

## Lesson Plan – 4.12 - 1 Helo Operations

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### **AIM:**

Trainer - Due to the limited opportunity for crew to experience a helo exercise prior to a shout, its essential the fundamentals are full explained and that crew clearly understand their role in preparing for a helo op, what to do during the operations and the emergency procedures involved.

Crew - To understand the require on crew and lifeboat prior to the arrival of a helo, during working with a helicopter and when being lifted into a helicopter.

#### **Training Shoreside –**

- PPE used and when
- How to prepare the lifeboat for the arrival of a helicopter (Briefings /Deck / Radar)
- Roles and responsibilities of crew
- High lines (including fouled winch line)
- Formation & SAR positioning
- Flares
- Hazards (Static Charge / Downdraft / Ditching)
- Communication
- Helicopter ditching
- Types of Lift / transfer
- Lifejackets
- Search lights for identification

**Training Afloat** - Combined helo exercise

**RNLI Training** - Crew Seamanship Course Poole

### **Preparation for Helicopter Operations**

#### **Exercise -**

Helo operations for training purposes are carried out with prior arrangement and the helm will discuss the operation with the helicopter pilot by phone before launching and agree the timing , location and formation to be used.

#### **Shouts -**

When on a shout there are two potential scenarios , the helo will arrive to support the lifeboat or vice versa. Either way , its important that both assets communicate before arriving on scene to support the other. This will ensure a full appreciation of the situation on scene and to minimise the risk of injury or an

incident. An example is where the the lifeboat has a yacht undertow and the helo arrives to winch someone off the yacht. Should the lifeboat move and the thus move the yacht, there is a chance the winchman can get caught in the rigging or the helo caught up.

First action is for the helm to brief the crew on their roles; to make sure the PPE is correct (helmets on / visors down / High line gloves out); that all loose items on deck are stowed and the radar is turned off.

If winching up then a survivor life jacket should be ready and used by crew where possible when being winched up. Should the helo have to ditch and crew inside have a lifejacket on with buoyancy or auto inflate, they will find it very difficult to escape. Follow all instructions from the helicopter crew i.e. keep arms down

If the operation is happening at night then search lights should be taken out and can be used to help the helo identify the lifeboat. this is done by facing the search light directly up to the sky and then lowering it towards the bow as the helo flashes its landing lights (do not shine at the helo as this will affect their night vision). By lowering towards the bow , the helo pilot knows the direction the lifeboat is facing.

Warning - parachute flares should never be used with helo in the vicinity; smoke flares can be used to show wind direction if requested or day / night flares if you are in the water and are the casualty.

If the helo uses a weighted high line due to weather conditions, then it must be allowed to touch the water or deck to discharge static electricity; the winchman will confirm when he is ready for lifeboat crew to grab the line. The purpose taking the line should be wearing highline gloves.

Take up the slack but do not pull in, be guided by the winchman and The line should be stowed in the footwell between seats 2 and 3 (**Warning never attach to the lifeboat**).

When paying out the line for a wick up, one crew member will kneel next to seat 2 and feed out the line on to the deck with the other crew member with the highline gloves at the bow feeding out the line as the winchman is raised. There should be no tension and no excessive slack between the two crew members.

## Carrying out Helicopter Transfer:

### Single Lift

- Take directions from crewman
- Remove ILB lifejacket and wear non-inflated survivor lifejacket
- To fit strop:
- Put strop over head and under arms
- Pull down the beckett (webbing ring) to tighten strop
- Put strop high up on back
- Keep arms down
- Winch operator will do all the work on arrival at the door

### Double Lift

- As single lift, but with second strop under thighs
- Reduces risk of post-immersion collapse

### No go Areas

- Forward – acceleration area, helo may dip forward to gain lift
- Directly underneath – not visible
- To port – ditching area, helo goes to port to allow hatch to be face up
- Avoid downwash – capsized risk

**In an emergency**

If the helicopter suffers a major mechanical emergency that forces the aircraft to ditch, the pilot will attempt to fly away to port prior to ditching in the sea. The lifeboat should immediately move to starboard away from the helo and communicate the incident to the Coastguard, do not return to the ditched helo but await close to pick up survivors.

In the event of a fouled winch cable / hi-line, leave well alone as the helicopter crew will cut the wire. Lifeboat crew then can haul it in

If there is a problem with the lifeboat then the turn to starboard and communicate via VHF 'Abort Abort Abort'

**Reference Material:**

Video Clips -

Horizon Guidance -

SOP -