

AVIATION RESCUE SWIMMER SCHOOL

Direct Deployment
LT 3.5





Introduction

US Naval helicopter crews are routinely faced with situations where traditional rescue swimmer deployment procedures are inadequate. The direct deployment procedure was developed as a tool to use in some of these situations. The primary difference between direct deployment and traditional rescue crewman deployment procedures is the rescue crewman remains attached to the hoist throughout the evolution, and survivor recovery is made using the quick stop. This procedure can be used effectively in surf, heavy seas, high winds, moving water, ice, and on cliffs and structures, and should only be used when the crew has determined that it will be the best method for recovery of a survivor. Direct deployment procedures are expedient, and the rescue swimmer is typically ready for hoisting with the survivor about one to two minutes after initial contact.

Enabling Objectives

- List maritime direct deployment procedural steps for survivor recovery.
- Demonstrate maritime direct deployment procedural steps for survivor recovery.

General Maritime Direct Deployment

TRI-SAR HARNESS

- The first harness designed to combine the security of a full body harness, comfort of a seat harness and safety of integrated flotation.
- Constructed of MIL-SPEC Types 8 and 13 nylon webbing and features low profile flotation and quick adjusting stainless steel hardware.
- Harness enables the swimmer to be hoisted in the upright, slightly reclined seated position to allow total use of the hands.
- Integrated flotation vest features a low profile, easy to swim in design with user variable buoyancy up to 35 lbs. Flotation cell is encased entirely in a heavy weight, puncture/abrasion resistant nylon cover.

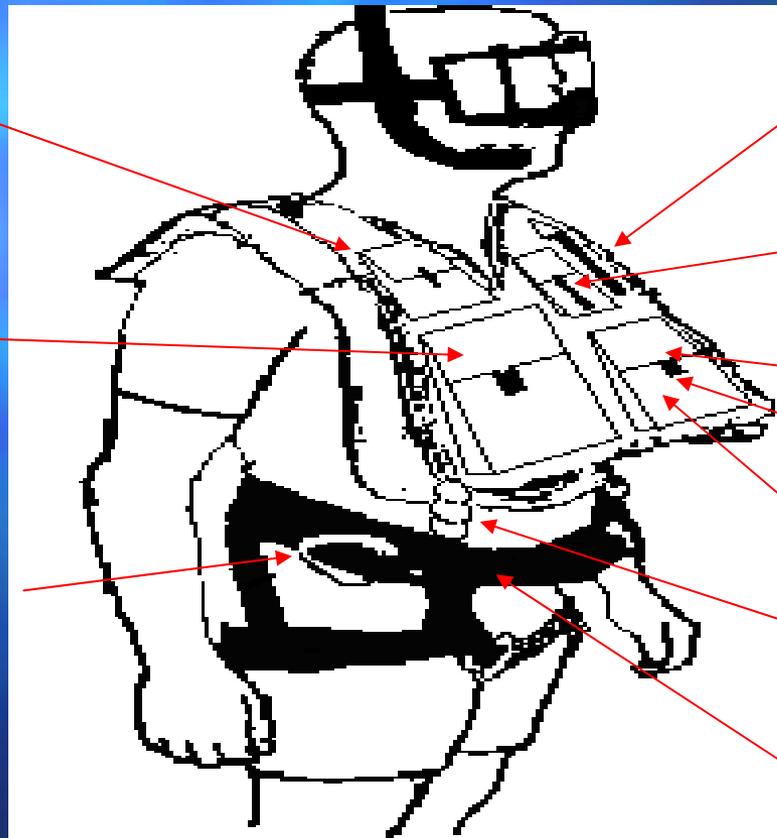
General Maritime Direct Deployment

TRI-SAR HARNESS

Strobe Light Pocket

Radio, Whistle

Lifting "V" Ring



Oral Inflation Tube

Miscellaneous

Knife Pocket

Flare Pocket

Chemlites

Pull Toggle (Flotation)

Gated Lifting Ring (2" Snap
Hook)

General Maritime Direct Deployment

TRI-SAR HARNESS



General Maritime Direct Deployment

Quick Strop Harness

- The Quick Strop provides a quick safe means of hoisting uninjured personnel.
- Constructed of MIL-SPEC webbing and stainless steel hardware.
- The strop is placed under the survivor's arms, around the survivor's back, or over the survivor's head in one quick motion.
- To prevent the survivor from slipping out, a slide buckle is slid down the Strop and attached to an adjustable crotch safety strap, which is stored in a zipper pocket on the rear of the Strop.
- Instructions and pictorials are printed on the Strop.

