swell to release, Be careful of the fall BlockSome systems have self-tensioning winches to retrieve the block once releasedMay have to fend off forward to get released from hull.4.4 Drills in Launch and RecoveryHook on / Release processThe hook-on and release process is considered to be the area where the crew are most at risk and despite the introduction of specialized hooks this still presents the area that tends to limit the conditions under which the FRC can be used. In particular, it is the connecting of the hoist wire that presents the challenge and limitation for the launch and recovery operation.There are three main requirements of an FRC to improve the safety of the crew and the effectiveness of the release and hook-on procedure:That the FRC provides a stable platform when it is alongside the mother ship during the launch and recovery procedures. This means that the impacts alongside the ship are minimized, and the jerking pull on the painter is reduced.That the crew can locate themselves securely in the boat during the launch and recovery procedures.That the release and hook-on procedures are simple, quick and effective and can be operated preferably one-handed.The use of foul weather recovery strops Most davits today have an attachment off the davit head for hanging off pennants. This is what will support the weight of the boat when foul weather strops are used.The Foul weather recovery strop is an extension to the floating block with the same breaking strain. It allows for easy hook-up instead of using the heavy falls which can cause injury to crew or knocked out of the boat.When coming alongside hook-up the Foul weather recoveries strops and raises it to the embarkation level and secure it.Secure the hanging off pennants with a shackle.Lower the falls and take off the Recovery Strop.Hook the floating fall block back into boats hook.Secure in chalks.Limit SwitchesLimit switches have to be on all electrically operated davits. This is protection against the falls being hoisted beyond there workable area, which will protect the wire from Parting. This is only a safety device and should never be relied upon to stop the travel protection, always ensure that it is operational by pushing the switch back manually while power is on.Limit switches prevent from bringing fall wires beyond their maximum travel.Limit switch.4Davit Proximity switch: is a sensor switch that activate when the Davit is just about in stowed position.Drills in launching and recovery of fast rescue boats (Practical)See last page of manual on Performance Requirements.Image CreditsHenriksen. (n.d.). Henriksen Geared Off-load Hooks. Pacific Marine. (n.d.). On Load release hook. Safety Board of Canada. (2000). Image 3 in Marine Investigation Report M00W0265. Technical Service. (n.d.). Limit switch. Switch100%(9)100% found this document useful (9 votes)15K viewsThis document provides instructions for launching and recovering a rescue boat from a ship. It outlines the key steps, which include:1) Preparing the rescue boat by checking fuel, equipmentAI-enhanced title and descriptionSaveSave Rescue boat launching For Later100%100% found this document useful, undefined Actually, time limits do not play a key role in onboard drills even though SOLAS has set out time limits for rescue boat operations. However, competence training is more important than time limits (See guidelines on safety during abandoning ship drills using lifeboats, MSC.1/Circ.1578). It has been seen that the accidents usually happen during mandatory drills. This is why IMO regulations no longer require rescue boats and lifeboats to be manned during launching and recovery. If possible, the boat should be manned after launching. (See GARD, 2008). Though this guide has been so confusing to the ships crews, that is why we are explaining it part by part. Any port state control (PSC) inspector may ask this question during lifeboat or rescue boat drills. Also note, in some ships, one of the life boat can be equipped to serve as rescue boat. While onboard vessel, It is important to have frequent drills to gain experience and confidence in use of LSA equipment, most importantly rescue boat launching. At least once a week frequent drills or checks will also make sure that the equipment is effective and in workingcondition. Also, drill scheduling is important because of frequent crew changes. Scheduling of drills ensures that every crewmember will get familiar with the LSA equipment. Related read; How To Maintain Rescue Boat Outboard Engine ! As per IMO , 2014 Ships rescue boat should be launched and driven by its assigned crew once a month as far asit is reasonable. In every case rescue boat should be launched and driven at least once every three months, to avoid seizor of launching mechanism . To conduct a safety drill crews must make Planning. While on planning, all the recognized risks should be avoided and minimized by keeping the drill in