

2100 Second ST. SW Coast Guard Washington, DC 20593-000 Staff Symbol: G-OCA Phone: (202) 267-0952

> COMDTINST M3710.4B JUL 27 2000

COMMANDANT INSTRUCTION M3710.4B

Subj: COAST GUARD HELICOPTER RESCUE SWIMMER MANUAL

- 1. <u>PURPOSE</u>. This Manual prescribes policy, procedures, standards and instructions pertinent to all phases of helicopter rescue swimmer operations to be used by unit commanding officers and helicopter rescue swimmers.
- 2. <u>ACTION.</u> Area and district commanders, commanders of maintenance and logistics commands and unit commanding officers with aircraft assigned shall ensure the provisions of this Manual are followed. No paper distribution will be made of this Manual. Official distribution will be via the Coast Guard Directives System CD-ROM. For users on the Internet, the address is http://isddc.dot.gov.
- 3. <u>DIRECTIVES AFFECTED.</u> Coast Guard Helicopter Rescue Swimmer Manual, COMDTINST 3710.4A is cancelled.
- 4. <u>SUMMARY.</u> The changes to this Manual are primarily formatting and content reorganization. Salient policy and content changes are summarized below; however, due to the significant revision of this Manual, a careful review is recommended:
 - a. Chapter 1- Removes air station staffing levels. Changed reference to the LPU-28P to RS Harness.
 - b. Chapter 2- Addition of trail line hoisting of the rescue swimmer. Warning added concerning not to disconnect the hoist hook from the RS Harness during vertical surface deployments. Warning the potential of blackout during quick strop recovery and the use of the crotch strap during recovery of an unconscious victim. Added new rear surface approach procedures. Changed aircraft vectoring procedures to reflect the use of the H11940 radio.
 - c. Chapter 3- Changed the 50 yd. Cross Chest Buddy Tow and 50 yd. Equipment tow to a 200 yd. Buddy Tow. Changed rest time between 25 yd. underwater swims to 60 seconds. Added note for Commanding Officers minimum deployment discretion.

COMDTINST M3710.4B

d. ANNEX's- Added new stretches. Updated RS Flight Syllabus. Updated the RS PT and deployment clothing listing. Replaced the RS Minimum Training Record and Physical Training Screening Exam Forms.

TERRY M. CROSS Assistant Commandant for Operations

TABLE OF CONTENTS

CHAPTER 1 POLICIES AND REQUIREMENTS Section A. General Helicopter Rescue Swimmer Policies Section B. Minimum Equipment Requirements Section C. Rescue Swimmer Training Requirements	1-2 1-5 1-6
CHAPTER 2 RESCUE SWIMMER PROCEDURES	1-0
Section A. Helicopter Rescue Swimmer Procedures Section B. Rescue Swimmer Deployments Section C. Survivor Approaches, Carries, and Releases Section D. Military Aviator Equipment Release Section E. Parachute Disentanglement Section F. Survivors Without Flotation Procedures Section G. Recovery Procedures Section H. Aircraft Radio Vectoring	2-3 2-4 2-14 2-29 2-33 2-43 2-45 2-53
CHAPTER 3 RESCUE SWIMMER TRAINING REQUIREMENTS Section A. Training Requirements Introduction Section B. Training Requirements	3-2 3-3
ANNEX A STANDARD RESCUE SWIMMER DEPLOYMENT MESSAGE FORMAT	
ANNEX B STANDARD USCG HELICOPTER RESCUE SWIMMER HAND SIGNALS	
ANNEX C RESCUE SWIMMER TRAINING HEART RATE	
ANNEX D STRETCH AND EXERCISE DESCRIPTION	
ANNEX E RESCUE SWIMMER TRAINING "SURVIVOR" SYLLABUS	
ANNEX F RESCUE SWIMMER FLIGHT SYLLABUS	
ANNEX G RESCUE SWIMMER PT AND DEPLOYMENT CLOTHING	
ANNEX H RESCUE SWIMMER AUTHORIZED EQUIPMENT LIST	
ANNEX I RESCUE SWIMMER TRAINING RECORD AND SCREENING EXAM	
ANNEX J RESCUE SWIMMER SDAP CERTIFICATION	

LIST OF ILLUSTRATIONS

Figure	Title	Page
2-1	Torso Harness Fitting	2-29
2-2	Oxygen Facemask Connections	2-31
2-3	RSSK Seat Pan Oxygen Hose Guide Ring	2-32
2-4	Quick Fitting Harness Ejector Fittings	2-32

Chapter 1 Policies and Requirements Table of Contents

SECTION A. GENERAL HELICOPTER RESCUE SWIMMER POLICIES

A.1 Mission of the Coast Guard Helicopter Rescue Swimmer Program	1-2
A.2 Rescue Swimmer Capabilities	1-2
A.3 Concept of Operations	1-2
A.4 Rescue Swimmer Deployment Message	1-2
A.5 Rescue Swimmer Operational Procedures and Equipment	1-3
A.6 RS Operational Deployment Restriction	1-3
A.7 Rappelling Restriction	1-3
A.8 Underwater Rescue Restrictions	1-3
A.9 Procedures or Equipment Evaluation Restriction	1-3
A.10 Special Duty Assignment Pay	1-4
SECTION B. MINIMUM EQUIPMENT REQUIREMENTS	
B.1 Minimum Rescue Swimmer Equipment for Operational Deployment	1-5
SECTION C. RESCUE SWIMMER TRAINING REQUIREMENTS	
C.1 RS Training Requirements Overview	1-6
C.2 EMT Certification	1-6
C.3 EMT Certification or Recertification Failure Procedures	1-6
C.4 RS Qualification Requirements	1-6
C.4 RS Qualification Requirements (Continued)	1-7
C.5 RS Survivor Qualification	1-7

Section A. General Helicopter Rescue Swimmer Policies

A.1 Mission of the Coast Guard Helicopter Rescue Swimmer Program

The primary mission of the helicopter rescue swimmer, hereafter referred to as Rescue Swimmer (RS), is to provide Rotary Wing (RW) stations with the capability of deploying a properly trained and conditioned person to assist persons in distress in the maritime environment. The stated primary mission should not be construed as a restriction on other operational requirements, when determined appropriate by the operational commander, for deployment of the rescue swimmer.

A.2 Rescue Swimmer Capabilities

The RS must have the flexibility, strength, endurance, and equipment to function for 30 minutes in heavy seas, and the skills to provide basic pre-hospital life support for the rescued individual(s). RS Emergency Medical Technician (EMT) skills may also be used during other Search and Rescue (SAR) cases in which the swimming ability is not required.

A.3 Concept of Operations RS.

Conditions on scene will determine the need to use the The crew must consider the following: Sea State

Water/air temperature Predatory marine life Other environmental factors

Ability of the RS to safely complete the mission. The decision to deploy the RS is initiated by the pilot in command, but the RS has the authority to decline deployment if the RS assesses the situation to be beyond his/her capabilities.

A.4 Rescue Swimmer Deployment Message

A unit shall send a message after a dramatic or noteworthy case, when the rescue swimmer saves a life, when practical lessons can be learned, or when problems with RS equipment arise. The message format and a sample are shown in Annex A of this Manual.

Section A. General Helicopter Rescue Swimmer Policies (Continued)

A.5 Rescue Swimmer Operational Procedures and Equipment The following Manuals are used for RS operational procedures and equipment references.

The helicopter flight Manuals contain the pilot and flight mechanic normal and emergency procedures for RS operations.

Helicopter Rescue Swimmer Operations Manual, COMDTINST M3710.4 (series) contains RS procedures, training and physical standards, and lists the authorized equipment for RS operations.

The Aviation Life Support Systems Manual, COMDTINST M13520.1 (series) provides authorized RS equipment descriptions and maintenance procedures.

A.6 RS Operational Deployment Restriction Helicopter rescue swimmers are not permitted to act as cutter swimmers, nor are cutter swimmers permitted to deploy from helicopters.

A.7 Rappelling Restriction

Rappelling formalized tree extraction procedures or equipment shall neither be used nor maintained by RS.

A.8 Underwater Rescue Restrictions Self Contained Underwater Breathing Apparatus (SCUBA) procedures or equipment shall be neither used nor maintained by the RS. An RS shall not swim under parachutes or layers of ice. An RS shall not swim into or under a capsized or submerged vessel, aircraft, or vehicle. If deployed next to a capsized object, the RS is permitted to search visually and reach inside while maintaining a grasp on a reference point on the exterior of the object. If the RS determines that a person is trapped under or in the object and cannot be reached from the reference point, the pilot in command must request alternative assistance through the search mission coordinator or operations center.

A.9 Procedures or Equipment Evaluation Restriction

Units are not permitted to evaluate new procedures or equipment without the written authorization of Commandant (G-OCA).

Section A. General Helicopter Rescue Swimmer Policies (Continued)

A.10 Special Duty Assignment Pay Operational rescue swimmers are authorized Special Duty Assignment Pay (SDAP), as provided in Special Duty Assignment Pay, COMDTINST 1430.1 (series). To be eligible, a rescue swimmer must be serving at a helicopter unit tasked to maintain helicopter rescue swimmers and fulfilling all appropriate operational and forth in this Manual. The unit commanding officer must certify in writing to Commandant (G-OCA), either by letter, message or electronic mail, that the member meets all eligibility requirements. This certification (Annex J) is due annually in January.

B.1 Minimum Rescue Swimmer Equipment for Operational Deployment The RS must wear appropriate protective clothing during all ground and flight operations. The type and quantity of clothing worn is determined by mission needs. Regardless of the ensemble chosen, the RS must wear an Aircrew protective helmet during follows: take-off and landing. RS clothing is defined as

CAUTION

The appropriate Flying or Water Ensemble with helmet shall be worn when being hoisted to a vessel.

- (1) **Flying Ensemble.** Normal Aircrew protective clothing includes the following.
 - Flight suit
 - Flight gloves
 - Flight boots
 - Aircrew survival vest
 - Protective helmet

The Flying Ensemble must be worn on all flights in which a water deployment is not likely to occur within the first 30 minutes. Aircrew flight helmet will be worn when being hoisted to land.

- (2) Water Deployment Ensemble. Water ensembles include the following.
 - Wet suit (water temperature above 55 F.) or
 - Dry suit (water temperature 55 F. and below)
 - RS harness
 - Fins
 - Mask, and snorkel.

To increase visibility, the RS shall wear a wet/dry suit hood or surf-cap (with SOLAS grade retro-reflective tape)

during all night opera-tions, regardless of water/air temperature. A protective helmet (with SOLAS grade retro-reflective tape) shall be worn during operations conducted in surf or whitewater areas. Water Ensembles are not specifically designed for flame resistance and can cause heat stress to the RS. Aircraft commanders must consider the risks of performance degradation and lack of flame protection vs. practicality when per-mitting the RS to wear a water ensemble for longer than 30 minutes.

Section C. Rescue Swimmer Training Requirements

C.1 RS Training Requirements Overview

The Coast Guard Air Operations Manual, COMDTINST M3710.1 (series) contains the pilot, flight mechanic, and RS initial and recurrent flight training requirements for RS operations. The swimming, physical fitness and EMT training requirements for a RS are contained in Chapter 3 of this Manual.

C.2 EMT Certification

The RS must maintain National Registry EMT certification in accordance with Emergency Medical Services Manual, COMDTINST M16135.4 (series). Air station commanding officers are responsible for obtaining National Registry, recertification training for their RS. An RS whose EMT National Registry certification has expired is not permitted to deploy as an operational RS. Units desiring to maintain higher EMT levels of training must obtain authorization from Commandant (G-OCA).

C.3 EMT Certification or Recertification Failure Procedures

If an RS fails the initial certification or recertification test, the individual must reapply to take the certification or recertification test within thirty (30) days of notification of failure of the first test.

The RS may continue to deploy as an operational RS while waiting to retake the certification or recertification test and awaiting the results. Upon notification of failure of the second test, the RS may not deploy as an operational RS. Application for a third certification or recertification test must be made within thirty (30) days of notification of failure of the second test. If the individual fails the third test, he/she must reattend the initial EMT Certification training and successfully pass the National Registry certification test before he/she may again deploy as an operational rescue swimmers.

C.4 RS Qualification Requirements (

The following are RS airframe qualification requirements.

- 1) An RS designation in any type helicopter shall remain current for 15 months after the swimmers last standardization checkregardless of the helicopter type assigned at the swimmers present unit.
- (2) The Rescue Swimmer Transition Syllabus should be completed by unit swimmers when a different helicopter type (i.e. HH-60J at an HH-65A unit) is assigned temporary alert duty for periods that will allow for RS training flights.

C.4 RS Qualification Requirements (Continued)

(3) During instances of urgent operational necessity, an RS may deploy from any Coast Guard type helicopter after receiving a thorough passenger brief.

The following table lists differences and/or procedures between the Coast Guard HH-65A and HH-60J helicopters that should be noted.

A/F	Differences and/or Procedures
HH-65A	The handhold at the main cabin door is located on the boom stanchion. Do not use the pilot's seat headrest as a handhold during exit or entry while on the hoist cable Limited cabin space requires careful survivor and basket Management While sitting in doorway, the swimmer should note the numerous sharp edges on the cabin door track, as well as a sharp edge near the in-flight refueling cover
НН-60Ј	When seated in the door for a free-fall deployment, insure that you allow adequate clearance between landing gear and auxiliary fuel tank (if installed). Handholds are located at each side of main cabin door Rotor wash is disabling to survivors who do not have adequate protection (i.e. mask and snorkel Limited cabin space requires careful survivor and basket management.

CAUTION

C.5 RS Survivor Qualification

Only graduates of a formal military helicopter rescue swimmer training program is permitted to perform free-fall deployments.

Only active-duty military personnel are authorized to act as survivors on RS training flights.

Prior to flight the candidate must complete the survivor brief and questionnaire (Annex E) with a qualified RS and receive a thorough egress brief in helicopter type.

Chapter 2 Rescue Swimmer Procedures Table of Contents

SECTION A. HELICOPTER RESCUE SWIMMER PROCEDURES	
A.1 Helicopter Rescue Swimmer Procedures Introduction	2-3
A.2 Equipment Inspection	2-3
SECTION B. RESCUE SWIMMER DEPLOYMENTS	2.4
B.1 Free Fall Deployment Procedures	2-4
B.2 Strop (Survivors) Deployment ProceduresB.3 Harness Deployment Procedures	2-5 2-6
B.4 Hoisting RS Via Harness/Strop Using Trail Line Procedures	2-6 2-7
B.5 Direct Deployment Procedures	2-8
B.6 HH-65A Ice Disembark Deployment Procedures	2-10
B.7 Ice Strop Disembark Deployment Procedures	2-11
B.8 Direct Deployment Over Solid Ice Procedures	2-13
SECTION C. SURVIVOR APPROACHES, CARRIES, AND RELEASES	
C.1 Vertical Surface Walking Approach Procedures	2-14
C.2 Direct Deployment Water Approach	2-16
C.3 Rear Surface Approach	2-19
C.4 Underwater Approach	2-19
C.5 Front Surface Approach	2-21
C.6 Cross-Chest Carry	2-22
C.7 Collar Tow or Equipment Tow	23
C.8 Front Head Hold Release	2-24
C.9 Front Head Hold Escape	2-25
C.10 Rear Head Hold Release	2-26
C.11 Rear Head Hold Escape	2-28
SECTION D. MILITARY AVIATOR EQUIPMENT RELEASE	
D.1 Introduction	2-29
D.2 Seawater Activated Parachute Canopy Release	2-29
D.3 USN Integrated Torso Harness Koch Fittings	2-30
D.4 USN Integrated Torso Harness Mini-Koch Fittings	2-30
D.5 Oxygen Fittings (USN/ USAF)	2-31
D.6 Oxygen Hose Disconnection	2-32
D.7 Quick Fitting Harness and Ejector Fitting	2-32
SECTION E. PARACHUTE DISENTANGLEMENT	
E.1 Quick Fitting Harness	2-33
E.2 Integrated Torso Harness	2-36
E.3 Other Types of Harnesses	2-39
E.4 Chest Pack (US Navy)	2-39

SECTION E. PARACHUTE DISENTANGLEMENT (CONTINUED)

E.5 Backpack (US Navy)	2-40
E.6 Backpack (US Air Force)	2-40
E.7 Ballooned Canopy Disentanglement	2-40
SECTION F. SURVIVORS WITHOUT FLOTATION PROCEDURES	
F.1 Single Survivor	2-43
F.2 Multiple Survivors	2-43
SECTION G. RECOVERY PROCEDURES	
G.1 Rescue Basket Recovery	2-45
G.2 Folding Rescue Litter Recovery	2-46
G.3 RS Harness Emergency Recovery	2-48
G.4 Survivors Strop/Harness Recovery of RS	2-48
G.5 RS Harness, Military Aviator Double Pick-Up	2-49
G.6 Strop (Survivors) Augmented Double Pick-Up	2-51
SECTION H. AIRCRAFT RADIO VECTORING	
H.1 Aircraft Radio Vectoring Introduction	2-53
H.2 Radio Vectoring Commands	2-53
H.3 Radio Vectoring Advisory Reports	2-53
H.4 Aircraft Radio Vectoring Procedure Notes	2-54

A.1 Helicopter Rescue Swimmer Procedures Introduction

This chapter establishes standard operating procedures for Coast Guard Helicopter Rescue Swimmers hereafter referred to as Rescue Swimmer (RS). The helicopter flight Manuals contain the pilot and flight mechanic normal and emergency procedures for RS operations. These procedures shall be used when the pilot in command has elected to use the RS and the RS has assessed that the task is within his/her capabilities.

WARNING

Caution must be exercised when responding to fires involving aircraft or vessels made of composites. Inhalation of composite fibers may be harmful to personnel. Respiratory protection shall be worn when exposed to this potential hazard.

A.2 Equipment Inspection

Prior to every RS training flight, the RS will inspect and adjust all items in his/her equipment bag. At the beginning of each duty day, the RS will inspect his/her own equipment and the unit's supplemental RS SAR and EMT equipment.

B.1 Free The following are procedures for performing a free fall **Fall Deployment** deployment. **Procedures**

NOTE

Free fall is used only in daylight. A strop/harness deployment is always used at night or any time conditions dictate, such as debris or broken ice in water, questionable water depth and sea state.

B.2 Strop (Survivors) Deployment Procedures The following are procedures for performing a strop deployment.

NOTE

A strop deployment is always used at night or any time conditions dictate, such as debris or broken ice in water, questionable water depth and sea state.

Step	Action
1	When directed to come forward, the RS assumes a
	sitting position in the doorway with the
	gunner's belt attached and the survivors strop
	positioned under the arms of the RS.
	NOTE
	Prior to being lowered at night or during low
	visibility conditions, the RS and the rescue hook
	shall be illuminated by 4-inch chemical lights
2	RS releases the gunner's belt when hoist operator
	taps the RS once on the chest.
3	RS gives "thumbs up signal" to hoist operator when
	the RS is ready.
4	RS keeps arms crossed over strop while being
	lowered to the water. The strop safety straps are
	not used during this maneuver
5	While being lowered on the strop, the RS should try
	to maintain visual contact with the survivor.
	Turning of the hoist cable may prevent constant
	visual contact.
6	After being fully immersed in the water, the RS
	slips out of the strop and signals "I am all right.(RS
	Hand Signals Annex B).
7	After giving hand signal, the RS swims toward
	survivor

B.3 Harness Deployment Procedures

The following are procedures for performing a harness deployment.

