SEA COVERY

LIFE-SAVING SIGNALS AND SHIPBOARD SAFETY

SOLAS No.1

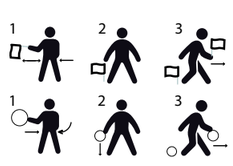
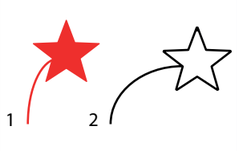
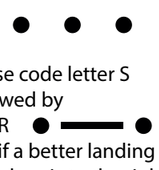
Answering signals made by life-saving stations or maritime rescue units when signals are seen from a ship or person in distress

HAND SIGNALS	LIGHT SIGNALS	OTHER SIGNALS	MEANING
DAY	 Orange smoke signal	 Exploding white star rocket consisting of 3 single signals fired at about 1-minute intervals.	You are seen. Help is coming. (Repetition of such signals shall have the same meaning.)
NIGHT These may be interchanged	 White star rocket consisting of 3 single signals fired at about 1-minute intervals.		

Landing signals for the guidance of small boats or persons in distress (day and night)

 Vertical movement of a white flag, the arms, or white light or flare	 Green star fired.	Morse code letter K given by light or sound signal apparatus	This is the best place to land.

Indicate direction by placing a steady white light or flare at a lower level and in line with the observer.

 Horizontal movement of a white flag, the arms extended horizontally, or white light or flare	 Red star fired.	Morse code letter S given by light or sound signal apparatus	Landing here is highly dangerous.
 1. Horizontal movement of a white flag, light or flare 2. Placing of flag, light or flare on the ground 3. Carrying a second flag, light or flare in the direction to be taken	 1. Red star fired vertically and 2. White star fired pointing to a better landing place	 Morse code letter S followed by a. R if a better landing place is to the right of the direction of approach b. L if a better landing place is to the left of the direction of approach	Landing here is highly dangerous. Go in the direction indicated.

Signals to be used with shore life-saving apparatus (day and night)

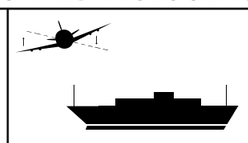
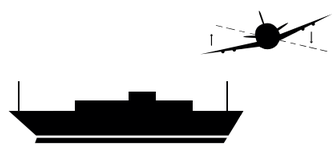
 Vertical movement of a white flag, the arms, or white light or flare	 Green star fired.		Affirmative Specifically: • Rocket line is held • Tail block/hawser is made fast • Man in breeches buoy • Haul away
 Horizontal movement of a white flag, the arms fully extended, or white light or flare	 Red star fired.		Negative Specifically: • Slack away • Avast hauling

The detailed procedures for the shore-side search-and-rescue functions are contained in IAMSAR Vol. III which are further amplified within the local UK context, as appropriate, and reproduced in the Admiralty List of Radio Signals Vol. 5 (NP285) Annex 1.

Red and green star landing signals and rocket rescue equipment are NOT used by rescue services in the UK.

Air-to-surface visual signals

Signals used by aircraft engaged in search-and-rescue operations to direct ships towards an aircraft, ship or person in distress.

PROCEDURES PERFORMED IN SEQUENCE BY AN AIRCRAFT			MEANING
 CIRCLE the vessel at least once.	 CROSS the vessel's projected course close AHEAD at a low altitude while ROCKING the wings (see note).	 HEAD in the direction in which the vessel should go.	The aircraft is directing a vessel towards an aircraft or vessel in distress. (Repetition of such signals shall have the same meaning.)
CROSS the vessel's wake close ASTERN at low altitude while ROCKING the wings (see note)  NOTE Opening and closing the throttle or changing the propeller pitch may also be practised as an alternative means of attracting attention to that of rocking the wings. However, this form of sound signal may be less effective than the visual signal of rocking the wings owing to high noise level on board the vessel.			The assistance of the vessel is no longer required. (Repetition of such signals shall have the same meaning.)