General Maritime Direct Deployment

Quick Strop Harness



General Maritime Direct Deployment

Acronyms used:

DD – Direct Deployment

RS – Rescue Swimmer

QS – Quick Strop

CC – Crew Chief

TSH – Tri-SAR Harness

General Maritime Direct Deployment

- The QS shall only be used in conjunction with the TSH for DD and recovery of survivors.
- The decision to use DD procedures on a survivor with a known or suspected head, neck, spinal or other severe injury should only be exercised when the use of traditional survivor recovery procedures would place the lives of the RS and/or survivor at greater risk.
- Direct deployment procedures should not be used aviators who have ejected from aircraft or if the survivor is entangled in parachute.
- The QS shall not be deployed to survivors without the RS. The survivors may not know how to properly use it.

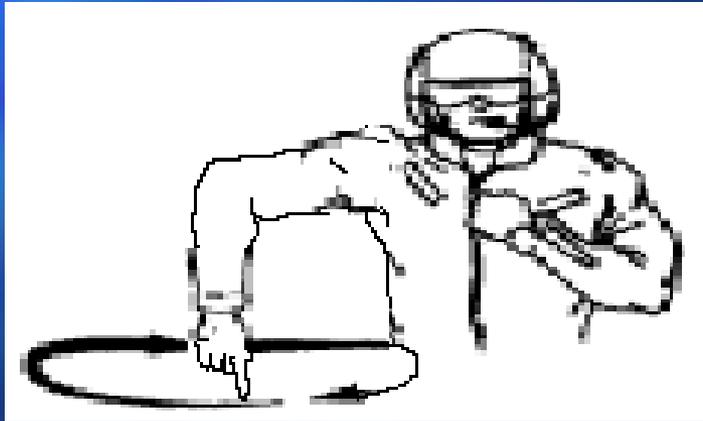
MARITIME DIRECT DEPLOYMENT HAND SIGNALS

NOTE

All hand signals should be given in a large and exaggerated manner to prevent misinterpretation by the flight crew.

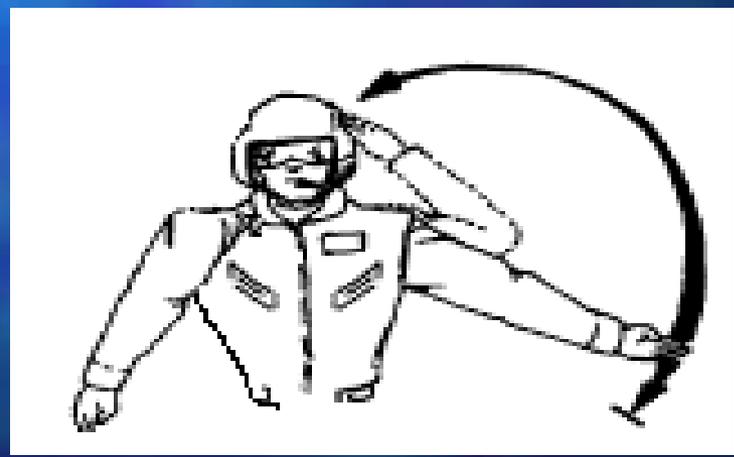
MARITIME DIRECT DEPLOYMENT HAND SIGNALS

- Down: either RS arm held straight out from the side of the body, bent at the elbow 90 degrees so hand is pointing down, index finger extended, swiveling from the elbow down, in a circular motion.



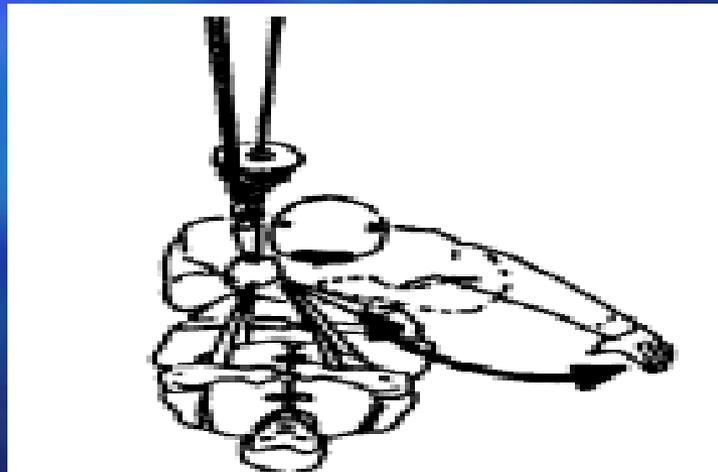
MARITIME DIRECT DEPLOYMENT HAND SIGNALS

➤ Up: either RS arm held straight out from the side of the body, palm facing up, sweeping the arm in an up and down motion touching the top of the head and then back to the perpendicular position. The arm should not go below 90 degrees from the body on the down portion of the sweep.



MARITIME DIRECT DEPLOYMENT HAND SIGNALS

- Level off: either RS arm held straight out from the side of the body (90 degrees), hand flat, palm facing down waiving in a rhythmic motion from left to right.