NOTE

A harness deployment is always used at night or any time conditions dictate, such as debris or broken ice in water, questionable water depth and sea state.

Step	Action
1	When directed to come forward, the RS
	assumes a sitting position in the doorway with
	the gunner's belt attached and the hoist hook
	connected directly to the lifting "V" ring on
	the RS Harness
	NOTE
	Prior to being lowered at night or during
	low visibility conditions, the RS and the
	rescue hook shall be illuminated by 4-inch
	chemical lights
2	RS releases the gunner's belt when hoist
	operator taps the RS once on the chest
3	RS gives "thumbs up signal" to hoist operator
	when the RS is ready.
4	Hoist operator will stop hoisting once RS is
	clear of deck to allow the RS to check harness
	for comfort. RS will then give the hoist
	operator the "thumbs up signal" when ready
	to continue hoist.
5	While being lowered on the RS harness, the
	RShould try to maintain visual contact with
	the survivor. Turning of the hoist cable may
	prevent constant visual contact
6	After being fully immersed in the water, the
	RS disconnects from the rescue hook and
	signals "I am all right. "(RS Hand Signals
_	Annex B).
7	After giving hand signal, the RS swims
	toward survivor.

B.4 Hoisting RS Via Harness/Strop Using Trail Line Procedures

WARNING

This delivery shall not be attempted without the use of the trail line quick-release

The trail line hoisting of the rescue swimmer may be used when delivering the rescue swimmer to a vessel only. It is not to be used for water deliveries or recoveries. The trail line method is ideal for situations when stability of the rescue swimmer is desired for delivery to an unstable vessel. This technique may be used with the harness and strop deployment only, in conjunction with the trail line quick-release.

The trail line quick release is a stainless steel snap shackle, which will release under a load. The trail line quick release has three main components; a beaded release handle, a fixed eye, and a gated eye. During use of the trail line quick-release, the gated eye is connected to the equipment attachment ring on the hoist hook. To release the trail line from the hoist hook, the RS shall pull the beaded handle and release.

NOTE

At any time should the RS feel that he/she is in danger of entanglement, they may release themselves from the trail line by activating the Trail Line Quick Release.

Step	Action
1	When directed to come forward, the RS assumes a
	sitting position in the doorway with the gunner's
	belt attached. The RS harness/strop is connected to
	the hoist hook, with the trail line quick
	disconnect attached to the equipment attachment
	ring on the hoist hook.
2	During the "swimmer check" the RS releases the
	gunner's belt when the hoist operator taps the RS
	once on the chest

B.4 Hoisting RS Via Harness/Strop Using Trail Line Procedures (Continued) The following is the continuation of the hoisting an RS via harness/strop using a trail line procedure.

Step	Action
3	RS gives the "thumbs up signal" to hoist operator when
	the RS is ready
4	To accomplish the "load check" the hoist operator will hoist the RS clear of the deck to allow the RS to check harness/strop for comfort. RS will then give the hoist operator the "thumbs up signal" when ready to be repositioned in the door.
	XX : 4
5	Hoist operator will begin the delivery of the trail line to the vessel.
6	Once the trail line is paid-out, the hoist operator will connect the weak link end of the trail line to the fixed ring end of the trail line quick-release

.B.5 Direct Deployment Procedures The following are procedures for performing a direct deployment

WARNING

When using this procedure in heavy seas, the aircrew must take extreme care with the varying amounts of cable that may be paid out. Too little cable may cause the RS to be jerked out of the water as he/she enters the trough of the wave. Too much cable may cause the RS or survivor to become entangled in the cable prior to pickup. When used in high winds the aircrew must monitor wind gusts to compensate for sudden movements of the aircraft. During vertical surface operations, the RS shall not disconnect from the hoist hook.

B.5 Direct Deployment Procedures (Continued) The following is the continuation of the direct deployment procedures.

CAUTION

Do not send the strop to survivors without the RS, as it may become caught on entanglement hazards and survivors may not know how to properly use it.

Step	Action	
1	When directed to come forward, the RS assumes a sitting	
	position in the doorway with thegunner's belt attached. The RS	
	harness and quick strop, with the detach-able side of the strop	
	(identified by the red webbing) on the outboard side, are	
	connected to the hoist hook. The RS positions the quick strop on	
	either shoulder with the friction keeper slide close	
	to the hoist hook.	
2	RS releases the gunner's belt when the hoist	
_	operator taps the RS once on the chest.	
3	RS gives the "thumbs up signal" to hoist	
	operator when the RS is ready.	
4	RS maintains control over quick strop while	
	being hoisted clear of the deck. Hoist operator	
	will stop hoisting once RS is clear of deck to	
	allow the RS to check harness for comfort. RS	
	will then give the hoist operator the "thumbs	
	up signal" when ready to continue hoist.	
5	While being lowered in the harness, the RS	
	should try to maintain visual contact with the	
	survivor. Turning of the cable may prevent	
	constant visual contact	
	NOTE	
	If being hoisted to the water, RS should be placed within 2-3	
	feet of the survivor	

B.5 Direct Deployment Procedures (Continued) The following is the continuation of the direct deployment procedures.

Step	Action
5	NOTE
(Continued	If being hoisted to a vertical surface, the
	aircrew shall assess the situation and hoist the
	RS in a way that avoids an approach that
	endangers the survivor with the cable, falling
	debris,rotor-wash, or other hazards. The hoist
	operator should conn the aircraft to a position that
	allows the RS to maintain positive contact with the
	vertical surface. Once in positive contact with
	the vertical surface, the RS maintains a rappelling
	position and does not climb, instead using the hoist
	to reposition vertically Conn the aircraft to the
	survivor using cliff walking techniques and
	appropriate hand signals (Annex B).

B.6 HH-65A Ice Disembark Deployment Procedures

)

The following are procedures for performing an ice disembark deployment.

WARNING

The rescue line is not connected in any way to the aircraft.

CAUTION

Do not expose survivor to rotor wash prior to RS contact, as this may cause survivor to slide radically on ice, possibly causing injury.

Step	Action	
1	When directed to come forward, the RS assumes a sitting	
	position in the doorway with the gunner's belt attached	

B.6 HH-65A Ice Disembark Deployment Procedures (Continued) The following is the continuation of the ice disembark deployment procedures.

Step	Action	
2	After the "Check Swimmer" command, the RS	
	exchanges the aircraft gunner's belt for the modified	
	gunner's belt attached to the rescue line.	
3	RS gives "Thumbs Up" signal (RS Hand Signals	
	Annex B) when RS is ready	
4	The aircraft maintains wheels lightly on the ice.	
5	After the "Deploy Swimmer" command, the RS	
	exits the aircraft, steps onto the ice and proceeds to the	
	survivor	
6	If survivor is ambulatory, he/she is to follow safety line	
	hand over hand to helo. If not ambulatory, the RS shall	
	assist as necessary	

The following are procedures for performing an ice strop disembark deployment

B.7 Ice Strop Disembark . Deployment Procedures

WARNING

The rescue line is not connected in any way to the aircraft

CAUTION

Do not expose survivor to rotor wash prior to RS contact, as this may cause survivor to slide radically on ice, possibly causing injury.

B.7 Ice Strop Disembark Deployment Procedures (Continued) The following is the continuation of the ice strop disembark deployment procedures.

Step	Action
1	When directed to come forward, the RS assumes a
	sitting position in the doorway with the gunner's belt attached and
	the survivor strop positioned under the RS arms
2	RS releases the gunner's belt when hoist operator taps the RS once
	on the chest
3	RS gives "Thumbs Up" signal (RS Hand Signals Annex B) to hoist
	operator when the RS is ready
4	RS keeps arms crossed over strop while being lowered to the ice.
	The sling safety straps are not used during this maneuver
5	Once on the ice, the RS slips out of the strop and signals "I am all
	right" (RS Hand Signals Annex B).
6	The FM retrieves the strop and lowers the modified gunner's belt
	with rescue line attached to the RS.
7	The RS attaches the modified gunners belt and proceeds to the
	survivor
8	RS has survivor lie down on ice and calls for appropriate rescue
	device
9	Helo moves into position. RS removes modified gunners belt for
	retrieval by flight mechanic. Survivor and RS are hoisted using
	established procedures

B.8 Direct Deployment Over Solid Ice Procedures The following are procedures for performing a direct deployment over solid ice.

CAUTION

Do not expose survivor to rotor wash prior to RS contact, as this may cause survivor to slide radically on ice, possibly causing injury.

Step	Action	
1	Wassing associated and associated DC and associated	
1	Keeping survivor outside rotor wash, RS performs Direct	
	Deployment to the ice, and proceeds to the survivor	
2	If a Direct Deployment recovery is not practical, RS disconnects	
	hoist hook and signals for appropriate rescue device	
3	RS and survivor are hoisted using established procedures	

Section C. Survivor Approaches, Carries, and Releases

C.1 Vertical The following are procedures for
 Surface Walking performing a vertical surface walking approach.
 Approach
 Procedures

WARNING

During a vertical surface deployment, the RS shall not disconnect the hoist hook from their harness

WARNING

In the event the survivor grabs the RS preventing the application of the strop; the RS shall immediately grip the survivor under the arms and inter-lock his/her hands. The flight mechanic shall immediately recognize this situation as an emergency, conn the aircraft away from the vertical surface down as low as safely possible and continue the hoist either into the aircraft or to the surface as appropriate

WARNING

Whenever hoisting using the quick strop, a possibility exists for the survivor to lose consciousness during the actual hoisting phase. When hoisting with the quick strop and the survivor facing away from the RS, the possibility for the survivor to lose consciousness is greater.

The RS should include specific landmarks on the pre-briefed route, as it may be difficult to maintain visual contact with the survivor once in positive contact with the vertical surface. This route should avoid exposing the survivor to falling debris, rotor wash, or any other hazards. Avoid overhangs that may contact and damage the hoist cable

Continued next page

2-14

C.1 Vertical Surface Walking Approach Procedures (Continued) The following is the continuation of the vertical surface walking approach procedures.

Step	Action		
Всер	1 Action		
1	The RS, while using the RS harness, bends 90 degrees at		
	the waist, fully extends the legs, keeping the knees		
	slightly bent and contacts the vertical surface with his/her		
	boots in a rappelling position. The RS is supported by the		
	hoist cable and is not to be a "climber".		
2	The RS walks on the vertical surface, giving the		
	appropriate hand signals to conn the aircraft along the		
	pre-briefed approach route to the survivor		
3	WARNING		
	Failure to connect the crotch strap on an unconscious or		
	incapacitated survivor may result in survivor		
	slipping out of the quick strop.		
	If the survivor is facing the RS:		
	Using the same shoulder that the Quick Strop is on, the		
	RS grasps the wrist of the survivor. RS slides the strop		
	down his/her arm and up the survivor's arm, maneuvering		
	the strop over the survivor's head and other arm. RS then		
	snugs the strop under survivor's armpits, slides friction keeper as tight as possible and holds with one		
	hand.		
	If the survivor is facing away from the RS:		
	The RS disconnects one side of the strop (identified by		
	the RED webbing), feeds itaround the survivor, then		
	feeds it back through the friction keeper, and reconnects		
	to the hoist hook. Snugs the strop under the armpits,		
	slides friction keeper as tight as possible, and hold in		
	place with one hand.		

C.1 Vertical Surface Walking Approach Procedures (Continued)

C.1 Vertical Surface The following is the continuation of the vertical surface walking **Approach** approach procedures.

Step	Action	
4	RS then signals "Ready For Pickup", followed by	
	pointing away from the vertical surface to indicate	
	"Ready to lose positive contact	
5	WARNING	
	It is imperative that the RS keep his/her hand on	
	the friction keeper and as tight as possible to the	
	survivor, with legs around survivor's arms until	
	both RS and survivor are secure on the deck of the	
	aircraft. The survivor is brought into the cabin first	
	regardless of whether he/she is ward or away from	
	the RS.	

C.2 Direct Deployment Water Approach

The following are procedures for performing a direct deployment water approach.

WARNING

Whenever hoisting using the quick strop, a possibility exists for the survivor to lose consciousness during the actual hoisting phase. When hoisting with the quick strop and the survivor facing away from the RS, the possibility for the survivor to lose consciousness is greater. For this reason, any training hoist of a live "survivor" with the quick strop in the facing away position shall be limited to 10 feet. The survivor shall then be lowered to the water where he/she shall be repositioned to face the RS, and hoisting can continue

C.2 Direct Deployment Water Approach (Continued) The following is the continuation of the direct deployment water approach procedures.

Step	Action	
1	The RS is lowered to a position just above the water's surface.	
2	The aircraft is conned to a position that allows the RS to be	
	lowered into the water and placed within 2-3 feet of the survivor	
3	WARNING	
	Failure to connect the crotch strap on an unconscious or	
	incapacitated survivor may result in survivor slipping out of	
	the quick strop	
	Using the same shoulder that the quick strop is	
	on, the RS grasps the wrist of the survivor, slides the strop down	
	his/her arm and up the survivor's arm, maneuvers the strop over	
	the survivor's head and other arm, snugs the strop under	
	survivor's arm pits, slides friction keeper as tight as possible and	
	holds with one hand.	
4	WARNING	
	Failure to connect the crotch strap on an unconscious or incapacitated survivor may result in survivor slipping out of the quick strop.	
	If the survivor is facing away from the RS, the strop is placed over the head and shoulders, snugged into the armpits and the friction keeper is secured. The strop may also be applied by moving the strop over the feet and up the body to the armpits	

C.2 Direct The following is the continuation of the direct deployment water approach procedures.
 Water Approach (Continued)

Step	Action		
5	RS signals "Ready For Pickup".		
6	When dealing with severe hypothermia, employ the double-lift method. The survivor strop is used in conjunction with the quick strop to hoist the survivor in a semi-supine position.		
	a. The survivor strop is attached to the hoist hook between the harness and the quick strop.		
	b. Once in the water, place the survivor strop around the survivor's torso and attach the safety strap.		
	c. Move down to the legs and slide the quick strop up the legs and under the knees.		
	d. Secure the friction keeper and signal "Ready For Pick-up". Straddle the survivor while being hoisted		
7	WARNING It is imperative that the RS keep his/her hand on the friction keeper and as tight as possible to the survivor, with legs around survivor's arms until both RS and survivor are secure on the deck of the aircraft. The survivor is brought into the cabin first regardless of whether he/she is facing toward or away from the RS.		

C.3 Rear Surface Approach

The following are procedures for performing a rear surface approach.

NOTE

Prior to executing the following approach, the RS should attempt to establish comms with survivor.

Step	Action	
1	Approach the survivor with head out of the water and	
	eyes on the survivor	
2	With forward momentum, grab survivor under the	
	armpits and rotate towards the RS.	
3	Secure survivor in a cross-chest; collar tow, or equipment	
	carry.	

C.4 Underwater Approach

The following are procedures for performing an underwater approach.

WARNING

Do not use an underwater approach when a raft, lines, debris, or a parachute is attached to or in the immediate vicinity of the survivor

NOTE

Prior to executing the following approach, the RS should attempt to establish comms with survivor.

C.4 Underwater Approach (Continued) The following is the continuation of the underwater approach procedures.

Step	Action	Example
1	Approach the survivor with head out of the water and eyes on the survivor.	
2	Upon reaching a distance of 6 to 8 feet from the survivor, execute a surface dive and swim under the survivor. NOTE	
	The RS must be aware of the added buoyancy of the wet/dry suit and avoid premature surfacing.	
3	Execute a half turn (survivor's back should be toward RS) and surface.	
4	While surfacing, place survivor in a controlled cross-chest carry.	

C.5 Front Surface Approach The following are procedures for performing an front surface approach.

NOTE
Prior to executing the following approach, the RS should attempt to establish comms with survivor.

Step	Action	Example
1	Approach the survivor with head out of the water and eyes on the survivor	
2	Upon reaching an armslength istance from the survivor execute a quick reverse	PART
3	Timing the movement, the RS crosses their arm over the survivors arm and firmly grasps the back of he survivor's wrist, right hand to right wrist, or left hand to left wrist. The RS then leans backand pulls the survivor's arm across and in front of the RS's body, turning the survivor around	
4	When the survivor's back is fully turned, the RS places the survivor in a cross- chest, collar tow, or equipment carry	

C.6 Cross-Chest Carry

The following are procedures for performing a cross-chest carry.

Step	Action	Example
1	From a position behind the survivor's shoulder or under survivor's arm, the RS reaches across the chest and pulls the survivor from under the armpit with the back of the RS's hand	
2	The survivor's shoulder is then tucked securely into the armpit of the RS and the a firmly clamped against the survivor's chest	
3	The RS turns to the side with the hip directly against the small of the survivor's back the RS strokes vigorously with the using a flutter kick to provide propulsion	
4	Should the survivor be aggressive, the RS shall loc his/her free hand under the survivor's armpit. NOTE This procedure may be difficult to perform on military aircrew-members due to their flotation and survival equipment. The equipment carry is appropriate in this situation.	

C.7 Collar

The following are procedures for performing a collar

Tow or

tow or equipment tow.

Equipment Tow

WARNING

Do not grasp the survivor in a manner, which may result in restricted breathing or circulation

Step	Action	Example
1	Grasp the survivor's shirt collar or flight equipment from behind and between the shoulder blades	EQUIPMENT CARRY - HOLD ON HARNESS
		COLLAR TOW
2	The RS assumes the sidestroke position and strokes vigorousl with thelegs, using a flutter kick.	

C.8 Front Head Hold Release The following are procedures for performing a front head hold release.

Step	Action	Example
1	As soon as the survivor's arms are felt encircling the head, the RS tucks their chin down and to the side while taking a quick "bite" or breath of air. RS submerges, taking the survivor under	
2	If survivor's head is on the right of RS's head. The RS brings their right arm up and over the encircling arm, and places hand securely againstsurvivor's right cheek, the little finger against the side of survivor's nose, and thumb hooked under the jaw	
	NOTE Should the survivor's head be on the left side of the RS,the method is reversed	
3	The remaining hand is brought up beneath the survivor's other arm seizing it in a grip with the thumb just above the elbow	
4	In one continuous motion, thesurvivor's head is pressed out and around with the right hand over the RS's head and sweeping it across to the far side. This is a continuos movement until the survivor's back is to the RS.	

C.8 Front Head Hold Release (Continued) The following is the continuation of the front head hold release procedures.

Example Step Action The left hand continues to hold the arm 5 until it can be move into a cross chest carry, then the right hand is shifted from the survivor's face to the chest to lock in the controlled cross-chestcarry. **NOTE** Should the survivor's head be """ on the left side of the RS, the method is reversed. If survivor places a scissors lock on the RS with their legs, the scissors rarely is held after the head hold is released. However, if it is not released, the RS uses one hand between the ankles to unlock the crossed

C.9 Front Head Hold Escape

The following are procedures for performing a

front head hold escape.

feet.

