

Surface Rescue Swimmer School

Rescue Swimmer's Equipment
LT 4.1



Enabling Objectives

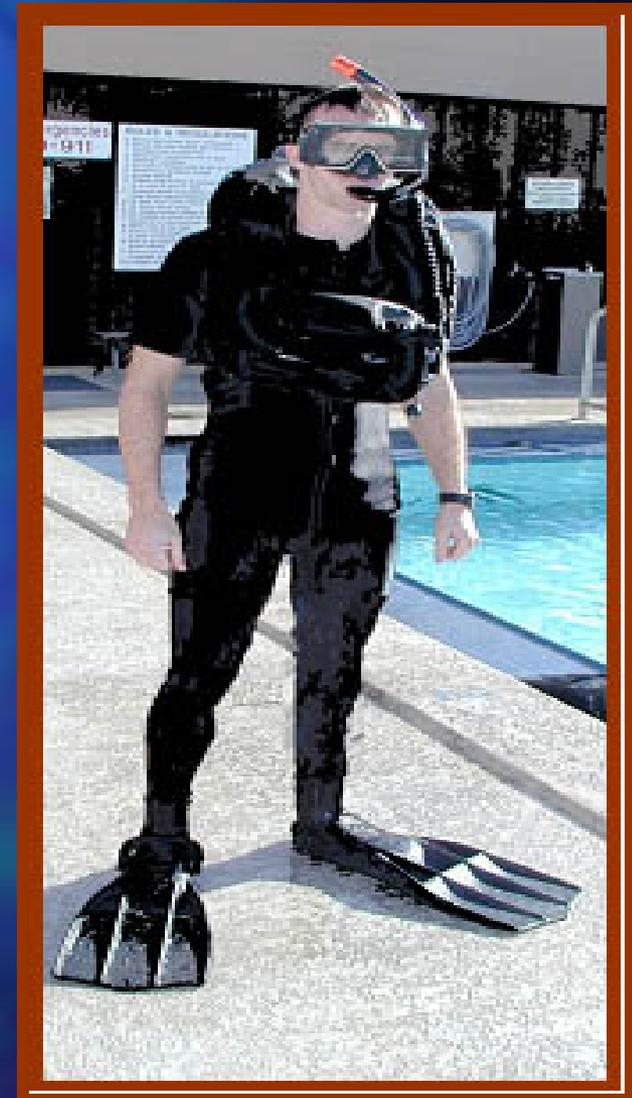
- State requirements for the maintenance of rescue swimmer's equipment per current NAVAIR 13-1-6 series manuals/Maintenance Requirements Cards (MRC's)
- Explain the functional operation of rescue swimmer's equipment.

Enabling Objectives

- Wet Suit
- Mask, Fins, and Snorkel
- Surface Rescue Swimmer's Harness
- LPU-28 (SAR-1)

Rescue Swimmer's Equipment

- Wetsuit Ensemble
 - Preferred commercial grade.
 - Neoprene rubber sandwiched by non-chaffing nylon.
- Consists of:
 - Jacket with long sleeves.
 - Trousers, Farmer John type.
 - "Shorty" assembly.



Wetsuit Ensemble

■ Booties

- Worn with fins to protect the feet.
- Worn at the discretion of the rescue swimmer, unless atmospheric conditions dictate otherwise.

■ Gloves

- Worn at the swimmer's discretion.
- Shall be the five finger type.

Wetsuit Ensemble

■ Hood

- Worn at the swimmer's discretion.
- Reduces chill factor generated by rotor wash.
- Reduces heat loss through the head. Sixty percent of all body heat is lost through the head.

- Minimum of a wetsuit top shall be worn during all rescues.

Wetsuit Ensemble

- Entire wetsuit shall be worn as per OPNAVINST 3710.7, specifically:
 - When water temperature is above 50°F and air temperature is above 32°F (wind chill corrected), full wetsuits shall be worn at the commanding officer's discretion.
 - Whenever the water temperature is below 50°F or air temperature is 32°F (wind chill corrected), or below, full anti-exposure protection is mandatory.

