

LESSON PLAN

JANUARY 2004

COURSE TITLE: AVIATION RESCUE SWIMMER
COURSES, Q-050-0600
Q-050-0602

TERMINAL OBJECTIVE:
Partially supported by this lesson topic:

CLASSIFICATION: Unclassified

3.0 Upon completion of this unit of instruction, the student will demonstrate the proper rescue techniques of military and civilian personnel, day or night, utilizing appropriate SAR equipment for at-sea and overland rescue as outlined in NWP3-50.1 and OPNAVINST 3130.6 series without injury to personnel or damage to equipment.

LESSON TOPIC NUMBER: 3.7

LESSON TOPIC: Disentanglement procedures
(Back Pack)

ALLOTTED LESSON TIME: 1.5 Classroom

INSTRUCTIONAL SUPPORT:

1 Classroom Instructor
1 Laboratory Instructor
Safety personnel and additional instructors as required per Annex E, Staffing Requirements, of Curriculum Outline.

ENABLING OBJECTIVES:

Completely supported by this lesson topic:

3.13 List parachute disentanglement procedures for personnel wearing U. S. Navy Back Pack parachute assembly.

INSTRUCTIONAL REFERENCES:

1. NWP 3-50.1, Naval Search and Rescue Manual
2. NAVAIR 13-1-6 Series Manual

CRITERION TEST: Written test.

HOMEWORK: None

INSTRUCTIONAL AIDS:

1. Trainee Guide

2. 2 LRU-1 Life Raft
3. 4 Back Pack Harness with Parachute
4. 4 Helmets
5. Pool
6. Whistle
7. Rescue Swimmer's Equipment

DISCUSSION POINT

RELATED INSTRUCTOR ACTIVITY

A. Establish Contact

Display name and lesson topic

1. Introduce self; give rank, current job
2. State background, schools, duty stations etc.
3. State question and answer policy
4. Review Training Time Out policy
5. Ask the following questions:
 - a. Has anyone gone to the hospital/branch clinic for treatment within 24 hours, and are you taking any medications?
 - b. Has anyone taken over-the-counter medications within 24 hours?
 - c. Are there any potentially disqualifying illnesses/conditions for which you are currently being evaluated?

Refer questionable cases to the department medical representative for disposition.

B. State Lesson Objectives

Turn to cover page of Lesson Plan and paraphrase objectives.

C. Establish Readiness

Establish importance and relevance of lesson material using personal experience or anecdote.

DISCUSSION POINT

RELATED INSTRUCTOR ACTIVITY

1. Motivating Statements

Aviation personnel who have bailed out of or ejected from their aircraft and are entangled in the parachute present the rescue swimmer with both the greatest challenge and the greatest danger. The swimmer must act swiftly and efficiently in disentangling the survivor before the parachute sinks and the survivor is pulled down with the parachute.

2. Lesson Overview

Briefly outline material to be covered.

The wave generator may be used during all non-testable portions of this lesson as approved by the Training Chief.

a. Lesson Topic: Disentanglement Procedures

b. Major Teaching Points:

(1) Disentanglement Procedures for the Navy Standard Back Pack harness and parachute.

(2) Ballooned Canopy Procedures

PRESENTATION:

WARNING

Inhalation of composite fibers resulting from aircraft fires

DISCUSSION POINT

and/or aircraft material damage may be harmful to Rescue Personnel. If smoke is present, the Rescue Swimmer shall be deployed up-wind and will approach the aircraft in a manner as to avoid any smoke. Discard wets suit if it becomes impregnated with composite fibers.

NOTE

Equipment worn by the survivor determines the procedures to be used in parachute.

WARNING

The parachute should never be allowed to come between the rescue swimmer and the survivor, as the rescue swimmer could lose sight of the survivor or could become entangled in the parachute or suspension lines.

A. Disentanglement procedures for Back Pack Harness

1. **ASSESS** situation to determine if survivor(s) are conscious, unconscious, passive or active. Assessing the situation begins before water entry. The situation may change at any moment.
2. **ESTABLISH** communication to determine the condition of the survivor and make approach. Ask, "Are you OK"? The rescue swimmer shall continually evaluate the medical condition of a survivor during the entire course of a rescue.
3. Grasp survivor's harness between the shoulder bladders and pull survivor into the wind and away from parachute. Obtain control of survivor **"ICIC"**.

RELATED INSTRUCTOR ACTIVITY

State that the rear surface approach is preferred.

Stress "In close in Control" **ICIC**.

DISCUSSION POINT

RELATED INSTRUCTOR ACTIVITY

4. Remove oxygen mask, if applicable. **CLEAR** head, neck, and chest area. If survivor is conscious ask about any known injuries or conditions.

NOTE

CHECK FOR BREATHING Give two breaths if required. Continue giving rescue breaths during disentanglement not to exceed 60 seconds between breaths until survivor hoisted free of water.

WARNING

When the HGU series helmet is worn with the LPP-1 life preserver, do not inflate vest until chinstrap is loosened or helmet is removed.