accordance with shipboard requirements of occupational safety. Part of the planning is to make sure that the LSA equipment is in good working condition according to the maintenance manuals anddocumentation. Officers responsible for the drill should review the manufacturers instruction manual and make sure that all persons operating LSA equipment are familiar to the instruction manual. Result of the drill should be documented and included in the planning of the next drill. When preparing and conducting a rescue boat drill it is mandatory to perform every task by safety first thinking. SOLAS regulation III/19.3.1 says: Drills shall, as far as practicable, be conducted as if there were an actual emergency. SOLAS regulation III/14.1 says thatrescue boat needs to be stowed: in a state of continuous readiness for launching in not more than 5 min It is important to understand that these regulations should not be kept as a priority objective in drill performance. SOLAS regulation III/19.3.1 means that drill safety may require some elements of an actual emergency to be excluded from the drill because those elements may cause unnecessary risk for the safety of the ship and the crew. Time limits of SOLAS regulation III/14.1 should not be kept as an objective in rescue boat drill. The main objective of the drill is to gain crew competence not to have acident. While onboard in 2019, at Ireland, some port state control (PSC) inspectors boarded our ship for inspection, they requested for safety drill, and life / rescue boat launching. On the process, chief mate was asked how the boat should be launched. Either by crews Onboard or after lowering it to water level. The ship failed PSC inspection drill just because of wrong (old) guide answered by chief mate. Now note; SOLAS regulation III/19.3.3.6 say: As far as is reasonable and practicable, rescue boats other than lifeboats which are also rescue boats, shall be launched each month with their assigned crew aboard and manoeuvred in the water. That regulation can be easilymisunderstood. The regulation does not require the rescue boat to be manned during launching or recovery. The regulation only requires the rescue boat to be driven by its assigned crew in the water. Launching the rescue boat with its full complement onboard may cause unnecessary risk for the safety of the crew(considering rules list earlier about safety drill). Rescue boat launching with crew onboard should only be conducted if special precautions are observed. It is recommended that the rescue boat is launched and recovered without any persons onboard if possible. As per IMO, 2017b, If the arrangements require persons to be onboard the boat during launching and recovery, it is recommended that the rescue boat launching and recovery system will be tested first without any persons onboard to make sure that the system is functioning correctly. In SOLAS there is no regulation that the ships rescue boat launching should be done with the ship underway or headway. Even though rescue boats are required to be capable of such launching it is completely masters decision to perform such a drill, but must take all safety precautions. SOLAS regulation III/17.3 says: ..all rescue boats shall be capable of being launched, where necessary utilizing painters,with the ship making headway at speeds up to 5 knots in calm water. The regulation concerns the speed only as a rescue boat performance requirement. There are no SOLAS or LSA-code requirements for the ships speed when recovering the boat. According to SOLAS regulation III/19.3.3.7 , if rescue boat launching drill, when ship is underway is carried out, it should be performed only in calm weather and sheltered waters. Base on the cases above, these Emergency situations should be considered when a vessel takes part in search and rescue operations. The ship master should take into consideration: ships maneuvrebility ships freeboard points on the ship where casualties may be recovered characteristics and limitations of equipment to be used for operation available crew and personal protective equipment wind force, direction and spray significant wave height period of waves swell safety of navigationConsidering IMO, 2012, Initiation and continuation of recovery operations should always be masters decision taking into account above mentioned characteristics. Conclusion All safety drills are to keep crews ready in case of any emergency. They are to be taken seriously and observations should be made, discussed on the tools box meeting. This will help crews during any emergency. Work safe and earn safe. Do you wish to contribute to an article like this? Email it to us via contact us section. Dont forget to sharing this article with friends (if helpful) and subscribe below for our post updates.

Rescue boat launching procedure. Rescue boat recovery procedure. Rescue boat launching requirements. Rescue boat recovery speed. Rescue boat launch.