Signals used by a vessel in response to an aircraft engaged on search-and-rescue operations

 Hoist 'Code and Answering' pendant close up, or	 Change course to the required direction, or	Flash Morse code signal 'T' by signalling lamp.	Acknowledges receipt of aircraft's signal
 Hoist international flag 'N' (NOVEMBER), or		 Flash Morse code signal 'N' by signalling lamp.	Indicates inability to comply

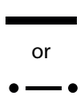
Surface-to-air visual signals

Communication from surface craft or survivors to an aircraft

Display the appropriate signal on the deck or on the ground.	
Message	ICAO*/IAMSAR** visual signal
Require assistance	V
Require medical assistance	X
No or negative	N
Yes or affirmative	Y
Proceed in this direction	

*ICAO Annex 12 Search and Rescue
** International Aeronautical and Maritime Search and Rescue (IAMSAR) Manual, Vol. III

Reply from an aircraft observing the above signals from a surface craft or survivors

					MEANING
 Drop a message or	 Rock the wings (during daylight) or	 Flash the landing or navigation lights on and off twice (during darkness) or	 or Flash Morse code signal T or R or	Use any other suitable signal	Message understood
 Fly straight and level without rocking wings or	Flash Morse code signal RPT or	Use any other suitable signal			Message not understood (repeat)

*High - visibility coloured streamer

HELICOPTER RESCUE OPERATIONS AT SEA - SHIPBOARD SAFETY CHECKLIST

Helicopters are frequently used for maritime rescues. Given below is a shipboard safety checklist to be used in relation to helicopter operations. For further information on helicopter rescue operations, refer to the Admiralty List of Radio Signals Vol. 5 (NP285) Annex 1.

1. General
- Have all objects within and adjacent to the operating area been secured or removed?
- Have all aerials, standing or running gear above and in the vicinity of the operating area been lowered or secured?
- Has a pennant or windsock been hoisted where it can be clearly seen by the helicopter pilot?
- Has the officer of the watch been consulted about the vessel's readiness?
- Does the leader of the deck party have a portable radio transceiver (with earphones, etc.) on the correct channel, for communicating with the bridge, and can this be used for direct contact with the aircraft, if necessary?
- Are the fire pumps running, and is there adequate pressure on deck?
- Are fire hoses ready (near to but clear of the operating area)?
- Are foam hoses, monitors and portable foam equipment ready?
- Are dry powder fire extinguishers available and ready for use?
- Is the deck party complete, correctly dressed, pockets and hats secured, and in position?
- Are the fire hoses and foam nozzles pointing away from the operating area in case of inadvertent discharge?
- Has a rescue party been detailed?
- Is a man overboard rescue boat (with radio) ready for lowering?
- Are the following items of equipment to hand?
  - Large axe
  - Crowbar
  - Wire cutters
  - Red emergency signal/torch
  - Marshalling batons (at night)
  - First aid equipment
- Has the correct lighting (including special navigation lights) been switched on prior to night operations?
- Is the deck party ready, wearing brightly coloured tabards and protective helmets, and are all passengers clear of the operating area?
- Has the hook handler been equipped with helmet, strong rubber gloves and rubber-soled shoes to avoid the danger of static discharge?
- Is access to and egress from the operating area clear?

2. Helicopter landing
- Can the deck/hatch take the weight of the helicopter?
- Is the deck party aware that a landing is to be made?
- Is the operating area free of heavy spray or seas on deck?
- Have side rails and awnings, stanchions and other obstructions been lowered or removed?
- Have portable pipes been removed and have the remaining apex ends been blanked off?
- Are rope messengers to hand for securing the helicopter, if necessary? (Note: only the helicopter pilot may decide whether or not to secure the helicopter.)
- Have all personnel been warned to keep clear of rotors and exhausts?

3. Tankers
- Vessels not fitted with an inert gas system: has pressure been released from tanks within 30 minutes of commencement of helicopter operations?
- Vessels fitted with an inert gas system: has pressure in cargo tanks been reduced to slight positive pressure?
- All tankers: have all tank openings been secured following venting operations?

4. Bulk carriers and combination carriers
- Has surface ventilation to dry bulk cargoes ceased?
- Have all hatch openings been fully battened down prior to helicopter operations?

5. Gas carriers
- Have all precautions been taken to prevent vapour emission on deck?

6. Passenger vessels
- Portable radio communication
- 123.1 MHz/121.5 MHz