5. Disconnect survivor's quick ejector snap located on the chest and **CHECK FLOATATION** (inflate manually or orally, if necessary).

Display and demonstrate operation of quick ejector snap.

WARNING

If releasing the quick ejector snap is not done prior to inflation and the survivor's is wearing an LPP-1, there is a possibility of the LPP-1 crushing survivor's chest. At a minimum, it will be hard for the survivor to breathe. This warning applies to the U.S. Chest Pack, Back Pack, and Seat Pack Harness also.

NOTE

If the survivor is wearing a chest pack, one of the butterfly spring snaps, that connect the pack to the harness, must be released to gain access to the chest quickly.

DISCUSSION POINT

RELATED INSTRUCTOR ACTIVITY

6. **DISENTANGLEMENT** from head to toe, checking for injuries during disentanglement procedures.
7. Remove shoulder straps and **SWEEP ARMS**, ensuring that survivor's arms are completely clear of any debris. Once it has been verified that the survivor's arms are clear, cross the arms across the survivor's chest.
8. **SPINAL HIGHWAY**, using the spine as a reference, submerge and proceed hand-over-hand, keeping one hand on the survivor at all times, and release quick ejector fittings on survivor's legs. After fittings are released, submerge as before and remove all parachute suspension lines from survivor's legs. Submerge as many times as necessary to remove all debris.

Stress there is no fitting attaching the parachute to the harness. It must be removed as one unit.

WARNING

If survivor has a suspected back injury, use the side of the survivor as a reference, proceed hand-over-hand along the side, keeping one hand on the survivor at all times, and remove all possible entanglements.

Tow the survivor clear of the parachute. If the survivor is still not free of the parachute or harness, use the washboard method.

WARNING

If the survivor has a suspected back injury do not use the washboard method.

- a. Grasp survivor with both hands on the back of the

DISCUSSION POINT

RELATED INSTRUCTOR ACTIVITY

floatation device.

- b. In quick succession, push and pull survivor fore and aft. Make sure that the survivor's head is kept above water.

9. **DISCARD RAFT** (If applicable)

NOTE

At the discretion of the rescue swimmer the raft may be punctured with a knife and sunk before, during or after the survivor has been removed.

WARNING

Loss of ABC's is a serious life threatening condition requiring immediate medical treatment. This condition takes precedence and survivor should be recovered by fastest means possible.

- 10. Perform **FINAL CHECK**, head to toe to ensure that all shroud lines and parachute suspension lines are clear.
- 11. **SIGNAL** rescue platform.
 - a. Day - Arm raised, thumb up.
 - b. Night - Arm raised, waving high intensity chemlight.
- 12. As the helicopter is approaching

Emphasize importance of final check especially if swimmer inadvertently swims into parachute.

DISCUSSION POINT

RELATED INSTRUCTOR ACTIVITY

- a. Ensure the **AREA CLEAR.**
- b. Establish a left-hand cross-chest carry, grasping survivor's lifting "V" ring in your left hand.

WARNING

When connecting to a survivor who has an SV-2 vest, ensure that the chest strap on the survivor is loosened slightly to avoid injury to the survivor.

- c. With your right hand connect rescue swimmer's snap hook to survivor's "V" ring.
 - d. Maintain left-hand cross-chest carry while grasping rescue swimmer's lifting "V" ring in your left hand.
13. Allow **RESCUE HOOK TO TOUCH WATER,** discharging static electricity.
 14. **USE APPROPRIATE PROCEDURES** for rescue device selected.
 15. Perform **SAFETY CHECK** on rescue device, signal up hoist.

C. Ballooned Canopy Procedures

Explain ballooned canopy

1. Establish communications during approach to survivor

DISCUSSION POINT

RELATED INSTRUCTOR ACTIVITY

WARNING

Do not go under canopy; it may collapse and trap survivor and swimmer.

2. Swim to chute edge closest to survivor and opposite the apex.
3. Lift edge of parachute; pull one shroud line until survivor is within reach.
4. With free arm, turn survivor around and grasp back of harness pull to edge of canopy.
5. In one motion; Lift skirt over survivor head and pull survivor clear.
6. With survivor out from under the parachute continue pulling survivor into the wind and away from parachute canopy.
7. When well clear of parachute canopy, use disentanglement procedures applicable to type of harness the survivor is wearing.

SUMMARY:

A. State Lesson Objectives

Turn to cover page for objectives

B. Review Major Teaching Points

Briefly summarize

DISCUSSION POINT

RELATED INSTRUCTOR ACTIVITY

APPLICATION:

A. Instructor performs a day water entry and proceeds to slowly disentangle survivor wearing a standard parachute harness, while another ARSS instructor narrates procedures. Set up rescue scenarios in the deep end of pool.

Ensure students receive the classroom instruction and observe an in-water demonstration prior to any practical experience.

EVALUATION: Written test.

ASSIGNMENT: None