Step	Action	Example
1	As soon as the survivor's arms are felt	
	encircling the head, the RS tucks their	
	chin down and to the side, takes a quick	
	"bite" or breath of air, and submerges	
	with the survivor	

Section C. Survivor Approaches, Carries, and Releases (Continued)

C.9 Front Head Hold The following is the continuation of the front head

Head Hold hold escape procedures. **Escape**

(Continued)

Step	Action	Example
2	Without pause, the RS places both hands on the front of the survivor's hips with heels of the hands against the body; fingers extended, and thumbs grasping the survivor's sides. By forcefully pressing and extending the arms, the RS pushes the survivor's body back and up toward the horizontal position. This leverage will loosen the survivor's grasp	
3	By tucking the chin inward and hunching the shoulders, the RS head is freed. Survivor is then pushed away.	

C.10 Rear Head

The following are procedures for performing a rear head hold release.

Hold Release

:.:

Step	Action	Example
1	As soon as the survivor's arms are felt encircling RS head, the RS tucks their chin down and to the side, takes a quick "bite" or breath of and then submerges with survivor air,	

Section C. Survivor Approaches, Carries, and Releases (Continued)

C.10 Rear Head Hold Release (Continued) The following is the continuation of the rear head hold release procedures.

Step	Action	Example
2	The RS places both hands on survivor's top arm wrist, and pulls down toward the RS's hips, rotating the hand and sliding the other hand up to the survivor's elbow.	
3	By twisting inward and down on the survivor's wrist, and pushing survivor's elbow upward, the grip is released	
	Survivor's forearm is straight across survivor's back and survivor is in front of RS.	
4	From this position behind survivor, the RS places survivor in a controlled cross-chest carry	

Section C. Survivor Approaches, Carries, and Releases (Continued)

C.11 Rear Head Hold . Escape The following are procedures for performing a rear head hold escape

Step	Action	Example
1	Upon feeling survivor's arm encircling his/her head, the RS immediately tucks their chin down and to the side, takes a quick "bite" or breath of air, and submerges with the survivor	
2	RS brings the hands up to underside of each of the survivor's elbows. While keeping their chin tucked in and hunching the shoulders, RS pushes forcefully upward freeing the head.	
3	Survivor is then pushed back. RS turns to face survivor prepared to prevent subsequent grasps	
4	RS swims well out of reach of survivor, surfaces, and decides which rescue procedure to use	

D.1 Introduction

CAUTION

Rescue Swimmers must be aware that military aviators will often be tethered to their life raft and possibly entangled in the raft's retaining line and/or drogue line, and/or the parachute shroud lines.

D.2 Seawater Activated Parachute Canopy Release Some military aviators may be equipped with a Seawater Activated Parachute Canopy release system (SEAWARS). This system is designed to automatically release the aviator's parachute risers and canopy upon immersion in seawater The RS must manually release all other equipment as described below. In the event, SEAWARS does not function; the RS must be prepared to release the aviator's parachute manually.

:

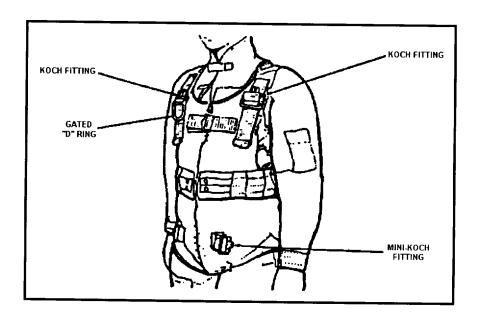


Figure 2-1 Torso Harness Fittings

D.3 USN Integrated Torso Harness Koch Fittings The USN Integrated Torso Harness Koch Fittings are located on each shoulder. (See figure 2-1), these are released using the following procedures.

Step	Action	Example
1	Lift the cover plate	COVER PLATE
2	Push down on locking bar	COVER PLATE
3	While holding the locking bar down separate the fitting	ACTUATING LEVER

.D.4 USN Integrated Torso Harness Mini-Koch Fittings Located on the lap belt (Figure 1). Connects the Rigid Seat Survival Kit (RSSK) to the aviator and is released in the same manner as shoulder Koch fittings.

NOTE Air Force Koch fittings are reverse of USN fittings.

D.5 Oxygen Fittings (USN/ USAF) Four types of oxygen facemask connections are currently in use These fittings are located on each side of the aviator's helmet (Figure 2-2).

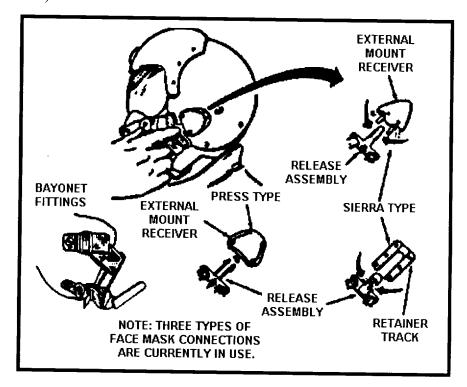


Figure 2-2 Oxygen Facemask Connections

Press type - Press the fitting in towards the face and pull away to release the mask.

Bayonet fittings - Push tab releases located on the sides of mask. away from face

Sierra fittings (Track Mounted) - Squeeze the pinch lever release mechanism located on the helmet side of the fitting and pull away from face.

Sierra fittings (Fixed Mounted) - Squeeze the pinch lever release located on the mask side of fitting and pull away from face.

Section D. Military Aviator Equipment Release (Continued)

D.6 Oxygen	The oxygen hose is connected to the RSSK seat pan by a quick
Hose	release bayonet fitting. To release, lift guide ring and pull out
Disconnection	(Figure 2-3).



Figure 2-3 RSSK Seat Pan Oxygen Hose Guide

D.7 Quick Fitting **Fitting**

There are three types of quick fitting harnesses currently being used Harness Ejector and by Navy aircrewmembers. All have the same quick ejector fittings One fitting is located on the chest and one on each leg. To release the quick ejector fittings, pull up on the lever (Figure 2-4).

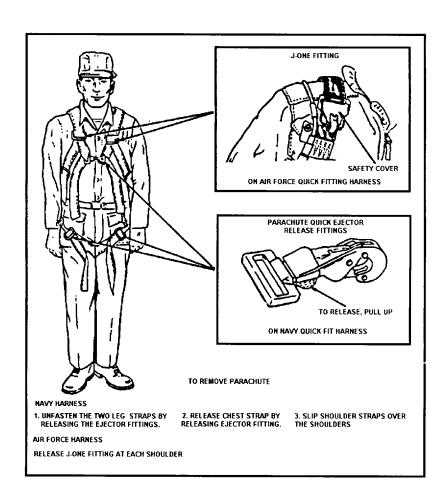


Figure 2-4 Quick Fitting Harness Ejector Fittings

Harness

E.1 Quick Fitting The following are procedures for performing quick fitting harness parachute disentanglement

WARNING

The parachute must never be allowed to come between the RS and the survivor, as the RS could lose sight of the survivor or become entangled in the parachuteor suspension lines

Step	Action	
1	Approach survivor and establish communications	
	to determine the condition of the survivor.	
	Using rear surface approach, grasp survivor's	
	harness between the shoulder blades and pull	
	into the wind and away from the parachute	
	canopy	
2	Remove oxygen mask. Clear the survivor's head,	
	neck, and chest area of suspension lines	
	SURVIVOR WEARING UNINFLATE VEST	

Section E. Parachute Disentanglement (Continued)

E.1 Quick Fitting

The following is the continuation of the quick fitting harness parachute disentanglement procedures.

Harness

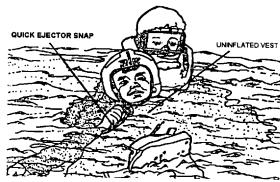
(Continued)

Step 3

Action

WARNING

Survivor may be wearing a flotation device; therefore, the RS shall disconnect the chest quick ejector snaps before inflating the device. Inflating the device before disconnecting chest ejector snap could crush survivor's chest or restrict breathing.



Disconnect chest quick ejector snap and inflate survivor's flotation device.

4

WARNING

Suspension lines shall be cut only if necessary. Do not use an open-bladed knife when cutting suspension lines. The survivor and/or the RS could be injured severely in the process. Use a hook knife (pocket shroud cutter). Remove parachute suspension lines from survivor. Using spinal cord of survivor as a reference, submerge and proceed hand over hand along the back, always keeping one hand on survivor. Submerge as many times as necessary to remove all suspension lines.

Section E. Parachute Disentanglement (Continued)

E.1 Quick Fitting The following is the continuation of the quick fitting harness parachute disentanglement procedures.

(Continued)

Step	Action	
5	Release the survivor's leg quick ejector snaps when progressing down the body.	
	TO ARLEASE PURL OF	
6	Remove shoulder straps, then free survivor of suspension lines and leg snaps and continue pulling survivor into the wind. If survivor is still not free of the harness and parachute use the washboard method as follows	
	WARNING	
	Do not use the washboard method if survivor has back Injury	
	a. With both hands hold survivor by the back of flotation device	
	b. In quick succession, push and pull survivor fore and aft . Make sure that survivor's head is kept above water	
7	Submerge and perform a final check to ensure that all suspension lines are free of survivor and that harness is clear	
8	Ensuring the area is well clear of all floating debris, signal helicopter "ready for pickup" (RS Hand Signals Annex B).	

Continued next page

٠

E.2 Integrated Torso Harness

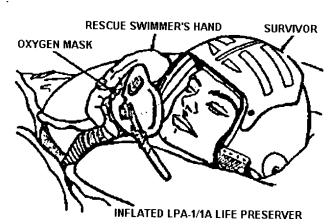
The following are procedures for performing integrated torso harness parachute disentanglement.

WARNING

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

Step	Action	
1	WARNING	
	Removal of the survivor's harness may increase the	
	risk of drowning because the flotation device would	
	have to be removed first	
	Approach survivor and establish communications to	
	determine the condition of the survivor. Using rear surface	
	approach grasp survivor's harness between the shoulder	
	blades and pull	
	into the wind and away from the parachute	
	canopy	

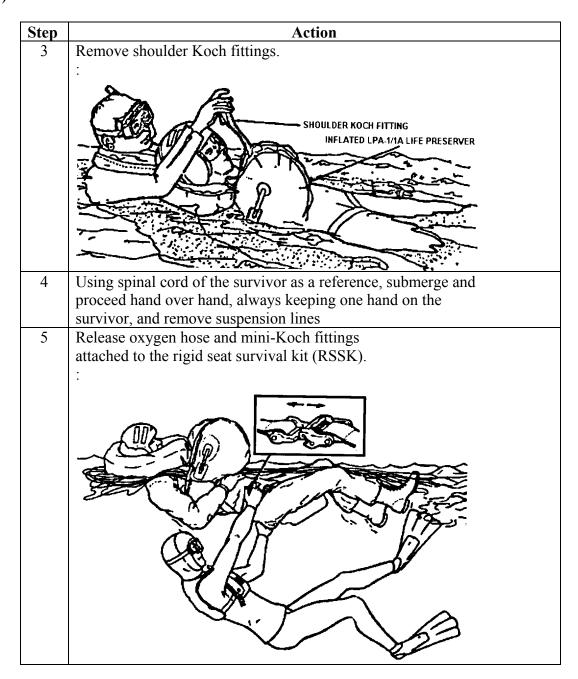
2 Remove oxygen mask. Clear survivor's head, neck, and chest area of suspension lines. Inflate survivor's flotation device if required.



Section E. Parachute Disentanglement (Continued)

E.2 Integrated Torso Harness (Continued)

The following is the continuation of the integrated torso harness parachute disentanglement procedures.



Section E. Parachute Disentanglement (Continued)

E.2 Integrated Torso Harness (Continued) The following is the continuation of the integrated torso harness parachute disentanglement procedures.

Step	Action		
6	Submerge as many times as required to remove all suspension		
	lines		
7	Continue pulling survivor into the wind. If survivor is still not		
	free of the parachute, use the washboard method as follows		
	WARNING		
	Do not use the washboard method if		
	survivor has back injury		
	but vivor has outer injury		
	a. With both hands hold survivor by the back of flotation		
	device		
	b. In quick succession, push and pull survivor fore and aft		
	Make sure that survivor's head is kept above water		
8	Submerge and perform a final check to ensure that all		
	suspension lines are free and the parachute is clear		
9	If the survivor has a life raft, puncture and discard the life raft		
	then move away from it.		
10	Ensure the area is clear of surface debris; then connect the snap		
	hook of the RS harness to the survivor's gated "D" ring		
11	Signal the helicopter, "Ready For Pickup" (RS Hand Signals		
	Annex B).		

Other Types of Harnesses

WARNING

Survivor may be wearing a flotation device; therefore, RS shall disconnect the chest quick ejector snaps before inflating the device.

Inflating the device before disconnecting chest ejector snap could crush survivor's chest or restrict breathing.

There are many types of harnesses an RS may encounter. With exception of different types of fittings, inflation of the flotation device, or removal of the parachute harness, the basic disentanglement procedures are the same as section D.7 of this chapter.

NOTE

Some military harnesses do not have a lifting "V" or gated "D" ring for hoisting. The pilot must be hoisted with the sling (with safety straps fastened), basket or litter

E.4 Chest Pack () US Navy The following are procedures for removing a parachute harness with a Navy chest pack installed.

Step	Action	
1	Disconnect one spring snap on chest pack to give access	
	to chest quick ejector snap.	
2	Disconnect chest quick ejector snap and clear chest area	
3	Inflate flotation device	
4	Disconnect spring snaps to separate parachute	
5	Remove entire harness	

Section E. Parachute Disentanglement (Continued)

E.5 Backpack (US Navy)

The following are procedures for removing a parachute harness with a Navy backpack installed.

Step	Action
1	Disconnect quick ejector snap and clear chest area
2	Inflate flotation device
3	Remove shoulder straps
4	Release leg quick ejector snaps

E.6 Backpack (US Air Force)

The following are procedures for removing a parachute harness with an Air Force backpack installed(Currently the J-1 fitting is being phased out on an iteration bases.)

Step	Action
1	Remove J-1 fitting and close safety cover section D.7(of this chapter).
2	Do not remove harness.
3	Disentanglement procedures are the same as for the USN integrated torso harness (section E.2 of this chapter).

E.7 Ballooned Canopy Disentanglement

The following are procedures for disentangling a survivor from under a ballooned canopy.

WARNING

RS must not go under parachute canopy. Both RS and survivor can be trapped should the canopy collapse and sink.

E.7 Ballooned Canopy Disentanglement (Continued)

The following is the continuation of the procedures for disentangling a survivor from under a ballooned canopy.

Step	Action
1	While approaching the canopy, establish communications with survivor
2	Utilize a surface approach, circle the canopy, and locate survivor. Execute a reverse at the edge nearest the survivor
3	With one arm, lift skirt hem of the parachute CANOPY SURVIVOR
4	The arm should be used as a hook, gathering the canopy into the hand. BALLOONED CANOPY SURVIVOR
5	With the free arm, turn survivor around, if required, and place firm grip on back of survivor's harness

Section E. Parachute Disentanglement (Continued)

E.7 Ballooned Canopy Disentanglement (Continued) The following is the continuation of the procedures for disentangling a survivor from under a ballooned canopy.

Step	Action
6	In one motion, pull survivor back and push parachute
	over survivor's head.
	CANOPY SURVIVOR
7	With survivor out from under the parachute, pull
	survivor into the wind and away from parachute canopy.
8	When well clear of parachute canopy, use
	disentanglement procedures applicable to the type of
	harness the survivor is wearing.

F.1 Single Survivor

The following are procedures for recovering a single survivor without flotation.

WARNING

If the survivor appears to be unconscious or otherwise incapacitated, the RS must take immediate action to gain control of the survivor and keep the survivor's airway clear

NOTE

The rescue basket is the preferred hoisting/rescue device

Step	Action
1	Upon reaching an arm's length distance from the
	survivor, execute a quick reverse and establish
	communications
2	Gain control of the survivor using the appropriate
	approach and carry.

F.2 Multiple Survivors

The following are procedures for recovering multiple survivors without flotation.

NOTE

The rescue basket is the preferred hoisting/rescue device.

The research substitute present and presen	
Step	Action
1	Upon arrival on scene, the crew may deployuninflated
	raft(s) or inflated life vests from the helicopter to the
	survivors before the RS enters the water
2	The most severely injured or hypothermic survivor
	should be rescued first

Section F. Survivors Without Flotation Procedures (Continued)

F.2 Multiple Survivors (Continued)

The following is the continuation of the procedures for multiple survivor recovery.

Step	Action
3	Rescue survivors furthest from raft or having least
	amount of flotation
4	Extract one survivor at a time from the raft. Help
	survivors swim far enough away from the raft so that the
	rotor wash does not affect the remaining survivors in the
	raft
5	Signal the helicopter, "Ready For Pickup" (RS Hand
	Signals Annex B).

.

Section G. Recovery Procedures

G.1 Rescue Basket Recovery The following are rescue basket recovery procedures.

CAUTION

When attaching or removing the M/J rescue basket from the hoist hook, place a hand under both bails to prevent them from falling on the individual in the rescue basket.

NOTE

The Rescue basket is the preferred method of recovery for survivors without spinal injuries.

Step	Action
1	After the RS signals the helicopter "Ready For Pickup
	" (RS Hand Signals Annex B), keep the survivor's airway
	clear, and keep the survivor's back into the prevailing
	seas/wind
2	Await delivery of the basket to the RS.
3	When the basket has been placed in the water, within 5
	to 10 feet of the RS, swim the survivor to the basket
4	Place the survivor inside the basket in the sitting
	position
5	Insure arms and legs of survivor are completely inside
	the basket
6	Signal the aircraft "Ready To Be Hoisted" (RS Hand
	Signals Annex B).
7	The RS should stabilize the basket while the helicopter
	becomes "plumb" over the basket, just before hoisting
8	Once device leaves the water, RS back flutter kicks out
	to the helicopter's 1 to 2 O'clock position, maintaining
	eye contact with hoisting device.

Continued next page

.

.

2 Folding Rescue Litter Recovery The following are folding rescue litter recovery procedures

CAUTION

The medevac board that may be used in the rescue litter has no flotation capability and is not attached to the litter. Therefore, to prevent the loss of the medevac board, do not use it when strapping a person into the litter while they are still in the water

Step	Action
1	The RS shall give the hand signal (RS Hand Signals
	Annex B) when it is determined that the litter is needed
2	The helicopter shall deliver the litter via hoist within 5 to
	10 feet of the RS.
3	When the litter is in the water, the RS shall disconnect
	the litter from the rescue hook and place the hoisting
	sling cables to the outside of the litter
	NOTE
	The litter hoisting cables must be kept from interfering
	with the patient restraint straps, as they could become
	fouled under the survivor
4	The helicopter shall move left and back once the litter is
	disconnected
5	The RS shall guide the survivor into the positioned litter
	by using the collar tow or equipment carry
6	
	WARNING
	Survivors wearing a buoyant anti-exposure suit will
	affect the flotation characteristics of the litter.
	Once the survivor is positioned, the RS shall secure the
	top two restraint straps around the survivor's chest

G.2 Folding Rescue Litter Recovery (Continued)

The following is the continuation of the folding rescue litter recovery procedures.

