

## **LIFESLING® OWNER'S PREPARATION GUIDE**

### **Updated July 26, 2010**

Developed by and for the Bonnell Cove Foundation's "SUDDENLY ALONE Seminar" which was first presented on April 7, 2001 in Mystic, CT.

This guide describes the five different models of LIFESLINGs available from US Catalogs and Chandlers, their differences and adjustments and installation techniques recommended by the original developer, The Sailing Foundation of The Pacific Northwest in their Lifesling Instructors Clinic Manual, revised in March 1998 and in *THE CERTIFICATION SERIES* books, Basic Cruising, Bareboat Cruising, and Passage Making published by US SAILING.

**CHOICES.** There are five Lifesling ® models in use in the US.

1. The original LIFESLING with 21 lbs of buoyancy, equipped with 150 feet of multi-filament polypropylene floating line. Recommended for 30-80 ft sail and powerboats. Meets ORC/ISAF Offshore Special Regulations (OSR) and is USCG approved as a Type V device. (NO LONGER IN PRODUCTION - Replacement Storage Bags and Fiberglass Cases are still available).
2. The smaller, and less expensive LIFESLING 2 with 21 lbs of buoyancy, equipped with 125 feet of multi-filament polypropylene floating retrieving line. Suitable for powerboats with a lifting point 10 ft above the water and sailboats over 20 ft LOA. Meets ISAF OSR and is USCG approved (Type V which substitutes for a Type IV).
3. The LIFESLING 3 with 21 lbs of buoyancy, equipped with 150 feet of retrieval line for larger boats, stainless steel D-rings, SOLAS reflecting tape, and a rugged UV-resistant, fiberglass case. Meets ISAF OSR and is USCG approved for both recreational and commercial vessels (Type V which substitutes for a Type IV) (New in 2006).
4. The LIFESLING for Commercial Vessels is similar to the Original LIFESLING with SOLAS reflective tape added. Meets ISAF OSR and is USCG approved (Type V). Replaces the requirement for a 24 in ring buoy on uninspected commercial vessels that have a hoisting point at least 10 ft above the deck. (Replaced by LIFESLING 3)
5. The LIFESLING INFLATABLE (previously called RESCUESLING and INFLATABLE LIFESLING), equipped with 125 feet of multi-filament yellow polypropylene floating line, thrown like a softball that automatically inflates into a floatation collar with 25 lb buoyancy that functions similar to the original LIFESLING. (Not USCG Approved) (Recalled in 2010 as not in compliance with new West Marine safety standards)

Non inflatable models come in a white stowage bag or a white rigid case that is recommended, especially for offshore use.

Rigid case mount kits for rail and bulkhead mountings are extra.

The recommended water actuated solid light (non-strobe) is extra.

No LIFESLING should have a drogue attached to it.

All models of LIFESLING are equally suitable for sail and power boats.

Hoisting Tackle for both sail (3:1 tackle for use with a winch) and powerboats (5:1 tackle used without a winch) is available as a LIFESLING accessory.

## **LIFESLING INSTALLATION ADJUSTMENTS for *all models*.**

Bowline or Lifting Eye. The most important adjustment to any LIFESLING is to have a lifting point that can be reached without leaning over the side of the retrieving vessel. The bowline loop should reach above the deck of your boat so that when the victim is alongside someone can easily reach the loop to connect the lifting hoist without leaning over the side. This usually means adjusting the size of the bowline in the LIFESLING to match your boat's freeboard at the point where the victim will be hoisted aboard. The new bowline must be taped, seized or sewed so that it does not open inadvertently. An alternate adjustment is to tie an overhand loop for the hoist attachment in the line at the deck edge within easy reach of the person on deck.

Overhand Knots. It is recommended that the owner tie overhand knots in the LIFESLING retrieval line starting at the end of the bowline at nine inch intervals for several feet to a point which is above the lifelines. This enables remaining crew to have grab points for manually pulling the victim up out of the water. It also serves as a warning to the victim that the bowline loop and LIFESLING are approaching as the trailing line is pulled past/around him/her in the water.