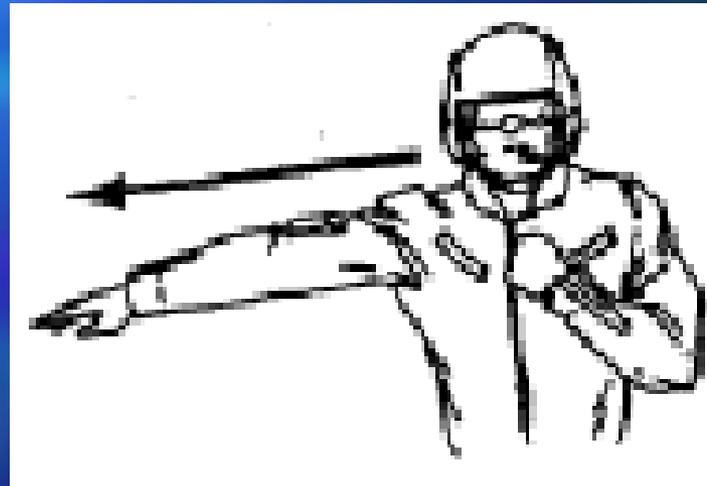
MARITIME DIRECT DEPLOYMENT HAND SIGNALS

- Left: left arm held straight out to side of body, index finger pointing outward.



MARITIME DIRECT DEPLOYMENT HAND SIGNALS

- Right: right arm held straight out to side of body, index finger pointing outward.



MARITIME DIRECT DEPLOYMENT HAND SIGNALS

- Deploy LPP-1/A or LPU-32/P personal flotation device: palm of either hand placed on the top of the head (Only one hand shall be placed on the top of the head for this signal).



MARITIME DIRECT DEPLOYMENT HAND SIGNALS

NOTE

The RS cannot remove the flotation device on the TRI-SAR Harness during a rescue. Therefore, when utilizing the TSH during a traditional rescue, and the need arises to provide flotation to a survivor, the hand signal for Deploy LPP-1/A or LPU-33 shall be utilized.

MARITIME DIRECT DEPLOYMENT PROCEDURES

- The CC opens the cabin door, and brings the rescue hook into the helicopter for RS hook-up.

NOTE

Being hooked into more than one safety device (gunners belt, crew seat restraint belt, large rescue hook) at one time may be hazardous to the RS should the helicopter encounter an emergency and have to ditch. The CC shall ensure that the RS is immediately released from the gunner's belt once the RS is properly hooked in to the large rescue hook and the CC has positive physical control of the RS

MARITIME DIRECT DEPLOYMENT PROCEDURES

NOTE

The SAR Helicopter Breathing Device holster (SHBD holster) shall be removed from the TSH assembly of the Aviation RS prior to deployment (day or night) from the helicopter.

MARITIME DIRECT DEPLOYMENT PROCEDURES

- The RS sits on the cabin deck, with gunner's belt on, and hooks up to the large rescue hook in the following order:
 - TSH Lifting V-Ring (always first).
 - Rescue Strop (for double lift recovery only).
 - QS (always last).

MARITIME DIRECT DEPLOYMENT PROCEDURES

- The detachable lifting strap of the QS can be identified by the red band of webbing located next to the detachable lifting strap's V-Ring assembly.
 - Ensure the detachable lifting strap is routed through the friction lock prior to hook-up.
 - Ensure the detachable lifting strap V-ring is always the last object hooked up to the large rescue hook.
 - The RS should slide the QS friction keeper as far out as possible, ensuring as large an opening as possible is maintained in the QS assembly. This will make employment of the QS over the survivor's head and shoulders easier.

MARITIME DIRECT DEPLOYMENT PROCEDURES

- RS routes the QS over the preferred shoulder and maintains control of it until employed on the survivor. When RS is satisfied, gives the CC the "thumbs up" signal.
- CC grabs the back of the RS's TSH, and taps the RS once on the chest.
 - Upon receiving the signal (one tap on the chest), the RS releases the gunner's belt.

MARITIME DIRECT DEPLOYMENT PROCEDURES

- CC maintains positive control of RS and directs the RS to the cabin door.
- After the helicopter has established a steady hover, and permission is granted to lower the RS, CC gives RS three taps on the shoulder. The RS then gives the CC a “thumbs up” signal.
- The CC hoists the RS off the deck. RS then adjusts straps for fit and comfort, when satisfied, RS give the CC a thumbs up signal meaning ready to be hoisted.

MARITIME DIRECT DEPLOYMENT PROCEDURES

NOTE

As the RS is entering the water the RS shall maintain visual contact with the survivor.

- The RS should be placed in the water no further than 2-3 feet from the survivor. This is accomplished by the RS directing the CC with hand signals.