Step	Action
7	Working from the head down, the RS shall secure the
	rest of the restraint straps using the same procedure
	NOTE
	When securing the chest pads, the survivor's arms are
	secured under the chest pad strap. The RS may
	encounter some difficulty if survivor has flotation
	however, survivor flotation shall not be removed.
8	The RS shall ready the litter hoisting sling cables and
	signal the aircraft "Ready For Pickup
9	The helicopter will move in, over the RS/Survivor
	position and lower the rescue hook.
	WA DAVING
	WARNING
	To prevent shock, allow hook to contact
	water prior to being touched
	The RS shall attach both sides of the litter hoisting sling
	cables to the large hook.
10	When ready, the RS signals "Thumbs Up" to begin
	hoisting
11	Once the device leaves the water, RS back flutter kicks
	out to the helicopter's 1 to 2 O'clock position,
	maintaining eye contact with hoisting device

Continued next page

•

Section G. Recovery Procedures (Continued)

G.3 RS Harness Emergency Recovery The following are procedures for RS emergency recovery, using the RS harness.

Step	Action
1	The RS shall connect the bare rescue hook directly to the
	RS harness lifting "V" ring.
2	Signal the aircraft, "Ready To Be Hoisted" (RS Hand
	Signals Annex B)
3	With the assistance of the Flight Mechanic, the RS shall
	enter the cabin backwards

.G.4 Survivors Strop/Harness Recovery . of RS The following are procedures for RS recovery from a vessel, land, or water, using the survivor strop/harness

WARNING

The RS shall ensure they are well inside the helicopter before detaching themselves. from the hoist hook or strop

Step	Action
1	The RS and helicopter crew may pre-brief this type
	maneuver before the RS exits the aircraft or the RS may
	signal the aircraft to "Deploy Survivors Strop" (RS
	Hand Signals Annex B).
	NOTE
	The survivors strop may be omitted only if its use may
	hinder the delivery of the rescue hook; i.e. strop
	swinging in rotorwash during delivery of hook to
	confined areas on land or vessels

Section G. Recovery Procedures (Continued)

G.4 Survivors Strop/Harness Recovery of RS (Continued) The following is the continuation of procedures for RS recovery from a vessel, land, or water, using the survivor strop/harness.

Step	Action
2	When the RS signals "Ready For Pickup" (RS Hand
	Signals Annex B), the helicopter shall lower the rescue
	hook with a survivors strop attached at one end to
	provide visibility and flotation.
3	The RS shall either connect the hoist hook to RS
	harness, or position strop around their body and connect
	loose end of survivor strop to hoist hook
4	Signal the aircraft, "Ready To Be Hoisted" (RS Hand
	Signals Annex B).

G.5 RS Harness, Military Aviator -Double Pick-Up

The following are procedures for the Military Aviator Double Pick Up (MADPU) recovery, using the RS harness.

Step	Action	
1	The RS and helicopter crew shall pre-brief this type	
	maneuver before the RS exits the aircraft.	
2	Approach the survivor from the rear and pull the lifting strap from the pocket of the RS harness.	
3	Connect the RS harness snap hook to the survivors lifting device.	
	RS HARNESS RS HARNESS SNAP HOOK CREWMAN'S GATED "D" RING	
	a sa a s	

G.5 RS Harness, Military Aviator Double Pick-Up (Continued)

The following is the continuation of procedures for the Military Aviator Double Pick-Up (MADPU) recovery, using the R/S harness

Step	Action
3	NOTE
(Contin	
ued)	During training with 2 RS's, the RS will connect the
	snap hook to the survivor RS's lifting "V" ring.
4	When the RS signals "Ready For Pickup". The
	helicopter shall lower the rescue hook with a survivor
	strop attached at one end to provide visibility and
	flotation.
5	WARNING
	If the survivor is wearing the Navy
	integrated torso harness, use extreme
	caution to ensure that the gated "D" rings,
	and RS snap hook are not disconnected before hoisting.
	When the rescue hook is lowered and in thewater
	connect the lifting "V" ring of the RS harness to the large rescue hook.
6	Signal the aircraft, "Ready To Be Hoisted" (RS Hand Signals Annex B).
	RS HARNESS RS HARNESS HARNESS
	SURVIVOR'S GATED RS HARNESS TO RING RS HARNESS SNAP HOOK

Section G. Recovery Procedures (Continued)

G.5 RS Harness, Military Aviator Double Pick-Up (Continued) The following is the continuation of procedures for the Military Aviator Double Pick-Up (MADPU) recovery, using the RS harness.

Action	
Upon clearing the water, the RS arms and legs are	
placed around the survivor.	
The RS and survivor shall be hoisted up to the	
helicopter. The RS shall prevent the survivor's head	
from contacting the bottom of the helicopter during the	
hoist	
The survivor is brought in the helicopter back first with	
the RS knees on deck straddling the survivor.	
WARNING	
The RS shall ensure they are	
well inside thehelicopter	
before detaching themselves	
from the hoist hook or strop	
Once inside the helicopter, the RS shall detach the survivor from the snap hook on the RS harness.	

G.6 Strop (Survivors) -Augmented Double Pick-Up The following are procedures for the Strop Augmented Double Pick

-Up (SADPU) recovery, using the survivors strop

NOTE

Before deploying sling to RS, the flight mechanic shall pull free the sling's safety straps and lower the sling to RS with one end attached to the large hoist hook

Section G. Recovery Procedures (Continued)

G.6 Strop (Survivors) Augmented Double Pick-Up (Continued) The following is the continuation of procedures for the Strop Augmented Double Pick-Up (SADPU) recovery.

Step	Action
1	Positioned at the survivor's back, the RS will place the
	sling in front of the survivor. Then pass the free end of
	the sling under one arm, around the back, and under the
	other arm.
2	Reconnect the "V" ring to the large rescue hook
3	Connect safety strap by securing snap hook to the "V"
	ring across survivor's chest and pulling tight.
4	The survivor's arms shall be crossed across the chest
5	The RS shall connect the lifting "V" ring of the
	swimmer's harness to the large rescue hook.
6	Signal the aircraft, "Ready To Be Hoisted" (RS Hand
	Signals Annex B).
7	Upon clearing the water the arms and legs of the RS are
	placed around the survivor
8	The RS and survivor shall be hoisted up to the
	helicopter. The RS shall prevent the survivor's head
	from contacting the bottom of the helicopter during the
	hoist.
9	WARNING
	The RS shall ensure the survivor is well
	inside the helicopter sitting or supine on
	the deck before detaching the survivor and
	him/herself from the hoist hook
	The survivor is brought in the helicopter back first with
	the knees of the RS on the deck straddling the survivor

2-52

.

.

Section H. Aircraft Radio Vectoring

H.1 Aircraft Radio Vectoring Introduction

These procedures shall be used by the RS when radio vectoring any aircraft during RS relocation. The effectiveness of radio vectoring operations depends upon the ability of the RS to communicate accurate guidance to the aircraft pilot. Standard voice procedures reduce the chance of misunderstanding.

H.2 Radio Vectoring Commands

The table below provides radio-vectoring commands and they're meaning.

Command	Meaning
COMMENCE RIGHT TURN	Start turn to the Right
COMMENCE LEFT TURN	Start turn to the Left
STOP TURN	Stop turning(aircraft wings
	level, maintain heading

H.3 Radio Vectoring Advisory Reports The table below provides radio vectoring advisory

reports and they're

meaning

Advisory	Meaning
CONTINUETURN	Continue turning "Right" or
	"Left"
I AM AT YOUR _O'CLOCK	The swimmer's present position
, APPROXMILE(S)	the_and distance relative to
	aircraft
MARK, MARK, MARK	Aircraft position is directly
	overhead of Rescue Swimmer.
	Mark position.

H.4 Aircraft Radio Vectoring Procedure Notes

The following is a list of procedure notes concerning aircraft radio vectoring.

- (1) Local CG working frequency is used for all CG Rescue Swimmer radio operations. During actual SAR situations, the Rescue Swimmer may use VHF CH 16 in order to call in other assets that may be responding.
- (2) Ensure that the radio's antenna is not touching the water and pointed straight up; not at the aircraft.
- .(3) Before attempting to transmit or receive, check that the radio speakers have no water in them. To clear speakers blow . forcefully into them; this forces the water out of the speaker . . diaphragm.
- (4) When radio vectoring always have the aircraft turn toward your
 position. If the aircraft is moving from right to left of your
 position, have the aircraft turn left. For an aircraft moving left to
- . right of your position, have the aircraft turn right
- (5) Most aircraft do not respond instantly to control inputs from the pilots. When you radio "COMMENCE RIGHT TURN," it may be a few seconds before the aircraft starts turning. This delay is the pilot reacting to the command, and the aircraft reacting to the control input. A delay will also occur after the STOP TURN"" command. The goal of radio vectoring is to vector an aircraft to your position with the aircraft turning the least number of turns as possible.
- (6) The importance of having the rescue swimmer keep talking after establishing radio contact with an aircraft cannot be overstressed. Between vectoring commands and advisories, the rescue swimmer may begin telling the aircraft his/her condition and equipment or signals that are available. Inform the pilot of the surface winds relative to the aircraft's position and heading if possible.

Chapter 3 Rescue Swimmer Training Requirements Table of Contents

SECTI	ON A. TRAINING REQUIREMENTS INTRODUCTION		
A.1 A.2	Introduction Shallow Water Blackout	3-2 3-2	
SECTI	ON B. TRAINING REQUIREMENTS		
B.1	Operational Training Requirements	3-3	
B.2	Frequency of Required Training Elements	3-3	
B.3	RS Training Elements	3-4	
B.3.a	Physical Training Screen Exam	3-4	
B.3.a	Physical Training Screen Exam	3-5	
B.3.b	PT Workout	3-6	
B.3.c	SwimWorkout	3-8	
B.3.c	Swim Workout	3-9	
B.4	Rescue Equipment and Lifesaving Drills	3-9	
B.5	Litter Recovery, Parachute and Harness Disentanglement	3-10.	
B.6	EMT Classroom Training	3-10	
B.7	EMT Practical Training	3-11	
B.8	EMT Recertification	3-12	
B.9	Aircraft Vectoring	3-12	
B.10	Helicopter RS Operations	3-13	
B.11	PT Screening Requirements for Non-Operational RS	3-13	
B.12	Training Records	3-14	

Section A. Training Requirements Introduction

A. Introduction 1

This chapter establishes minimum training requirements for Coast Guard Helicopter Rescue Swimmers. These elements of training assure that the operational RS maintains the skills to function as a helicopter crewmember and EMT, and the flexibility, strength, and endurance to assist persons in heavy seas. They also assure that the AST (E-6 and below) that is non-operational maintains a minimum level of fitness that will permit a quick return to the operational level of fitness.

A.2 Shallow-Water Blackout

WARNING

Do not hyperventilate prior to underwater swims. Hyperventilation can lead to shallow-water blackout.

During RS training short distant underwater swimming is required .A long breath-holding ability is not needed to complete this training The following is a simple explanation of shallow-water black

- (1) Hyperventilation (excessively rapid breathing) purges the blood of C02, the body's cue to breathe.
- (2) The swimmer runs out of oxygen without ever feeling the need to breathe, passes out, and drowns.

Section B. Training Requirements

B. Operationa Training Requirements

- (1) Training requirements as listed in this Manual provide RS with adequate time each week and broad guideline's to maintain their physical fitness. An RS will be tested, in the form of the Monthly Physical Training Screen Exam, to ensure they are maintaining the minimum standard of physical fitness. It is the responsibility of the RS to maintain the appropriate level of physical fitness
- (2) Any AST whose operational training requirements are not met is not permitted to function as a helicopter rescue swimmer and may forfeit SDAP. An AST that has not maintained his/her physical fitness due to leave, TAD, Night Check, medical grounding, etc for 30 days or more must pass the monthly screen exam prior to performing the duties of an operational RS.
- (3) When a swimming pool is temporarily unavailable or an RS is deployed with a helicopter away from their home station, the swim workout is waived. In lieu of this, the RS must complete the PT workout 3 times in a 7-day period

B.2 Frequency of Required Training Elements

The following table provides the frequency of required raining elements.

Training	Frequency
PT Screen Exam	1 time a calendar month
PT workout	2 times a 7-day period
Swimming workout	1 time a calendar week
Rescue equipment/lifesaving drills	1 time a calendar month
Litter drills	1 time each 6 months
Harness/parachute disentanglement	1 time each 6 months
EMT recurrent classroom training	3 hours per quarter
EMT recurrent practical training	3 hours per quarter
EMT recertification	Every 24 months
Aircraft Vectoring	1 time each 6 months

B.2 Frequency of Required Training Elements (Continued)

The following is the continuation of the frequency of required training elements.

Training	Frequency
Standardization Check	See Chapter 4, COMDTINST
	3710.1, Air Operations Manual
Bloodborne Pathogens	1 time a calendar year
Helo RS Ops (deployments)	6 per quarter (2DD, 2FF, 2
	sling/harness)

B.3 RS Training

Elements

The PT and swimming workouts are designed to maintain the flexibility, strength, and endurance an RS needs to function for 30 minutes while assisting persons in heavy seas. The levels of stress in these workouts allow the operational RS to complete the workout and retain sufficient strength and endurance to stand duty and perform a rescue.

B.3.a Physical Training Screen Exam

NOTE

Exercise descriptions are in Annex D.

(1) **Warm-Up:** 3-minute fast walk, light jog, jog in place, or flutter kick.

NOTE

The intention of the warm-up is to increase the heart rate and warm up the muscles to prepare for the stretches, upper body workout, and cardiovascular conditioning. Performing the warm-up in cold temperatures without cold weather PT clothing may not allow the muscles to warm properly.

B.3.a Physical Training Screen Exam

(2) Pre-Exercise Stretches:

Stretches	Duration/Direction
Neck Flexion	15 Secs. each direction
Shoulder Rotations	5 each direction
Swimmer Strethc	15 Secs
Deltoid Stretch	15 Secs. Left/Right
Tricep Stretch	15 Secs. Left/Right
Sitting Body Twist	15 Secs. Left/Right
Calf Stretch	15 Secs. Left/Right
Inside Hurdlers Stretch	15 Secs. Left/Right
Groin Stretch (Butterfly)	15 Secs.
Lower Back Stretch	15 Secs. Left/Right

(3) Screen Exam Standards:

Exercise	Minimum Standard
Shoulder Width Pushups	50
Sit-ups	60
Pull-ups	5
Chin-ups	5
500 Yard Crawl Swim	Completed within 12 Minutes
25 Yard Underwater Swim	Repeat 4 Times
Buddy Tow	200 Yds. (RS shall use cross
	chest carry or equipment tow.)

Section B. Training Requirements (Continued)

B.3.a Physical Training Screen Exam (Continued)

- (4) The Monthly Physical Training Screen Exam shall be administered by the AST shop supervisor or an RS Flight Examining Board member to ensure a RS is maintaining their physical fitness.
- (5) An RS who do not pass the monthly screen exam or any part of the screen exam shall not perform the duties of an operational RS until he/she is capable of passing the entire screen exam.
- (6) All exercises shall be completed in strict adherence to proper form (IAW Annex D).
- (7) RS shall complete the 200-yard buddy tow.
- (8) RS shall complete the four 25 yard underwater swims consecutively, with a maximum of 60 seconds rest between swims.

B.3.b PT Workout

WARNING

RS shall not exercise to muscle failure on RS duty days

The PT Workout is designed to be completed within a60-minute period. Commands shall provide sufficient time for RS to complete the PT Workout three times per week. Two periods per week shall include the3-minute warm-up, pre- exercise stretches, 20 minutes of cardiovascular training at training heart rate, 3 minutes of cool down and post exercise stretches. One period per week shall be the swim workout.

(1) **Warm-Up:** 3-minute fast walk, light jog, jog in place, or flutter kick.

NOTE

The intention of the warm-up is to increase the heart rate and warm up the muscles to prepare for the stretches, upper body workout, and cardiovascular conditioning. Performing the warm-up in cold temperatures without cold weather PT clothing may not allow the muscles to warm properly.

_B.3.b PT Workout (Continued)

(2) Pre Exercise Stretches:

Stretches	Duration/Direction
Neck Flexion	15 Secs. each direction
Shoulder Rotations	5 each direction
Swimmer Stretch	15 Secs
Deltoid Stretch	15 Secs. Left/Right
Tricep Stretch	15 Secs. Left/Right
Sitting Body Twist	15 Secs. Left/Right
Calf Stretch	15 Secs. Left/Right
Inside Hurdlers Stretch	15 Secs. Left/Right
Groin Stretch (Butterfly)	15 Secs
Lower Back Stretch	15 Secs. Left/Right

(3) Cardiovascular Conditioning: (20 minutes

minimum) Maintain Training Heart Rate (Annex C) to achieve training effect. Swimming is preferred, if facilities and time are available. Examples of non-swim alternatives are: running ,cycling, stationary cycling machine, cross-country ski machine, or stair step machine

(4) **Cool Down:** Perform a 3-minute cool-down walk to transition to the Post-exercise stretches.

(5) Post-Exercise Stretches:

Stretches	Duration/Direction
Tricep	15 Secs. Left/Right
Sitting Toe Touch	15 Secs
Groin Stretch (Butterfly)	15 Secs

Section B. Training Requirements (Continued)

B.3.c Swim Workout

WARNING

RS shall not exercise to muscle failure on RS duty days.

One period per week shall be the swim workout.

(1) Pre Swim Stretches:

Stretches	Duration/Direction
Neck Flexion	15 Secs. each direction
Shoulder Rotations	5 each direction
Swimmer Stretch	15 Secs
Deltoid Stretch	15 Secs. Left/Right
Tricep Stretch	15 Secs. Left/Right
Sitting Body Twist	15 Secs. Left/Right
Calf Stretch	15 Secs. Left/Right
Inside Hurdlers Stretch	15 Secs. Left/Right
Groin Stretch (Butterfly)	15 Secs
Lower Back Stretch	15 Secs. Left/Right

WARNING

Do not hyperventilate prior to underwater swims. Hyperventilation can lead to shallow-water blackout.

(2) Swim Standards: With Swim Suits Only (Goggles optional):

* Maintain Training	Heart Rate to	achieve	training
effect (Annex C).			

B.3.c Swim Work-out (Continued)

The following is the continuation of the swim workout.

Exercises	Duration/Direction
With Swim Suits Only (Goggles	12:00 Minutes (500 Yds.Min)
optional): Crawl Stroke	
With Gear (Mask, Fins, Snorkel)	15:00 Minutes*
Swim (Flutter Kick, Any Stroke)	
Buddy Tow	200 Yards
25 Yd. Underwater Swim	Repeat 4 Times

- (3) RS shall complete the 12-minute crawl stroke swim and 15 minute gear swim consecutively, changing into RS gear, as listed in 5 minutes or less.
- (4) RS shall complete the four 25 yard underwater swims consecutively with a maximum of 60 seconds rest between swims.
- (5) RS shall complete a 200-yard Buddy tow.