U.S. Divers Wrap Around Mask

- Allows rescue swimmers to see clearly underwater by providing an air space in front of the eyes.
- Double skirted for comfort and optimum seal.
- Wrap around offers a wide field of view and greater peripheral vision.

U.S. Divers Wrap Around Mask

- Plastic adel clamp on top of mask provides means to attach the four inch General purpose Chemical Light to the swimmer.
- Mask fogging is prevented by coating the interior of all three lenses with commercial mask lens defogger, toothpaste, or saliva.

U.S. Divers Wrap Around Mask

- Mask shall be tied off on either the left or right shoulder strap of the rescue swimmers harness and not passed through the neck of the SAR-1 Vest. The mask shall not be tied off to the LPU-28.

U.S. Divers Rocket Fins

- Fins provide greater propulsion, speed, power, and mobility. U.S. Divers Rocket Fins are the only authorized fins.
- Slots or vents:
 - Redirect the flow of water through the fin and toward the tip.
 - Most efficient when used with the flutter kick.
 - Fins have a stiff blade which may cause calf cramps.

U.S. Divers Snorkel

- Permits the rescue swimmer to breathe easily while conducting in-water operations.
- Barrel can be straight or gently curved.
- Flexible hose connects barrel to mouthpiece.
- Snorkel attaches to mask strap with a snorkel keeper.

Surface Rescue Swimmer's Harness

- Incorporates one lifting device attached to the harness.

Surface Rescue Swimmer's Harness

- Lifting "V" ring
 - Located center of chest.
 - Attaches to rescue hook.

Surface Rescue Swimmer's Harness

- Has left and right riser pockets which contain the following equipment:
 - Two six inch General Purpose Chemical Lights for signaling or illumination of rescue devices.
 - Carried in the left riser pocket.

Surface Rescue Swimmer's Harness

- Two four inch High Intensity Chemical Light for use with the swimmers mask.
 - Carried in the left riser pocket.
- J-hook Knife
 - Used only as a last resort to cut shroud lines.
 - Carried in the right riser pocket.
 - Has curved end for safety.

Surface Rescue Swimmer's Harness

- One Strobe Light
 - Located on right shoulder strap.
 - Used for emergency signaling by the swimmer.
 - Covered with a blue lens for swimmer identification.
- Scabbard Knife, attached to chest strap.

LPU-28 (SAR-1)

- Provides emergency flotation for the rescue swimmer. SAR-1 may also be used to provide flotation for survivor.
- Provides a minimum of 30 pounds of buoyancy.
- Single cell construction.
- Velcro on right shoulder is for attaching strobe light or the AN/PRC-149 to the LPU-28.

LPU-28 (SAR-1)

- Storage pouch is in front.
- Normal inflation is through the oral inflation tube, emergency inflation is accomplished with CO₂ cartridge.
- Relief valve under storage pouch alleviates over inflation.

LPU-28 (SAR-1)



Rescue Swimmer's Equipment Maintenance

- Care and Preventative Maintenance
 - Fresh water rinse all equipment.
 - Hang in a cool, dry, windless place.
 - After drying hand fold wet suit loosely.
 - Lubrication:
 - Coat zippers, mechanical parts, and fins with silicone spray lubricant.
 - Do not expose mask, fins, and snorkel to direct sunlight unnecessarily as this will accelerate the deterioration of the silicone rubber.

Rescue Swimmer's Equipment Maintenance

- Inspection Intervals for Rescue Swimmers Equipment
 - By the swimmer prior to deployment.
 - Look for signs of deterioration.
 - Dry rot, corrosion.
 - Tears, worn or broken components.
 - Quarterly by the rescue swimmer per MRC.

Summary

- Gloves shall be the _____ type.

- *Five finger*

- What percent of body heat is lost through the head?

- *60%*

Summary

- The plastic adel clamp is used to attach the _____ inch chemlight.
- *Four*

Questions?