MARITIME DIRECT DEPLOYMENT PROCEDURES

- The “I am all right” hand signal is not used for DD procedures by the RS.

NOTE

The rescue strop shall not be used for DD, unless used in conjunction with the QS for the DD Double Lift Procedure.

MARITIME DIRECT DEPLOYMENT PROCEDURES

- The RS shall attempt to face the survivor, and grab the survivor's arm that coincides with the arm that the RS has the QS positioned on, (i.e. the RS's right hand grabs the survivor's left arm if the RS and survivor are facing each other.)

NOTE

The detachable lifting strap of the QS can be identified by the red band of webbing located next to the detachable lifting strap's V-Ring assembly.

MARITIME DIRECT DEPLOYMENT PROCEDURES

- The RS slides the QS off of his/her arm and along the survivor's arm, placing the QS over the survivor's head and shoulders. The QS may also be applied by:
 - Moving the QS over the survivor's feet, up the legs and torso.
 - Disconnecting the QS's detachable lifting strap V-Ring from the large end of the double rescue hook, pulling it through the friction keeper:

MARITIME DIRECT DEPLOYMENT PROCEDURES

- The RS then places the QS up into the armpits and as high on the survivor's back, then...
- Slides the friction keeper as close as possible to the survivor, placing constant pressure on the friction keeper and both straps of the QS with one hand.

MARITIME DIRECT DEPLOYMENT PROCEDURES

WARNING

The safety strap shall be properly secured when placing an unconscious survivor in the QS.

WARNING

During the actual rescue, the safety strap should be properly used unless it will cause the rescuer and survivor greater risk.

MARITIME DIRECT DEPLOYMENT PROCEDURES

- Securing the safety strap is accomplished by routing the hook located at the end of the strap between the survivor's legs and then connect the hook to the large side of the friction keeper.
- The RS then signals "Ready for pick-up".

DOUBLE LIFT PROCEDURES

NOTE

When dealing with severe hypothermia, the double-lift method may be utilized. The standard modified rescue strop is used in conjunction with the QS, lifting the survivor in a semi-supine position.

DOUBLE LIFT PROCEDURES

- The rescue strop is attached between the TSH and the QS on the double rescue hook.
- Once in the water, place the rescue strop around the survivor according to the NWP 3-50.1 series manual.
- Then slide down the legs and slide the QS up the legs and under the knees.
- Secure the friction keeper.
- Signal “Ready for pick-up”
- RS maintains positive control of the survivor while being hoisted.

Question 1

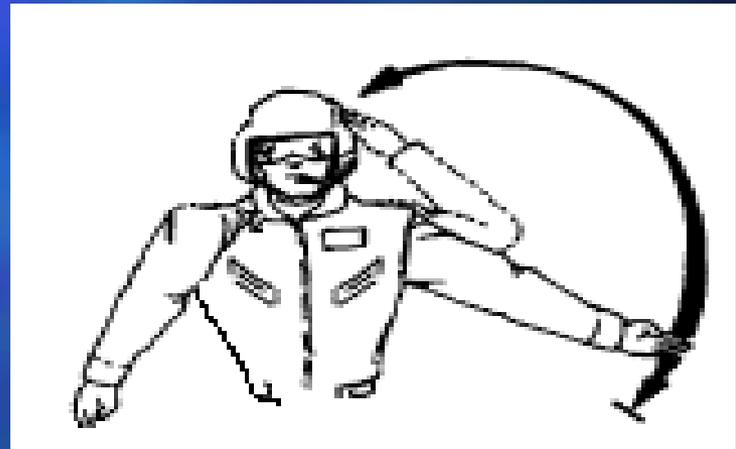
Q. The picture is showing which hand signal?

A. Down

B. Up

C. Clear to go

D. My hair is a mess



Click on the correct answer.

Question 2

Q. When being hoisted to the water, RS should be placed no further than _____ feet from the survivor.

A. 2-3

B. 5-6

C. 9-10

D. 15-20

Click on the correct answer.

Question 3

Q. Decide if the following statements are true or false.

When preparing the RS for Direct Deployment:

1) Ensure the QS's detachable lifting strap is routed through the friction lock prior to hook-up.

2) Ensure the QS's detachable lifting strap V-ring is always the last object hooked up to the large rescue hook.

A. True

B. False

Question 4

Q. During the Double Lift safety check, the RS _____ check the large rescue hook, TSH Lifting V-Ring, rescue strop Lifting V-Rings, and QS Lifting V-Rings for proper attachment points and security.

A. Should

B. Shall

Click on the correct answer.

Question 5

Q. The detachable lifting strap of the QS can be identified by the _____ of webbing located next to the detachable lifting strap's V-Ring assembly

A. red band

B. green band

C. yellow band

D. There is no way to tell

Click on the correct answer.

THE END