B.4 Rescue Equipment and Lifesaving Drills

The following rescue equipment and lifesaving drills shall be completed a minimum of one time during each calendar month(pool or sheltered water).

NOTE

Operational deployments can be used to fulfill this requirement. If minimums are not met, the RS may not deploy operationally until he/she regains currency.

Front surface approach Rear surface approach Underwater approach Rear head-hold escape Front head-hold release Front head-hold escape Spinal highway

B.5 Litte Recovery, Parachute and Harness Disentanglement The following litter recovery, parachute and harness disentanglement drills shall be completed a minimum of one time during each six month period. They shall be completed in appropriate ensemble for area of operations.

WARNING

Parachute and harness disentanglement drills shall be completed in a pool environment only.

NOTE

Operational deployments can be used to fulfill thisrequirement. If minimums are not met, the RS may not deploy operationally until he/she regains currency

- (1) Perform one in water litter recovery.
- (2) Perform one complete disentanglement of an individual in a current type of USN or USAF parachute harness.
- (3) Perform a canopy release/harness removal on each of the remaining current types of USN or USAF parachute harnesses.

B.6 EMT Classroom Training

The following table is a schedule of EMT classroom subjects that shall be completed a minimum of three hours per quarter (i.e. one hour per month).

Month	Subject	
January	Respiratory & cardiac problems	
February	Skull & spine injuries	
March	Emergency childbirth	
April	Diving & near drowning injuries	
May	Sunstroke, heat exhaustion & heat cramps	

Section B. Training Requirements (Continued)

B.6 EMT Classroom Training (Continued) The following is the continuation of the EMT classroom subjects training schedule.

Month	Subject	
June	Burns & soft tissue injuries	
July	Triage & psychological aspects of EMS	
August	Fracture, dislocation & abdominal problems	
September	Hypothermia & other cold injuries	
October	Anatomy & physiology/Blood Pathogens	
November	Patient examination & vital signs	
December	Diabetic emergency, shock/stroke/seizures	

B.7 EMT Practical Training The following table is a schedule of EMT practical subjects that shall be completed a minimum of three hours per quarter (i.e. one hour per month).

NOTE

Operational deployments (EMT skills performed) can be used to fulfill this requirement. If minimums are not met, the RS may not deploy operationally until he/she regains currency

Month	Subject	
January	CPR & oxygen equipment review	
February	Skull & spine injury management	
March	Emergency Childbirth	
April	Diving injury management & CPR review	
May	Heat injury management, EMT equipment inspection & maintenance	

B.7 EMT Practical Training (Continued) The following is the continuation of the EMT practical subjects training schedule.

Month	Subject
*	
June	Burns & soft tissue injury management
July	CPR & oxygen equipment review
August	Fracture & dislocation management
September	Hypothermia & cold injury management EMT equipment
	inspection & maintenance
October	CPR & oxygen equipment review
November	Patient examination & vital signs
December	Diabetic emergency, shock, stroke & seizure management

B.8 EMT Recertification

(Ref. Emergency Medical Services Manual, COMDTINST M16135.4 series)

All CG EMTs must attend and complete a recertification course prior to the expiration of their current certification. The National Registry recertification course at the CG EMT School is preferred, but any DOT nationally registered course will fulfill the requirement The EMT National Registry Board will send a standard form to the EMT to document completed training requirements. This form must be completed and returned as well as completion of recertification course to remain nationally certified. Recurrent EMT training shall be documented IAW Emergency Medical Services Manual, COMDTINST M16135.4 on CG-5550.

B.9 Aircraft Vectoring

Conduct a radio vectoring exercise with a Rotary Wing or Fixed Wing aircraft.

NOTE

Operational deployments requiring aircraft vectoring can be used to fulfill this requirement. If minimums are not met, the RS may not deploy operationally until he/she regains currency.

Section B. Training Requirements (Continued)

B.10 Helicopter **RS** Operations

Deploy from a Helo freefall, direct, sling or harness to water, ice, vessel or vertical surface and recover. Six deployments per quarter (2 direct, 2 sling, 2 freefall). RS shall employ crotch strap during 1 direct deployment recovery using rescue mannequin or qualified training survivor.

NOTE

Operational deployments can be used to fulfill this requirement. If minimums are not met, the RS may not deploy operationally until he/she regains currency.

NOTE

Units are authorized to count RS sling or harness deployments to any suitable land area towards minimums upon the unit commanding officer's determination that conditions beyond the unit's control reasonably preclude a water or vertical surface deployment during the period. These events will count for minimums for Rescue Swimmers, Pilots, and Flight Mechanics. While weather is a primary consideration, other factors such as absence of a safety boat or safety aircraft due to extreme operational tasking may also preclude water deployments for training. As this determination must be made at the end of the period in question, it is imperative that swimmers make use of every opportunity during the quarterly period to conduct their deployments.

B.11 PTThe Screening Requirements for Non-Operational RS following is the quarterly PT screening requirements for all non-operational RS AST's, E-6 and below, regardless of their assignment.

Exercise	Minimum Standard
Pushups	50
Sit-ups	60
Pull-ups	5
Chin-ups	5
Swim 500 Yd., Any Stroke	12:00 Minutes Max

Section B. Training Requirements (Continued)

B.12 Training	The Helicopter Rescue Swimmer Training Record and
Records	Physical Training Screen Exam must be completed and
	maintained by the RS unit for a minimum of 18 months.

STANDARD USCG HELICOPTER RESCUE SWIMMER DEPLOYMENT MESSAGE FORMAT

FM COGARD AIRSTA TO AIG FOUR NINE ZERO THREE BT UNCLAS FOUO//N01330//

SUBJ: RESCUE SWIMMER SAR DEPLOYMENT

- A. COAST GUARD HELICOPTER RESCUE SWIMMER MANUAL, COMDTINST M3710.4
- 1. Date and Local Time of Deployment (30 JUN 94, 1225Q)
- 2. Location of Deployment (25nm E Boston MA, 00-00N 00-00W)
- 3. Aircraft Type and Number (HH-65A, CGNR 6570)
- 4. Weather Best estimate of weather at time and place of deployment (sky conditions visibility, sea state, air temperature, water temperature)
- 5. DEPLOYMENT DATA
- a. Deployment/Recovery Method(s) Used
- b. Equipment problems encountered.
- c. Mishap to Rescue Swimmer, if any.
- 6. SURVIVOR DATA
- a. Number of survivors
- b. Survivor Information: Gender, Age(s) if known
- c. Situation of Survivors on Arrival (in raft, swimming etc.)
- d. Physical Condition upon Recovery
- e. EMT Treatment Provided
- 7. Narrative Description of Rescue Brevity is desired but provide a clear picture of what happened.
- 8. Additional information, Comments or Recommendations.
- 9. Name, Rank, Phone Number of Point of Contact (F.A. Erickson, LCDR, FTS 555-1212)

USCG HELICOPTER RESCUE SWIMMER SAR DEPLOYMENT MESSAGE SAMPLE MESSAGE

FM COGARD AIRSTA KODIAK AK

TO AIG FOUR NINE ZERO THREE

BT

UNCLAS FOUO//N01330//

SUBJ: RESCUE SWIMMER SAR DEPLOYMENT

A. COAST GUARD HELICOPTER RESCUE SWIMMER MANUAL, COMDTINST M3710.4

- 1. 30 JUN 94, 1225Q
- 2. 185NM EAST OF KODIAK AK 570-40N 146-36W
- 3. HH-60J, CGNR 6012
- 4. 2 OVC, VIS 1-2NM, WIND 170/30KTS, SEAS 10FT, OAT 50F, (EST) SWT 40F.
- 5. DEPLOYMENT DATA:
- A. SLING DEPLOYMENT, 5 BASKET RECOVERIES, BARE HOOK OF RESCUE SWIMMER
- B. DRY SUIT LEAKED IN THE FEET
- C. RS STRUCK ON FACE BY DEBRIS; 1" LACERATION ON CHEEK; TREATED UPON RTB
- 6. SURVIVOR DATA:
- A. 5
- B. 1-25M, 2-26M, 3-22F, 4-35F, 5-40M
- C. ALL 5 PERSONS IN RAFT WITH CANOPY, MANUFACTURER AND MODEL UNKNOWN. 4 OF THE FIVE SURVIVORS WERE IN SURVIVAL SUITS, OTHER SURVIVOR IN RAIN SUIT.
- D. SURVIVORS 1 2 3 AND 4 IN GOOD CONDITION, SURVIVOR 5 WAS WET AND SUFFERING FROM HYPOTHERMIA.
- E. PLACED SURVIVOR 5 IN T.R.C.
- 7. A F/V WAS REPORTED TOW AND SINKING 185NM EAST OF KODIAK. 4 OF 5 CREWMEN DONNED SURVIVAL SUITS AND ALL CREWMAN ENTERED RAFT. H-60 LOCATED RAFT AND ELECTED TO DEPLOY SWIMMER TO SPEED RECOVERY AND ELIMINATE NEED TO HOVER OVER RAFT. RS SLING DEPLOYED AND SWAM EACH SURVIVOR AWAY FROM RAFT AND PLACED IN BASKET FOR RECOVERY. WITH ONLY 40 MINUTES OF ON-SCENE FUEL REMAINING, SPEED WAS ESSENTIAL TO RECOVER ALL SURVIVORS IN ONE SORTIE.
- 8. BECAUSE OF HIGH WINDS AND CONFUSED SEA STATE, RECOMMEND USE OF SMOKES FOR RS DEPLOYMENTS TO KEEP TRACK OF WIND DIRECTION. WITHOUT USE OF RS, RESCUE WOULD HAVE TAKEN TWO SORTIES WHICH WOULD HAVE PUT SURVIVORS IN DANGER.
- 9. F.A. ERICKSON, LCDR, FTS 555-1212 BT

A.1 Day Signals The following are standard RS day hand signals

Signal		Meaning
	Raised Arm	I am all right
	Raised arm Thumb up	Move in for pick-up
	Vigorous waving of one arm	In trouble need assistance
	Clinched fists arms crossed overhead	Deploy raft

A.1 Day
Signals .
(Continued)

The following is the continuation of standard RS day hand signals

Signal		Meaning
	Hand held to ear	Monitor radio
	One arm raised and extended vertically with palm open facing forward. The other arm shall be raised so that it crosses the swimmer's head and touches the first arm at the elbow.	Deploy rescue litter
	Both arms extended over the swimmer's head. Palms open facing forward at a 45° angle to the side of the swimmer's head.	Deploy rescue basket

A.1 Day Signals (Continued) The following is the continuation of standard RS day hand signals

Sign	al	Meaning
	Both arms extended over the swimmer's head with fingers interlocked.	Deploy survivors strop

A.2 After Hook-Up to Rescue Hook

The following are after hook-up to rescue hook hand signals.

Signal		Meaning
	Arm raised thumb up	Ready to be hoisted
	Arm raised, clenched fist	Stop hoisting

A.2 After Hook-Up to Rescue Hook (Continued) The following is the continuation of after hook-up to rescue hook hand signals.

Signal		Meaning
	Arm raised thumb down	Lower cable

A.3 Night/Low Visibility Hand Signals

The following are night/low visibility hand signals.

Signal		Meaning
	Swimmer's lighting device (Chemlight) on, arm raised.	I am all right.
	Wave signal device	Move in for pick-up night/low visibility).

__A.3 Night/Low Visibility Hand Signals(Continued) The following is the continuation of night/low visibility hand signals.

Signal		Meaning
	Wave signal device	Alternate move in for pick-up (night/low visibility).
	Strobe on	In trouble, need assistance.

A.4 Direct Deployment Hand Signals

The following are direct deployment hand signals.

Signal	Meaning
Extend arm the bend elbow touch head we open palm.	to Up ith

A.4 Direct Deployment Hand Signals (Continued) The following is the continuation of direct deployment hand signals

Signal	Meaning
Flight Mech. View	Down
With finger pointed down, rotate forearm in horizontal circle.	
Flight Mech. View Sweep horizontal using entire arm.	Level off
Point in direction of desired movement	Move in direction indicated.

Rescue Swimmer Training Heart Rate

AGE	THR	THR
	Swim	Non-
		Swim
19	161	171
20	160	170
21	159	169
22	158	168
23	157	167
24	157	167
25	156	166
26	155	165
27	154	164
28	153	163
29	152	162
30	152	162
31	151	161
32	150	160
33	149	159
34	148	158
35	147	157
36	146	156
37	146	156
38	145	155
39	144	154
40	143	153

AGE	THR	THR
	Swim	Non-
		Swim
41	142	152
42	141	151
43	140	150
44	140	150
45	139	149
46	138	148
47	137	147
48	136	146
49	135	145
50	135	145
51	134	144
52	133	143
53	132	142
54	131	141
55	130	140
56	129	139
57	129	139
58	128	138
59	127	137
60	126	136
61	125	135
62	124	134

A.1 Stretch Descriptions The following table provides stretch descriptions with examples

i <u>ptions</u> .	
Description	Example
Neck Flexion: While standing, lean head to the right for 15 seconds and then to the left for 15 seconds. Turn head to the right and hold for 15 seconds then to the left	
Shoulder Rotations: While standing, roll shoulders to the rear 5 times then to the front 5 times.	

Description	Example
Swimmer Stretch: While standing, place arms behind back and interlace fingers. Bend forward at the waist while raising the arms above the back. Hold for 15 seconds. Release, stand straight.	
Deltoid Stretch: While standing, pull arm horizontally across chest using opposite hand placed on the elbow. Hold for 15 seconds. Repeat for other arm.	

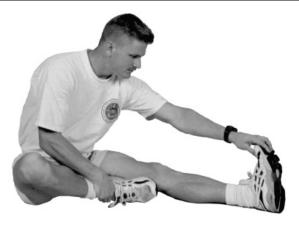
Annex D Stretch and Exercise Description (Continued)

Description	Example
Tricep Stretch: While standing, place the right hand behind the left shoulder. Grasp the right elbow with the left hand. Pull left and down on the elbow to stretch the tricep muscle. Flex the upper body to the left. Hold for 15 seconds. Repeat for other side.	
Sitting Body Twist: While sitting cross the left leg over the right and turn to the left locking your elbow behind the knee. Repeat for the opposite side.	
Calf Stretch: Stand three to four feet from a solid support (wall, post) and lean toward it, supporting ourself with your hands and arms extended. Lower yourself towards the support slowly until you feel the calves stretch. Keep the heels flat on the ground. Hold for 15 seconds.	

Description Inside Hurdlers Stretch:

While sitting on the floor, the right leg is extended straight out from the body. The left leg is flexed at the knee and the left foot is placed on the inside of the right leg. Bend forward at the waist attempting to touch the forehead to the right knee and extend the hands toward the right foot. Hold for 15 seconds. Repeat on the other side.

Example





Groin Stretch: While sitting on the floor. Both knees are flexed so the soles of the feet are together. The elbows are placed on the knees. The hands are placed on the ankles. The knees are pressed towards the floor. Hold for 15 seconds.



WARNING

Do not grasp the feet or rotate them while doing this stretch.

Description Lower Back Stretch: Lay on your back. Flex the right leg and grasp the midthigh with both hands. Gently pull knee to chest, while assuring that the left calf remains in contact with the floor. Hold for 15 seconds. Repeat for the other side.

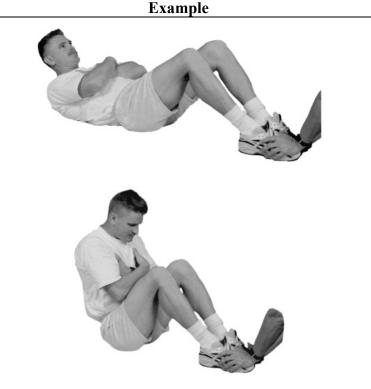
A.2 Exercise Descriptions

The following table provides exercise descriptions with examples.

Description	Example
Pushups: Assume the front lean and rest position. Place your hands approximately shoulder width apart. Your back, buttocks, and legs must be straight from head to heel. Begin the exercise by lowering your entire body as a unit until your elbows are bent at 90 degrees. Return to the start position by locking your elbows.	

Description

Sit-ups: Start the exercise by lying with your back on the floor and your thighs flexed at 45 degrees to the body plane. The knees are flexed at 90 degrees. Forearms are crossed across the chest. The feet are held by a partner or placed under a bar. Raise the body up and forward to the vertical position. After you have reached the vertical position, lower your body back to the ground. Only your lower back need touch the ground before the repetition is repeated.



Pull-ups: Hang from the bar with the arms fully extended, palms facing forward. Begin by pulling yourself up until your chin is above the level of the bar. Lower yourself until the arms are fully extended, repeat the proper number of repetitions.

NOTE: Exaggerated body or knee movement that assists in getting the chin above the bar is not acceptable.



Description Example **Chin-ups:** Hang from the bar with the arms fully extended, palms facing backward. Begin by pulling yourself up until your chin is above the level of the bar. Lower yourself until arms are fully extended, repeat the proper number of repetitions **NOTE:** *Exaggerated body* or knee movement that assists in getting the chin above the bar is not acceptable.

Annex E Rescue Swimmer Training "Survivor" Syllabus

TRAINING 'SURVIVOR' BRIEF/QUESTIONN	AIRE	DC I	NITIALO
1. Do you have any fear of the water?	Yes		NITIALS
2. Do you have any lower back problems?	Yes	No	
3. Do you have problems treading water?	Yes	_ No	
4. If needed, complete passenger/egress brief for specific aircraft ty	ype		
5. Explain particular safety hazards, i.e.: H-60 ext. fuel tank, H-65	sliding door tra	ck	
6. Explain use of RS harness.			
7. Demonstrate all RS hand signals.			
8. Explain Sling/Harness deployment.			
9. Explain Basket recovery.			
10. Explain Sling Augmented Double Pickup (SADPU)			
11. Explain Military Aviator Double Pickup (MADPU).			
12. Explain Direct Deployment and Quick Strop Procedures			
13. Explain Emergency Pickup/Bare hook recovery.			
14. Explain effects of rotorwash.			
15. Flight brief.			
Signature of survivor/Date	Signature of R	RS/Date	

REMARKS:

POOL PHASE

NOTE

When completing pool phase, a minimum of two swimmers must be present. While in the pool, complete the following:

1.	Survivor, in swimsuit, will swim fifty yards.	
2.	Survivor, in swimsuit, will tread water for one minute.	
N(OTE	
	Failure to complete above tasks disqualifies survivor from participation in RS training operations.	
3.	Demonstrate and have survivor complete clearing of mask and snorkel	
4.	Demonstrate and have survivor complete inflation of TRISAR	
5.	Demonstrate and have survivor complete inflation and boarding of LRU-18	
6.	Demonstrate cross-chest and cross chest control carries.	
7.	Demonstrate harness hookup for MADPU.	
8.	Demonstrate quick strop application for direct deployment.	
9.	Demonstrate placing survivor in basket.	
S	Signature of Survivor/ Date Signature of RS/ Date	

RESCUE SWIMMER'S SYLLABUS
QUALIFICATION REQUIREMENTS
Upon satisfactory completion of this syllabus, a member will be qualified as a Coast Guard Rescue Swimmer. This syllabus provides the minimum skills and knowledge required to perform Rescue Swimmer duties from a helicopter
has completed the Rescue Swimmer's Training us and is qualified as a Rescue Swimmer on the HH- Helicopter.
as and is quantified as a research Swimmer on the Tiff frencopter.
Instructor/Date

The goal of this program is to provide proficient, safe and standard Rescue Swimmers .Successful rescue missions are accomplished through the coordination of skills between the pilots and crew.

You, as a Rescue Swimmer, must have a working knowledge of the equipment used aboard the helicopter. You must be familiar with and accomplished in the professional skills, techniques and procedures used on rescue missions.

This syllabus was developed by the Rescue Swimmer Training Branch at Aviation Training Center Mobile, AL. Commanding Officers may supplement this syllabus, as required, based upon local mission requirements and operational limitations

Any questions or comments regarding this syllabus should be addressed to the Rescue Swimmer Training Branch at ATC Mobile, (334) 441-6836.

A qualified Rescue Swimmer instructor must supervise you as you complete this syllabus to the Standard level. The instructor will indicate that an item has been Demonstrated (D), Practiced (P), accomplished to the Intermediate level (I), or accomplished to the Standard level (S). The instructor will also make written comments concerning your progress through the course and areas of needed improvement.

The grade received for each task is based upon your proficiency in accomplishing that task relative to the Coast Guard's "Standard" performance. The "Standard", or ability to perform the task, does not change with the designation held or being sought.

The Coast Guard's grading standards are described below. The required level of performance (S,I,P, or D) will be shown on the syllabus for each task.

(1) S - STANDARD - <u>STANDARD PERFORMANCE LEVEL:</u>

The student performed the task properly, accurately, and with complete regard for safety The task was performed with out hesitation with few minor errors. The student must be able to maintain this proficiency without further instruction

(2) I - INTERMEDIATE - INTERMEDIATE PERFORMANCE LEVEL:

No Critical errors. The student demonstrated a thorough understanding of the mechanics techniques, and procedures involved in the task. The task was performed with no critical errors, but other errors kept the student from achieving the "Standard" performance level

FORWARD (Continued)

(3) P - PRACTICED:

The student was pre-briefed and practiced the task. Performance level was not yet to the "I" level.

(4) D - DEMONSTRATED - DEMONSTRATED BY THE INSTRUCTOR:

Demonstrated by an instructor. Used to introduce a new maneuver or task to a student through demonstration.

COMMENTS SECTION

- a. Purpose: The comments are intended to provide an accurate, fair, complete and consistent summary of each training session. The comments should provide sufficient detail to be useful to the student, and other instructors
- b. Areas addressed:
- (1) The specific task performance evaluation (grades)
- (2) Headwork/judgement
- (3) Procedural knowledge
- (4) In water skills
- (5) Rescue Swimmer duties
- (6) Crew coordination
- (7) Attitude, professionalism, motivation
- (8) Recommendations to the student (techniques, areas to study, etc.)
- (9) Recommendations for additional training or syllabus reduction due to superior performance

c. Guidelines:

(1) Level "P" and "I" performance by a student during <u>initial or upgrade</u> qualification may have, but need not have specific comments; however, appropriate discussion items on progress should be included for each training evaluation

FORWARD (Continued)

- (2) Level "P" or "I" performance during initial or upgrade qualification which is below the required performance level after a student has previously achieved the required level for specific item should be accompanied by comments dentifyin ig the problem areas.
- (3) Anything noticeable which indicates a need for improvement either in general, or in specific maneuvers.
- (4) All level "P" and "I" performance for an item which requires an "S" on all end of syllabus evaluations should be accompanied by a detailed description of the performance.

GLOSSARY OF TERMS

- a. <u>Critical Errors:</u> Any error which could jeopardize the flight or the successful completion of the task.
- b. <u>Minor Errors</u>: Errors which detract from the standard but in no way jeopardize the flight or successful completion of the task.
- c. <u>Task:</u> The maneuver or activity to be performed, i.e. Free Fall or Sling deployment.
- d. <u>Understanding:</u> The student has grasped the intended meaning and can apply basic reasoning to discuss the topic.

Revised: November 1999
 Crewmember

SIGN-OFF PROCEDURES

The following example will explain how the Rescue Swimmer syllabus will be properly signed off for completion and shows how the following terms will be used:

Required Level - The level at which the item shall be performed before completion of the task.

> Training Evolution - Three training sessions are listed in this syllabus This is used in case the student does not complete the assigned task to the required level.

" X -This is used whenever the item was not attempted during the training session.

REQUIRED LEVEL

	1	2	3
[S]	S		
[S]	X P	S	
[P]	P		
[P]	D	P	
[I]	P	I	
[I]	I		
[D]	D X		·
[S]	X	X	S

TRAINING EVOLUTION

In the first (1) training evolution, there were items accomplished by the student to the required level indicated by the appropriate letter designation. If the student does not complete the task to the satisfaction of the instructor, then the appropriate letter would be filled in the block. If the trainee does not attempt the task at all, then the letter "X" would be used.

In the second (2) training evolution, there were items completed to their required level and the appropriate letter designation used. Only those items that did NOT meet the required level in the first session need to be evaluated and initialed. There was still one item not attempted in this evolution.

The letter "X" would be used again to show that this item still needs to be completed . In the third (3) training evolution, the final item was completed and the appropriate letter designation entered. That completes this part of the student's syllabus

SIGN-OFF PROCEDURES (Continued)

The comments section would be used to note specific areas needing improvement. can then be given direct attention during the next session	Those areas
COMMENTS	
Instructor/Date	
Comments:	

GROUND PHASE

I. INTRODUCTION: The ground phase provides you with a working knowledge of the aircraft equipment and Rescue Swimmer procedures required when working in the HH-_____ Helicopter.

II. OBJECTIVES

- A. After completing this phase, the student will be able to:
 - 1. Identify and locate listed aircraft equipment.
 - 2. Explain the use and purpose of the aircraft's rescue and survival equipment.
 - 3. Perform, from a static helicopter, all Rescue Swimmer deployments and recoveries.

NOTE

The ground phase must be completed before the flight phase is started.

equ	ipment or procedures:	1 2 3	
A. B.	SAR Board Equipment Rescue Equipment: 1. Basket 2. Litter 3. Sling	/S/ / / /S/ / / /S/ / / /S/ / /	/ / / / /
C. Por D E. F. G. H. I. J. K L. M. N. O. P. Q. R.	Aircrew Safety Harness (gunner's belt) Datum Marker Buoy Float Lights First Aid Kits Flashlights Fire Extinguisher LPU-26/PE Life Vest Life raft(s) Boom Crank Heed belt Searchlight ICS Controls, and Procedures Hoist Controls, Shear Switch and Hot Mic Procedures for Approaching and Exiting A/C Search Procedures	/S/ / /	///////////////////////////////////////
II. COMM	ENTS		
Instructor/Sig Comments:			

GROUND TWO

Requirement	Helicopter Hydraulic Jenny Hoist Operator Unit Instructor	
I. The student wil following procedu	l demonstrate knowledge of the res:	
B. Rescue Swin 1. Deploym a. Free F b. Sling/ c. Direct (1) Qt (2) Di (3) Pr (4) Ve (5) De (6) Pr (7) Di	VIGHT) y signals (DAY & NIGHT) nmer Procedures: lents Fall/	1 2 3 /D / / / / /D / / / / /D / / / / D / / / /
d. Militare. SADP 3. Emergenc	e basket ency pickup (BARE HOOK TO RS HARNESS) ry aviator double pickup(OPEN SLING ON LARGE HOOK) U ies:	/D / / / / / / D / / / / / / D / / / /
b. Leavin	rimmer (DAY/NIGHT) g swimmer on scene	/ D / / / / / D / / / /
II. COMMENTS Instructor/Signatur Comments	re/Date	

GROUND TWO (Continued) III. PRACTICE-with static helicopter: A. Deployments 1 2 3 1. Free Fall /P / / / 2. Sling/Harness /P / / / 3. Direct Deployment: /P / / / a. Quick strop /P / / / b. Direct deployment hand signals /P / / / c. Procedure for entering the aircraft with surv. /P / / / d. Vertical surface approach procedures /P / / / e. Double lift for hypothermic survivor /P / / / f. Proper hoist hook sequence /P / / / g. Direct deployment procedures video /P / / / h. Physical grip (emergencies only) /P / / / B. Recoveries: 1. Emergency pickup (BARE HOOK TO RS /P / / / HARNESS TO DEMONSTRATE HARNESS CAPABILITY) 2. Military aviator double pickup / SADPU (OPEN SLING ON LARGE HOOK) /P / / / /P //// 3. Harness IV. **COMMENTS-Required** Instructor/Signature/Date Comments: Instructor/Signature/Date Comments: Instructor/Signature/Date____ Comments:

FLIGHT PHASE

I. INTRODUCTION

The flight phase is designed to help you achieve proficiency, standardization, and safety when acting as a Rescue Swimmer.

II. OBJECTIVES

- A. After completing this phase, the student will be able to:
 - 1. Explain hoist operation and standard hoisting terminology.
 - 2. Assist the Flight Mechanic during boat hoists.
 - 3. Perform all Rescue Swimmer deployments and recoveries, both day and night.

FLIGHT ONE LAND

I. FLIGHT PREPARATION

WARNING

SIMULATED HOIST EMERGENCIES SHALL NOT BE CONDUCTED DURING LIVE HOISTS.

	1 2 3
A. BRIEFING - discuss:	15 / / /
1. Aircraft in general	/D/ / / /
2. Flight controls	/D/ / /
3. Crew duties	/D/ / /
4. Hoisting	/D/ / /
II. FLIGHT	
A. Pilot will demonstrate and explain:	
1. Flight controls	/D/ / /
2. AFCS off flight	/D/ / /
3. All cockpit instruments	/D/ / /
4. Circuit breakers	/D/ / /
5. AN/ Navigation Equipment	/D/ / /
6. Single engine landings	/D / / /
B. Flight Mechanic will demonstrate and explain:	
1. Hoist operation- with standard phraseology	/D/ / /
2. Use of hydraulic override	/D/ / /
3. Student will assist instructor on two basket hoists	/S/ / / /
4. FM will lower and hoist student once in	
sling and basket	/S/ / /
III. DEBRIEFING - discuss:	
	(8////
A. Day's flight	/S/ / / /
B. Review of SAR equipment	/S/ / / /
C. Fouled cable procedure	/S/ / / /
D. Search procedures	/S/ / / /
E. Refueling	/S/ / / /
IV. COMMENTS-Required	
Instructor Signature/Date	
Comments:	
Instructor Signature/Data	
Instructor Signature/Date Comments:	<u> </u>
Comments.	

FLIGHT TWO DAY BOAT

I. FLIGHT PREPARATION

WARNING

SIMULATED HOIST EMERGENCIES SHALL NOT BE CONDUCTED DURING LIVE HOISTS.

A. BRIEFING - discuss:	1 2 3
1. Hoisting to a boat with and without the use of a trail line.	/S/ / / /
2. Being hoisted to vsl via sling with trail line & quick disconnect.	/S/ / / /
3. Trail line tending.	
II. FLIGHT	
A. Student will observe boat hoists from cabin	./S// / /
B. Flight Mechanic will deploy student via trail line	. /S// / /
C. Student will tend trail line during hoists to boat.	/S/ / / /
D. Flight mechanic will hoist student from boat using rescue basket. /S/ / /	
W. DEDDVERDIG . II	
III. DEBRIEFING - discuss:	10.1.1.1.1
A. Day's flight	/S/ / / /
B. Passenger briefing	/S/ / / /
C. Signaling:	
1. Signal mirror	/S/ / / /
2. MK-124 signal flare	/S/ / / /
IV. COMMENTS Deguined	
IV. COMMENTS-Required	
Instructor Signature/Date	
Comments:	
Instructor Signature/Date	
Comments:	
Instructor Signature/Date	
Comments:	

FLIGHT THREE DAY WATER

I. FLIGHT PREPARATION

WARNING

SIMULATED HOIST EMERGENCIES SHALL NOT BE CONDUCTED DURING LIVE HOISTS.

A. BRIEFING - discuss:	1 2 3
1. Rescue Swimmer hand signals	/S/ / / /
2. Lost Swimmer procedures	/S/ / / /
3. Direct Deployment operations	/S/ / / /
II. FLIGHT	
A. Perform:	
 Free Fall deployment with basket pickup for survivor and swimmer. 	/S/ / / /
 Sling deployment with basket pickup for survivor and emergency pickup for swimmer BARE HOOK TO RS (HARNESS OR BASKET). 	/S/ / / /
3. Free Fall deployment w/military aviator double pickup (OPEN SLING ON LARGE HOOK) / SADPU	/S/ / / /
. 4. Direct Deployment to the water w/conscious survivor.	/S/ / / /
Direct Deployment to the water, using a physical grip pickup to ten feet above water, lowered back to water	
complete DD of an unconscious survivor. (crotch strap).	/S/ / / /
6. Direct Deployment w/ Double lift recovery w/cantenary.	/S/ / / /
III. DEBRIEFING - discuss:	
A. Day's flight	/S/ / / /
B. Equipment maintenance	/S/ / / /
C. Review hand signals	/S/ / / /
IV. COMMENTS-Required	
Instructor Signature/Date	
Comments:	
Instructor Signature/Date	
Comments:	
Instructor Signature/Date	
Comments	

FLIGHT FOUR NIGHT WATER & QUALIFICATION

I. FLIGHT PREPARATION

WARNING

SIMULATED HOIST EMERGENCIES SHALL NOT BE CONDUCTED DURING LIVE HOISTS.

NOTE

For night relocation training Rescue Swimmer will be in one-man life raft within sight of surface vessel. Surface vessel will have all lights out

1	A. BRIEFING - discuss:		1	2	3
	1. Rescue Swimmer hand signals	/S/	/	/	/
	2. Night emergency signals	/S/	/	/	/
	3. Night Rescue Swimmer operations	/S/	/	/	/
	4. Rigging and use of chemical lights	/S/	/	/	/
	FLIGHT				
	A. Perform				
	1. Sling deployment with basket pickup for.	/S/	/	/	/
	survivor and swimmer				
	2. Sling deployment with basket pickup for	/S/	/	/	/
	survivor and emergency pickup for				
	swimmer (BARE HOOK TO RS HARNESS OR BASKET).				
	3. Sling deployment with military aviator	/S/	/	/	/
	double pickup (OPEN SLING ON LARGE HOOK).				
	4. Direct Deployment unconscious survivor	/S/			
	5. Direct Deployment w/double lift recovery	/S/	/	/	/
	6. Night relocation:				
	a. Using strobe light	/S/			
	b. Using MK-124 signal flare	/S/			
	c. Using radio to vector aircraft	/S/	/	/	/
III.	DEBRIEFING - discuss:				
	A. Night's flight	/S/			
	B. Equipment maintenance	/S/	/	/	/
IV.	COMMENT-Required				
Inst	cructor Signature/Date				
Cor	mments:				

Annex F Rescue Swimmer Flight Syllabus (Continued)	
FLIGHT FOUR NIGHT WATER & QUALIFICATION	(Continued)
Instructor Signature/Date Comments:	
Instructor Signature/DateComments:	

VERTICAL SURFACE QUALIFICATION OPTIONAL

I. FLIGHT PREPARATION

WARNING

SIMULATED FLIGHT EMERGENCIES SHALL NOT BE CONDUCTED DURING LIVE HOISTS

A. Briefing - discuss:			1 2	3
Direct deployment equipment	/S/	/	/	/
2. Direct deployment hand signals	/S/	/	/	/
3. Emergency signals and Procedures	/S/	/	/	/
4. Direct Deployment operations	/S/	/	/	/
II. FLIGHT				
A. Perform:				
1. Direct Deployment to a vertical surface, using cliff walking				
techniques complete a DD of a rescue mannequin facing toward				
the RS.	/S/	/	/	/
2. Direct Deployment to a vertical surface, using cliff walking				
techniques complete a DD of a rescue mannequin facing				
away from the RS	. /S/	/	/	/
NOTE				
If a vertical surface is not available in a geographical area it is not required to completed and shall be noted in the comments section of this syllabus	be			
III. DEBRIEFING - discuss:				
A. Post Flight Gear	/S/			
B. Review Hand Signals	/S/	/	/	/
IV. COMMENTS-Required				
Instructor/Signature/Date				
Comments:				
Instructor/Signature/Date				
Comments:				
Instructor/Signature/Date				
Comments:				

- ABBREVIATED TRANSITION SYLLABUS FOR THE HH AIRCRAFT
This syllabus is intended for Rescue Swimmers who are currently qualified as a Rescue Swimmer in the HH Commandant (G-OAV) has determined that a minimum of one daylight swimmer deployment flight is necessary to qualify each swimmer prior to operational deployments from the HH The Unit's Commanding Officer may require additional day or night flights for the purpose of enhancing safety and HH operational familiarization.
I. OBJECTIVES
A. After completing the ground phase, the swimmer will be able to:
1. Perform, from a static helicopter, all Rescue Swimmer deployments, and recoveries.
2. Complete emergency egress training in type aircraft.
NOTE
The ground phase must be completed before the flight phase is started.
has completed the HH has completed the HH Rescue Swimmer Transition Syllabus and is qualified as a RESCUE SWIMMER on the HH Helicopter.

Instructor

Annex F Rescue Swimmer Flight Syllabus (Continued)

Date

TRANSITION SYLLABUS GROUND PHASE

Hoist Operator Unit Instructor I. The student will demonstrate knowledge of the following procedures: A. Signals: 1	Requirement: Helicopter	
Unit Instructor I. The student will demonstrate knowledge of the following procedures: A. Signals: 1 2 3 1. Hand signals (DAY) 2. Signals (NIGHT) 3. Emergency signals (DAY & NIGHT) B. Rescue Swimmer Procedures: 1. Deployments: a. Identify snag hazards b. Free Fall c. Sling 70/ / / 2. Recoveries: a. Rescue Basket b. Litter c. Emergency pickup (BARE HOOK TO RS HARNESS) d. Military aviator double pickup (OPEN SLING ON LARGE HOOK) c. Available cabin handholds 3. Emergencies: a. Lost swimmer (DAY/NIGHT) b. Leaving swimmer on scene II. PRACTICE - with static helicopter: A. Deployments: 1. Free Fall 2. Sling B. Recoveries: 1. Emergency pickup (BARE HOOK TO RS HARNESS TO DEMONSTRATE HARNESS CAPABILITY) 2. Military aviator double pickup (OPEN SLING ON LARGE HOOK) RS HARNESS TO DEMONSTRATE HARNESS CAPABILITY) 2. Military aviator double pickup (OPEN SLING ON LARGE HOOK) (OPEN SLING ON LARGE HOOK TO RS HARNESS TO DEMONSTRATE HARNESS CAPABILITY) 2. Military aviator double pickup (OPEN SLING ON LARGE HOOK) III. Complete Emergency Egress training in type aircraft III. COMMENTS-Required III. COMMENTS-Required III. COMMENTS-Required III. COMMENTS-Required III. COMMENTS-Required Instructor/Signature/Date	Hydraulic Jenny	
I. The student will demonstrate knowledge of the following procedures: A. Signals: 1. Hand signals (DAY) 2. Signals (NIGHT) 3. Emergency signals (DAY & NIGHT) B. Rescue Swimmer Procedures: 1. Deployments: a. Identify snag hazards b. Free Fall c. Sling 2. Recoveries: a. Rescue Basket b. Litter c. Emergency pickup (BARE HOOK TO RS HARNESS) d. Military aviator double pickup (OPEN SLING ON LARGE HOOK) 3. Emergencies: a. Lost swimmer (DAY/NIGHT) b. Leaving swimmer on scene 1. PRACTICE - with static helicopter: A. Deployments: 1. Free Fall 2. Sling B. Recoveries: 1. Emergency pickup (BARE HOOK TO RS HARNESS TO DEMONSTRATE HARNESS CAPABILITY) 2. Military aviator double pickup (OPEN SLING ON LARGE HOOK) 11. PRACTICE - with static helicopter: A. Deployments: 1. Emergency pickup (BARE HOOK TO RS HARNESS TO DEMONSTRATE HARNESS CAPABILITY) 2. Military aviator double pickup (OPEN SLING ON LARGE HOOK) PP / / / III. Complete Emergency Egress training in type aircraft III. Communication of the pickup (OPEN SLING ON LARGE HOOK) III. Communication of the pickup (OPEN SLING ON LARGE HOOK) III. Communication of the pickup (OPEN SLING ON LARGE HOOK) III. Communication of the pickup (OPEN SLING ON LARGE HOOK) III. Communication of the pickup (OPEN SLING ON LARGE HOOK) III. Communication of the pickup (OPEN SLING ON LARGE HOOK) III. Communication of the pickup (OPEN SLING ON LARGE HOOK) III. Communication of the pickup (OPEN SLING ON LARGE HOOK) III. COMMENTS-Required Instructor/Signature/Date	•	
A. Signals:	Unit Instructor	
1. Hand signals (DAY)	I. The student will demonstrate knowledge of the following procedures:	
2. Signals (NIGHT) 3. Emergency signals (DAY & NIGHT) B. Rescue Swimmer Procedures: 1. Deployments: a. Identify snag hazards b. Free Fall c. Sling 2. Recoveries: a. Rescue Basket b. Litter c. Emergency pickup (BARE HOOK TO RS HARNESS) d. Military aviator double pickup (OPEN SLING ON LARGE HOOK) 3. Emergencies: a. Lost swimmer (DAY/NIGHT) b. Leaving swimmer on scene II. PRACTICE - with static helicopter: A. Deployments: 1. Free Fall 2. Sling B. Recoveries: 1. Emergency pickup (BARE HOOK TO RS HARNESS TO DEMONSTRATE HARNESS CAPABILITY) 2. Military aviator double pickup (OPEN SLING ON LARGE HOOK) B. Recoveries: 1. Emergency pickup (BARE HOOK TO RS HARNESS TO DEMONSTRATE HARNESS CAPABILITY) 2. Military aviator double pickup (OPEN SLING ON LARGE HOOK) III. Complete Emergency Egress training in type aircraft III. Complete Emergency Egress training in type aircraft III. COMMENTS-Required III. COMMENTS-Required Instructor/Signature/Date	A. Signals:	1 2 3
3. Emergency signals (DAY & NIGHT) B. Rescue Swimmer Procedures: 1. Deployments: a. Identify snag hazards b. Free Fall c. Sling 2. Recoveries: a. Rescue Basket b. Litter c. Emergency pickup (BARE HOOK TO RS HARNESS) d. Military aviator double pickup (OPEN SLING ON LARGE HOOK) e. Available cabin handholds 3. Emergencies: a. Lost swimmer (DAY/NIGHT) b. Leaving swimmer on scene II. PRACTICE - with static helicopter: A. Deployments: 1. Free Fall 2. Sling B. Recoveries: 1. Emergency pickup (BARE HOOK TO RS HARNESS TO DEMONSTRATE HARNESS CAPABILITY) 2. Military aviator double pickup (OPEN SLING ON LARGE HOOK) III. Complete Emergency Egress training in type aircraft III. Complete Emergency Egress training in type aircraft III. COMMENTS-Required III. COMMENTS-Required Instructor/Signature/Date		
B. Rescue Swimmer Procedures: 1. Deployments: a. Identify snag hazards b. Free Fall c. Sling C. Sling D. J.		
1. Deployments: a. Identify snag hazards b. Free Fall c. Sling 2. Recoveries: a. Rescue Basket b. Litter c. Emergency pickup (BARE HOOK TO RS HARNESS) d. Military aviator double pickup (OPEN SLING ON LARGE HOOK) e. Available cabin handholds 3. Emergencies: a. Lost swimmer (DAY/NIGHT) b. Leaving swimmer on scene II. PRACTICE - with static helicopter: A. Deployments: 1. Free Fall 2. Sling B. Recoveries: 1. Emergency pickup (BARE HOOK TO RS HARNESS TO DEMONSTRATE HARNESS CAPABILITY) 2. Military aviator double pickup (OPEN SLING ON LARGE HOOK) III. Complete Emergency Egress training in type aircraft JP/ / / III. Complete Emergency Egress training in type aircraft JP/ / / III. COMMENTS-Required III. COMMENTS-Required III. COMMENTS-Required III. COMMENTS-Required III. COMMENTS-Required		/D/ / / /
a. Identify snag hazards b. Free Fall c. Sling 2. Recoveries: a. Rescue Basket b. Litter c. Emergency pickup (BARE HOOK TO RS HARNESS) d. Military aviator double pickup (OPEN SLING ON LARGE HOOK) c. Available cabin handholds 3. Emergencies: a. Lost swimmer (DAY/NIGHT) b. Leaving swimmer on scene II. PRACTICE - with static helicopter: A. Deployments: 1. Free Fall 2. Sling B. Recoveries: 1. Emergency pickup (BARE HOOK TO RS HARNESS TO DEMONSTRATE HARNESS CAPABILITY) 2. Military aviator double pickup (OPEN SLING ON LARGE HOOK) III. Complete Emergency Egress training in type aircraft JP/ / / III. Complete Emergency Egress training in type aircraft JP/ / / III. COMMENTS-Required Instructor/Signature/Date		
b. Free Fall c. Sling C. Recoveries: a. Rescue Basket b. Litter c. Emergency pickup (BARE HOOK TO RS HARNESS) d. Military aviator double pickup (OPEN SLING ON LARGE HOOK) e. Available cabin handholds 3. Emergencies: a. Lost swimmer (DAY/NIGHT) b. Leaving swimmer on scene II. PRACTICE - with static helicopter: A. Deployments: 1. Free Fall 2. Sling B. Recoveries: 1. Emergency pickup (BARE HOOK TO RS HARNESS TO DEMONSTRATE HARNESS CAPABILITY) 2. Military aviator double pickup (OPEN SLING ON LARGE HOOK) III. Complete Emergency Egress training in type aircraft III. Complete Emergency Egress training in type aircraft III. COMMENTS-Required Instructor/Signature/Date	± 7	
c. Sling 2. Recoveries: a. Rescue Basket b. Litter c. Emergency pickup (BARE HOOK TO RS HARNESS) d. Military aviator double pickup (OPEN SLING ON LARGE HOOK) e. Available cabin handholds 3. Emergencies: a. Lost swimmer (DAY/NIGHT) b. Leaving swimmer on scene II. PRACTICE - with static helicopter: A. Deployments: 1. Free Fall 2. Sling B. Recoveries: 1. Emergency pickup (BARE HOOK TO RS HARNESS TO DEMONSTRATE HARNESS TO DEMONSTRATE HARNESS CAPABILITY) 2. Military aviator double pickup (OPEN SLING ON LARGE HOOK) III. Complete Emergency Egress training in type aircraft /P/ / / III. COMMENTS-Required Instructor/Signature/Date		
2. Recoveries: a. Rescue Basket b. Litter c. Emergency pickup (BARE HOOK TO RS HARNESS) d. Military aviator double pickup (OPEN SLING ON LARGE HOOK) e. Available cabin handholds 3. Emergencies: a. Lost swimmer (DAY/NIGHT) b. Leaving swimmer on scene II. PRACTICE - with static helicopter: A. Deployments: 1. Free Fall 2. Sling B. Recoveries: 1. Emergency pickup (BARE HOOK TO RS HARNESS TO DEMONSTRATE HARNESS CAPABILITY) 2. Military aviator double pickup (OPEN SLING ON LARGE HOOK) III. Complete Emergency Egress training in type aircraft JP / / / III. COMMENTS-Required Instructor/Signature/Date		
a. Rescue Basket b. Litter c. Emergency pickup (BARE HOOK TO RS HARNESS) d. Military aviator double pickup (OPEN SLING ON LARGE HOOK) e. Available cabin handholds 3. Emergencies: a. Lost swimmer (DAY/NIGHT) b. Leaving swimmer on scene II. PRACTICE - with static helicopter: A. Deployments: 1. Free Fall 2. Sling B. Recoveries: 1. Emergency pickup (BARE HOOK TO RS HARNESS TO DEMONSTRATE HARNESS CAPABILITY) 2. Military aviator double pickup (OPEN SLING ON LARGE HOOK) III. Complete Emergency Egress training in type aircraft /P/ / / III. COMMENTS-Required Instructor/Signature/Date	<u> </u>	/D/ / /
b. Litter c. Emergency pickup (BARE HOOK TO RS HARNESS) d. Military aviator double pickup (OPEN SLING ON LARGE HOOK) e. Available cabin handholds 3. Emergencies: a. Lost swimmer (DAY/NIGHT) b. Leaving swimmer on scene II. PRACTICE - with static helicopter: A. Deployments: 1. Free Fall 2. Sling B. Recoveries: 1. Emergency pickup (BARE HOOK TO RS HARNESS TO DEMONSTRATE HARNESS CAPABILITY) 2. Military aviator double pickup (OPEN SLING ON LARGE HOOK) III. Complete Emergency Egress training in type aircraft /P/ / / III. COMMENTS-Required Instructor/Signature/Date		/D / / / /
c. Emergency pickup (BARE HOOK		
TO RS HARNESS) d. Military aviator double pickup (OPEN SLING ON LARGE HOOK) e. Available cabin handholds 3. Emergencies: a. Lost swimmer (DAY/NIGHT) b. Leaving swimmer on scene II. PRACTICE - with static helicopter: A. Deployments: 1. Free Fall 2. Sling B. Recoveries: 1. Emergency pickup (BARE HOOK TO RS HARNESS TO DEMONSTRATE HARNESS CAPABILITY) 2. Military aviator double pickup (OPEN SLING ON LARGE HOOK) III. Complete Emergency Egress training in type aircraft /P/ / / III. COMMENTS-Required Instructor/Signature/Date		/D/ / / /
d. Military aviator double pickup (OPEN SLING ON LARGE HOOK) e. Available cabin handholds 3. Emergencies: a. Lost swimmer (DAY/NIGHT) b. Leaving swimmer on scene II. PRACTICE - with static helicopter: A. Deployments: 1. Free Fall 2. Sling B. Recoveries: 1. Emergency pickup (BARE HOOK TO RS HARNESS TO DEMONSTRATE HARNESS CAPABILITY) 2. Military aviator double pickup (OPEN SLING ON LARGE HOOK) III. Complete Emergency Egress training in type aircraft /P/ / / III. COMMENTS-Required Instructor/Signature/Date		/D/ / /
(OPEN SLING ON LARGE HOOK) e. Available cabin handholds 3. Emergencies: a. Lost swimmer (DAY/NIGHT) b. Leaving swimmer on scene II. PRACTICE - with static helicopter: A. Deployments: 1. Free Fall 2. Sling B. Recoveries: 1. Emergency pickup (BARE HOOK TO RS HARNESS TO DEMONSTRATE HARNESS CAPABILITY) 2. Military aviator double pickup (OPEN SLING ON LARGE HOOK) III. Complete Emergency Egress training in type aircraft III. COMMENTS-Required Instructor/Signature/Date	· · · · · · · · · · · · · · · · · · ·	/ D / / / /
e. Available cabin handholds 3. Emergencies: a. Lost swimmer (DAY/NIGHT) b. Leaving swimmer on scene II. PRACTICE - with static helicopter: A. Deployments: 1. Free Fall 2. Sling B. Recoveries: 1. Emergency pickup (BARE HOOK TO RS HARNESS TO DEMONSTRATE HARNESS CAPABILITY) 2. Military aviator double pickup (OPEN SLING ON LARGE HOOK) III. Complete Emergency Egress training in type aircraft III. COMMENTS-Required Instructor/Signature/Date	1 1	/D/ / /
3. Emergencies: a. Lost swimmer (DAY/NIGHT) b. Leaving swimmer on scene II. PRACTICE - with static helicopter: A. Deployments: 1. Free Fall 2. Sling B. Recoveries: 1. Emergency pickup (BARE HOOK TO RS HARNESS TO DEMONSTRATE HARNESS CAPABILITY) 2. Military aviator double pickup (OPEN SLING ON LARGE HOOK) III. Complete Emergency Egress training in type aircraft III. COMMENTS-Required Instructor/Signature/Date		
a. Lost swimmer (DAY/NIGHT) b. Leaving swimmer on scene II. PRACTICE - with static helicopter: A. Deployments: 1. Free Fall 2. Sling B. Recoveries: 1. Emergency pickup (BARE HOOK TO RS HARNESS TO DEMONSTRATE HARNESS CAPABILITY) 2. Military aviator double pickup (OPEN SLING ON LARGE HOOK) III. Complete Emergency Egress training in type aircraft III. COMMENTS-Required Instructor/Signature/Date		
b. Leaving swimmer on scene /D/ / / II. PRACTICE - with static helicopter: A. Deployments: 1. Free Fall /P/ / / 2. Sling B. Recoveries: 1. Emergency pickup (BARE HOOK TO RS HARNESS TO DEMONSTRATE HARNESS CAPABILITY) 2. Military aviator double pickup (OPEN SLING ON LARGE HOOK) III. Complete Emergency Egress training in type aircraft /P/ / / III. COMMENTS-Required Instructor/Signature/Date		/D/ / /
II. PRACTICE - with static helicopter: A. Deployments: 1. Free Fall 2. Sling B. Recoveries: 1. Emergency pickup (BARE HOOK TO RS HARNESS TO DEMONSTRATE HARNESS CAPABILITY) 2. Military aviator double pickup (OPEN SLING ON LARGE HOOK) III. Complete Emergency Egress training in type aircraft III. COMMENTS-Required Instructor/Signature/Date		
A. Deployments: 1. Free Fall 2. Sling B. Recoveries: 1. Emergency pickup (BARE HOOK TO RS HARNESS TO DEMONSTRATE HARNESS CAPABILITY) 2. Military aviator double pickup (OPEN SLING ON LARGE HOOK) III. Complete Emergency Egress training in type aircraft /P/ / /	o. Dearing swimmer on seems	
1. Free Fall 2. Sling B. Recoveries: 1. Emergency pickup (BARE HOOK TO RS HARNESS TO DEMONSTRATE HARNESS CAPABILITY) 2. Military aviator double pickup (OPEN SLING ON LARGE HOOK) III. Complete Emergency Egress training in type aircraft /P/ / /	II. PRACTICE - with static helicopter:	
2. Sling B. Recoveries: 1. Emergency pickup (BARE HOOK TO RS HARNESS TO DEMONSTRATE HARNESS CAPABILITY) 2. Military aviator double pickup (OPEN SLING ON LARGE HOOK) III. Complete Emergency Egress training in type aircraft /P/ / /	A. Deployments:	
B. Recoveries: 1. Emergency pickup (BARE HOOK TO RS HARNESS TO DEMONSTRATE HARNESS CAPABILITY) 2. Military aviator double pickup (OPEN SLING ON LARGE HOOK) III. Complete Emergency Egress training in type aircraft /P/ / / III. COMMENTS-Required Instructor/Signature/Date	1. Free Fall	/P/ / / /
1. Emergency pickup (BARE HOOK TO RS HARNESS TO DEMONSTRATE HARNESS CAPABILITY) 2. Military aviator double pickup (OPEN SLING ON LARGE HOOK) III. Complete Emergency Egress training in type aircraft /P/ / / III. COMMENTS-Required Instructor/Signature/Date	2. Sling	/P/ / / /
RS HARNESS TO DEMONSTRATE HARNESS CAPABILITY) 2. Military aviator double pickup (OPEN SLING ON LARGE HOOK) III. Complete Emergency Egress training in type aircraft ./P/ / / III. COMMENTS-Required Instructor/Signature/Date		
HARNESS CAPABILITY) 2. Military aviator double pickup (OPEN SLING ON LARGE HOOK) III. Complete Emergency Egress training in type aircraft /P/ / / /III. COMMENTS-Required Instructor/Signature/Date		
2. Military aviator double pickup (OPEN SLING ON LARGE HOOK) III. Complete Emergency Egress training in type aircraft ./P/ / / III. COMMENTS-Required Instructor/Signature/Date		
(OPEN SLING ON LARGE HOOK) III. Complete Emergency Egress training in type aircraft ./P/ / / III. COMMENTS-Required Instructor/Signature/Date		/P/ / /
III. Complete Emergency Egress training in type aircraft ./P/ / / III. COMMENTS-Required Instructor/Signature/Date	· · ·	
III. COMMENTS-Required Instructor/Signature/Date	(OPEN SLING ON LARGE HOOK)	/P/ / /
Instructor/Signature/Date	III. Complete Emergency Egress training in type aircraft	./P/ / / /
	T + + /0° + /D +	
	Comments:	_

Annex F Rescue Swimmer Flight Syllabus (Continued)

TRANSITION SYLLABUS FLIGHT PHASE (DAY WATER)

The flight phase is designed to help you achieve proficiency, standardization, and safety when acting as an HH-_____ Rescue Swimmer.

II. OBJECTIVES

- A. After completing this phase, the student will be able to:
 - 1. Perform all Rescue Swimmer deployments and recoveries.

III. FLIGHT PREPARATION

A. Briefing-discuss

WARNING

SIMULATED HOIST EMERGENCIES SHALL NOT BE CONDUCTED DURING LIVE HOISTS

:123

Rescue swimmer hand signals	/S/ / / /
2. Lost swimmer procedures	/S/ / /
21 Zoot on miller providence	, 2, , , ,
IV. FLIGHT	
A. Perform:	
1. Free Fall deployment with basket	/S/ / / /
pickup for survivor and swimmer	
2. Sling deployment with basket pickup for	/S/ / / /
survivor and emergency pickup for swimmer	
(BARE HOOK TO RS HARNESS OR BASKET)	
3. Free Fall deployment with military aviato	/S/ / / /
r double pickup (OPEN SLING ON LARGE HOOK)	
4. Direct Deployment with conscious survivor	/S/ / / /
5. Direct Deployment w/hypothermic pickup	/S/ / / /
V. DEBRIEFING - discuss:	17.1
A. Day's flight	/S/ / / /
B. Aircraft radio vectoring	/S/ / / /
VII. COMMENTS D	
VI. COMMENTS-Required	
Instructor Signature/Date	
Comments	
Comments	

A.1 Physical Uniforms Training

The following table provides physical training uniform descriptions with examples.

Description	Example		
RS PT Uniform: Plain white Beefy "t", tank top, long, or short sleeved shirt with RS logo and gray cloth running shorts. Plain white socks and athletic shoes. For pool workout: UDTs, Mask, snorkel, fins and booties.			
	PT Uniform	Winter Uniform	Swim Uniform
Cold Weather PT Uniform: Plain white Beefy "t", long or short sleeved, with RS logo and gray cloth running shorts. Crew neck or hooded sweatshirt and sweat pants. Plain white socks and athletic shoes. Black gloves and watch cap are optional.			
	Crew Necl	k I	Hooded

A.2 Deployment Ensembles

Description	Example
Direct Deployment (land): Flight suit or Anti Exposure Flight Garment, vibram soled boots (non-steel toed), helmet with the visor down, flight gloves, TRI-SAR harness, with quick strop.	
Direct Deployment (water): Appropriate wet/dry suit, mask, fins, snorkel, TRI- SAR harness, with quick strop.	

Description	Example
Water Deployment (below 55 F): Dry suit, mask, fins, snorkel, TRI-SAR harness. Hood or surf cap with SOLAS grade retroreflective tape is required at night.	
	Tri-Laminate Dry Suit
	Water Ensemble (below 55° F)
Water Deployment (above 55 F): Full length wet suit, mask, fins, snorkel, TRI-SAR harness. Hood or surf cap with SOLAS grade retro-reflective tape is required at night.	
	Water Ensemble (above 55° F)

Annex G Rescue Swimmer PT and Deployment Clothing (Continued)

Description	Example	
Warm Water Deployment: One piece 3/2mm wet suit or shorty wet suit. Mask, fins, snorkel, TRI-SAR harness.		
	Shorty Wet Suit	3/2 mm Wet Suit
Hood or surf cap with SOLAS grade retroreflective tape is required at night. The Seda Helmet with SOLAS gradereflective tape is required for all deployments to surf, or swift water.		
	Wet Su	it Hood
		Helmet

NOTE

Following extensive review by G-WPM, G-CFM and G-LGL, the physical training clothing in this annex has been authorized by the Coast Guard Rescue Swimmer Program Manager (under Commandant's authority). Substitution of this clothing of a lesser quality than what is prescribed is prohibited without the approval of the Coast Guard Rescue Swimmer Program Manager.

- 1. This list is the only authorized equipment to be used when performing the duties of a Helicopter Rescue Swimmer.
- 2. AST's may purchase this equipment as often as life limits allow or when the item is found to be unserviceable (A/R means As Required).
- 3. While this list contains known sources of supply it is not intended to limit competition nor is it a basis for sole source procurement.
- 4. Where options are available, it is up to the individual RS to determine which piece of equipment to use.

Equipment	Source (& item number)	Life Limit
Mask, silicone	Sea Vision	
Clear	P/N SV1202C	A/R
prescription	P/N PF1202C	
Snorkel, black	Sea Vision P/N SN1200C	A/R
Harness, Rescue Swimmer	Lifesaving Systems Corp P/N 487-O	7 Years
MK-124 Signal Flares	Local USCG District Armory 1370-00-115-3532	A/R
Four inch chem. Lights	6260-00-106-7478	A/R
J Hook Knife	1670-00-779-1253	A/R
Knife, PBR	Benchmade Knife Co. P/N 9000S Black-T.	A/R
Flashlight	Open Purchase	A/R

Equipment	Source (& item number)	Life Limit
Radio, Rescue Swimmer Uniden	Lesco Distributing 1 800 444	A/R
940 VHF-FM radio	8896 Talley Communications	
	Corp. 1-562-906-8000	
Signal Mirror, Plastic	6850-00-105-1252	A/R
Swim Fins, Rockets	U.S. Divers (Open Purchase)	A/R
Trail Line Quick Disconnect	Lifesaving Systems Corp P/N 619	A/R
Equipment Bag, RS	Lifesaving Systems Corp	A/R
	P/N 304-CG	
Wet Suit Ensemble	Henderson Aquatics	24 months
Neoprene 5/3 Long jumpsuit		
Warm Water Ensembles,	Henderson Aquatics	24 months
Neoprene		
3/2 Shorty		
3/2 Long Jump suit		
Dry suit Ensembles 2 EA	DUI	24 months
(water temps 55 F or less	P/N G-USCG-3	
Booties, wet suit 1 pr	Open purchase	24 months
	NOTE	
	Good grade neoprene wet suit	
	bootiescomparable to or better	
	than Henderson Gripper Booties	
	or U.S.Divers Aqua	
	Track	
Surf Cap	Henderson Aquatics	24 months
	P/N T-CG01	

Continued next page

)

Annex H Rescue Swimmer Authorized Equipment List (Continued)

......

Equipment	Source (& item number)	Life Limit
Gloves, wet suit 2 pr	Open purchase NOTE	24 months
	Good grade neoprene gloves comparable to or better than: IHK 5 MM Diving	
	Glove, Glacier Glove, U.S. Divers 3 MM	
	Aqua Grip glove, Henderson Gripper or	
	Comfo Gloves. RS's choice depending	
	on climate	
Gloves, dry suit 2 p	Open purchase	24 months
	NOTE	
	Good grade neoprene or latex rubber	
	gloves comparable to or better than: IHK	
	5 MM Diving Glove, or DUI Dry Five	
	Glove RS's choice depending on	
	.climate	
Belt, Safety, Crewman	1680-00-211-7356	7 Years
Chem. light safety straps 6	Lifesaving Systems Corp	7 Years
ea	P/N 230	
Shorts, UDT 3 pr size 32	8415-00-455-6349	24 months
34	8415-00-455-6350	
36	8415-00-455-6351	
Shorts, Ash gray PT 3 pr	Open Purchase	24 months
	NOTE	
	Mid thigh bicycle shorts with	
	rescue swimmer logo on left leg	

Equipment	Source (& item number)	Life Limit
Watch (with second hand)	Open Purchase (Not to exceed\$100.00.)	A/R
Shirts, PT heavy-duty White 3 ea. Long, short sleeved or	Open Purchase	24 months
Tank Top	NOTE	
	100 Percent cotton white "T" shirt or Tank	
	Top with rescue swimmer logo on	
Swit Syrapta Ash may 2 on	left breast	24 months
Suit, Sweats Ash gray 3 ea	Open Purchase NOTE	24 months
	Crew neck and/or hooded sweat top with	
	rescue swimmer logo on left breast, and	
	sweat pants	
Shoes, workout 1 pr	Open Purchase	6 Months
, .		
	NOTE	
	High quality athletic shoe that the	
	individual can use to participate in	
	physical fitness training not to exceed	
	\$100.00 per pair	
Socks, white crew 3 pr	Open Purchase	6 Months
Name Tags	Open Purchase	A/R
Traine rags	NOTE	7 t/ K
	1" Wide blue cotton webbing with white	
	3/4" lettering to be place on: RS	
	Harness, on the outside of the back strap	
	; RS bag, centered on top parallel to	
	carrying handle; gunners belt, centered	
	between snap hook and adjustable	
	friction adapter	

Equipment	Source (& item number)	Life Limit
Undergarments, dry suit	Open purchase	A/R
Exotherm I II, and III's	USIA	
Thermolux I, II, and III	USIA	
DUI Undergarments	DUI	
Poly propylene underwear		A/R
Тор	8415-00-227-9549	
Bottom	8415-00-227-9544	
Nomex Long underwear		A/R
Тор	8415-00-485-6548	
Bottom	8415-00-467-4076	
Exotherm dry suit socks	USIA	A/R
Wool Socks	8440-00-153-6717	A/R
Face Mask (Vert Surface	Open Purchase	A/R
Ops.) Paintball / motocross		
Undergarment, Anti	Open purchase	A/R
Chaffing		
Boots, vertical surface ops	Summer: TLS Model 800, Aqua-Force A/R	
	Model	
	# 2069, and Eliminator 2 Model # 8036,	
	Winter: TLS Model L770, Wonder Boot	
	Model # 5066, and Eliminator2 Model #	
	8132	
C111	Liferenius Contento C. DNI 465	7.37
Sleeves, signal 1 pr	Lifesaving Systems Corp P/N 465	7 Years
Neck Ring, dry suit	Open purchase	7 Years
Seda Helmet Whitewater	Open purchase	A/R
(Required for surf rescues)		
Patches	Open purchase (Fully authorized by HQ as	A/R
CG Rescue Swimmer 2 ea	required organizational SAR identification	
CG EMT 2 ea	clothing)	
Goggles, swimmer	Open purchase	A/R

--1. The following list of equipment is authorized in order to support the rescue swimmer program. These items do not need to be maintained by individual RS's.

Equipmen	Source (& item number)	Life Limit
Rescue Mannequin	From PMX at 800-453-1264,	A/R
-	GSA Contract 02F1424H	
	ICE OPERATIONS EQUIPMENT	
Rescue rope equipment bag	California Mountain Co	A/R
	P/N 431101	
Rescue rope, 250 feet	California Mountain Co.	A/R
	P/N L75321	
Carabiner, steel locking	California Mountain Co	A/R
	P/N 321001	
Safety bel	1680-00-211-7356	A/R
Ice awls	W.Born Assoc., INC.	A/R
	P/N Pick of Life	
Ice cleats	Cabelas Co	A/R
	P/N 85537-002/6	
Mukluk line	8415-00-177-7994	A/R
Mukluk	8430-00-269-0100	A/R
	DISENTANGLEMENT TRAINING	
	EQUIPMENT	
Vest, SV-2	8415-00-139-6174	A/R
Canopy, Parachute	1670-00-554-6413	A/R
Koch, Lap Female	1670-00-997-6662	A/R
Koch, Lap Male	1670-00-986-8334	A/R
Koch, Shoulder Female	1670-00-886-6878	A/R
Koch, Shoulder Male	1670-01-093-0191	A/R

Annex H Rescue Swimmer Authorized Equipment List (Continued)

Equipment	Equipment Source (& item number)	
Harness, Torso	1670-01-130-3123	A/R
Seat Pan	Locally Fabricated	A/R
	EMERGENCY MEDICAL EQUIPMENT NOTE This list is the minimum requirement to support the EMT mission. Different areas of operation may require special equipment not included on this list and should be procured by the unit. Procurement of equipment not listed costing more than \$100.00 requires HQ approval.	
Bag-Valve Mask	Life Support Products P/N W18119	A/R
Resuscitator	Oxygen Life Support Products P/N 175-010	A/R
Laerdal Suction Kit V-Vac	Dyna Med. IncV	A/R
Cylinder, Oxygen "D size M-22	Life Support Products P/N 349-040	A/R
Antishock Trousers	Open Purchase	A/R
Traction Splint	Open Purchase	A/R
Cervical Collars	Open Purchase	A/R
Medevac Board	Lifesaving Systems Corp P/N 450	A/R

Equipment	Source (& item number)	Life Limit		
Medevac Report Form	7530-01-GF2-9080 (CG-5214 rev	A/R		
	10-88)			
Victims/Casualty	Wiggy's Inc	A/R		
Hypothermia Bag				
EMT Kit, Thomas Pack	Aeromed P/N TT890	A/R		
Automatic External D efibullator):	6515-01-459-3831	A/R		
Heartstream Forerunner(AED	6515-01-459-4432			
Model E01	6515-01-459-4407			
-HP CC Carrying Case	6515-01-459-3838			
-Semi-Rigid)				
- HP DP5 Extra Pads	6515-01-459-4417			
- HP ECI Data Card (30				
minutes ECG and Event)				
- HP BT1 Battery Pack				
Current EMT Text	Open Purchase	A/R		
(Currently used by				
EMT School)				
	The following is information on			
	procurement and mandatory			
	stowage of EMT equipment in the			
	Thomas Pack			
COMPARTMENT 1	6515-01-039-4884 or Open Purchase	A/R		
Outside:	6515-00-935-4088 or Open Purchase			
Blood pressure cuff	6239-00-125-5528 or Open Purchase			
Stethoscope	6515-01-030-4465 Open Purchase			
Pen Light				
Latex Gloves				
Scissors				
COMPARTMENT 2		A/R		
Outside:				
SAM Splint	6515-01-225-4681			

Equipment	Source(&item number)	Life Limit
	The following is the continuation of	
	information on procurement and	
	mandatory stowage of EMT equipment	
	in the Thomas Pack.	
COMPARTMENT 3	Open Purchase	A/R
Outsid e		
Airway Kit Oropharyngea	Open Purchase	
Airway Kit Nasalpharyn	Open Purchase	
Geal		
Pocket Mask		
COMPARTMENT 4	6510-00-935-5822	A/R
Ace Wrap		
COMPARTMENT 5		A/R
Band-Aid, adhesive	6510-00-913-7909	
Charcoal, Activated	6505-00-135-2881 or Open Purchase	
Glucose, Oral	6505-01-243-2676 or Open Purchase	
Syrup of Ipecac	6505-00-926-9197 or Open Purchase	
Bulb Syringe	6530-00-110-1854 or Open Purchase	
Cord Clamp	6515-00-890-1541 or Open Purchase	
Umbilical Tape	6515-00-379-2100 or Open Purchase	
COMPARTMENT A Inside		A/R
Battle Dressing, small	6510-00-159-4883	
Battle Dressing, Med	6510-00-201-7430	
Battle Dressing, Large	6510-00-201-7425	
COMPARTMENT B Inside		A/R
Bandage, Gauze	6510-00-582-7992	
Water Gel, Burn Kit	Coast Guard kit (201) 507-8325	
Petroleum Gauze	651000-202-0800 or Open Purchase	
Sponges, Surgical, 4x4	-6510-00-721-9808	
COMPARTMENT C Inside	6510-00-201-1775	A/R
Cravat, Bandage		

Equipment	Source (& item number)	Life Limit
	The following is the continuation of	
	information on procurement and	
	mandatory stowage of EMT	
	equipment in the Thomas Pack	
COMPARTMENT D		A/R
Inside: Plastic Bag	8105-00-837-7755	
Adhesive, tape, 2"	6510-00-926-8883	
Adhesive, tape, 1	6510-00-926-8882	
INNER COMPARTMENT		A/R
Inside:		
Collar, Cervical	Open Purchase	
No-neck, small, medium,	-	
large – 1 of each	Open Purchase	
INNER COMPARTMENT		A/R
E, F, & G:		
Band-Aid	6515-00-913-7909	
Thermometer 94-108F	6515-00-149-1405 or Open Purchase	
and/or	7520-00-935-7135	
Electronic Ear Canal		
Thermometer	Open Purchase	
Ball Point Pen		

Annex I Rescue Swimmer Training Record and Screening Exam

HELICOPTER RESCUE SWIMMER TRAINING RECORD AND PHYSICAL TRAINING SCREEN EXAM

Maintain RS recurrent training records for at least 18 months.

Refer to COMDTINST M3710.4 Coast Guard Helicopter Rescue Swimmer Manual for explanation of each category.

NOTE:

- (1) 3 minute warm-up, pre exercise stretches, cool down, post exercise stretches shall be incorporated into all workouts, including the monthly screen exam.
- (2) Proper exercise form, IAW M3710.4, shall be enforced.
- (3) DO NOT exercise to muscle failure on rescue swimmer duty days.
- (4) All swims shall be performed in appropriate gear, IAW M3710.4

NAME:	RESCUE SWIMMER MINIMUM TRAINING EQUIREMENTS					
	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE
Monthly Requirements:						
Shoulder Width Pushup, (50 min)						
Sit ups, (60 min)						,
Pullups, (5 min)						
Chinups (5 min)						
12-minute Crawl Swim (500 yd min.)						
25-yd Underwater Swim (x4)						
200-yd Buddy Tow						
Administered By: (Sign and Date)						
Lifsaving Drills						
EMT Lecture (3 hrs per quarter)						
EMT Practical (3 hrs per quarter)						
200 200-200 200 VA						
Quarterly Requirements:						
Direct Deployment (x2)						
Sling Deployment (x2)						
Free Fall Deployment (x2)						
Semi-Annual Requirements:						
Aircraft Vectoring						
Litter						
Harness & Parachute Disentanglement						
Annual Requirements:						
Stan Check						
Date of Last Stan Check						
EMT Re-Cert Date						

NAME:	RESCUE SWIMMER MINIMUM TRAINING EQUIREMENTS					
	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER
Monthly Requirements:						
Shoulder Width Pushup, (50						
min)						
Sit ups, (60 min)						
Pullups, (5 min)			8			
Chinups (5 min)		N (X				
12-minute Crawl Swim (500 yd						
min.)						
25-yd Underwater Swim (x4)						
200-yd Buddy Tow		0.0				
Administered By: (Sign and						
Date)						
Lifsaving Drills						
EMT Lecture (3 hrs per quarter)						
EMT Practical (3 hrs per						
quarter)		0 00				,
Quarterly Requirements:			8			
Direct Deployment (x2)						
Sling Deployment (x2)						
Free Fall Deployment (x2)						
Semi-Annual Requirements:		8				
Aircraft Vectoring						
Litter		SID:			2	
Harness & Parachute						
Disentanglement						
1.00						
Annual Requirements:		17				
Stan Check						
Date of Last Stan Check		ļ				
EMT Re-Cert Date			8	8		

Annex J Rescue Swimmer SDAP Certification

HELICOPTER RESCUE SWIMMER SDAP CERTIFICATION

SAMPLE MESSAGE

RZ JAN 01
FM COGARD AIRSTA
TO COMDT COGARD WASHINGTON DC//G-OCA//
INFO CCGD
BT
UNCLAS//N12550//
SUBJ: HELICOPTER RESCUE SWIMMER SPECIAL DUTY ASSIGNMENT PAY
A. COMDTINST M3710.4 (Series), HELICOPTER RESCUE SWIMMER MANUAL
B. COMDINST 1430.1 (Series)
1. IN ACCORDANCE WITH REF (A), THE FOLLOWING IS A LIST OF ALL
OPERATIONAL RESCUE SWIMMERS WHO MET THE ELIGIBILITY REQUIREMENTS
SET FORTH IN REF (B) AND RECEIVED SDAP DURING THE 20 CALENDAR
YEAR:
AST1
AST1
AST2
AST2
AST2
AST3
AST3
AST3
2. THE FOLLOWING RESCUE SWIMMERS ARE CURRENTLY DESIGNATED AS
OPERATIONAL RESCUE SWIMMERS, MEET THE ELIGIBILITY CRITERIA OF
REF (B) AND ARE DRAWING SDAP:
AST1
AST1
AST2
AST2
AST3
AST3