Water Activated Light. A water activated solid light (non-strobe) should be attached to the inside of the strap near the towing loops or D rings for the retrieval/trailing line on the front of non inflatable LIFESLINGS. The pocket on the back of the older LIFESLING is no longer recommended for the light.

Length of Retrieval/Trailing Line. The multi-filament polypropylene floating line of each LIFESLING should be approximately three times the length of the boat. If a boat has a wide turning radius a longer length of line may be required. Boats with a tighter turning radius may have to use a shorter length of line to keep from turning into the line before it encircles the victim.

SOLAS Reflective Tape. It is recommended that reflective tape be wrapped completely around the front of the bollards/sides about 2 inches behind the D Rings or towing loops on all LIFESLINGS.

Thigh Strap. A LIFESLING can be modified with the addition of a thigh strap to provide more support for the lower body and legs. An adjustable strap made of 1.5 inch webbing is attached to the D Rings or towing loops of the LIFESLING and run outboard of the sling, where it is held in place by small pieces of velcro. Before the victim is hoisted aboard he/she must pull this webbing from the outer circumference of the LIFESLING and lower it to a point behind the knees, adjusting it as necessary for fit and comfort. This enables the victim to be hoisted aboard in a safer, nearly horizontal position that is also more comfortable than a strictly vertical lift.

Yacht Name. The name of the yacht should be marked on all portable safety equipment, including the LIFESLING.

## **LIFESLING INSTALLATION TIPS for *all models*.**

Attachment. The LIFESLING container or bag should be attached to a stern pulpit or bulkhead, *inside the rail, within easy reach of the helmsman doing the recovery.* The trailing line coming from the inside of the container or bag should be attached to an onboard cleat or other strong towing point. If a bowline must be taped, seized or sewed so that it cannot be open inadvertently. When choosing the attachment point consideration should be given to the fact that the remaining crew must be able to reach the point and pull in the trailing line, possibly with the aid of an installed winch.

Stowed ready to deploy. The retrieval/trailing line should be inserted without kinks or twists into the 'stuff bag' in the LIFESLING container or bag, starting with the end closest to the attachment point on the boat and ending at the bowline loop attached to the LIFESLING. Care must be taken that the retrieval/trailing line tied to the boat and leading into the container or bag is entirely covered by the UV cover sewed over its bitter end.

## LIFESLING HOISTING TACKLE.

**Block and Tackle for Sailboats.** The following requirements must be considered when selecting the lifting tackle for a sailboat:

- ▣ A 3 or 4-to-1 block and tackle is recommended. In most situations a mechanical advantage is necessary to lift a wet person (who may weight 250-300 lbs) out of the water. Quite often 3-to-1 is not sufficient and 4-to-1 is needed. The fall line used in this equipment must be long enough to allow the upper block to be hoisted a minimum of 10 ft above the deck and still be threaded/reeved through one or more turning blocks to the largest cockpit winch or the anchor windlass.
- ▣ In addition, a tail long enough to take at least 3 turns on the drum of the winch or windlass before securing it to a cleat must be allowed on the fall line. (On a 40 foot boat the total length of the fall line can easily reach 100 ft.)
- ▣ This line should have a large enough diameter to hold without slipping in any self-tailing winch that may be used in the rescue.
- ▣ The fall line must exit the upper block which should be distinctly marked or painted (red recommended).
- ▣ The lower block should have a snap shackle or carabiner that easily attaches to the Lifesling retrieval line and any harness likely to be used on the boat.

**Block and Tackle for Powerboats.** Lifesling is USCG Approved for powerboats that have a hoisting point at least 10 ft above the deck.. This point should be near a gate on the boat, preferably midships.

- ▣ A 5-to-1 block and tackle with a cam cleat at the top is recommended for the hoisting tackle. This allows hand over hand hoisting of the COB to the deck. The upper block should be distinctly marked or painted (red recommended).
- ▣ If hand over hand hoisting is too strenuous a power assist should be rigged using a block and tackle with the fall line threaded/reeved through turning blocks to a power windlass or a lifting boom.
- ▣ The location of the Hoisting Tackle Stuff Bag should be clearly marked on the Boat's Stowage Plan so that everyone on board can find it when they need it.

**Sailboat Rigging.** Deciding where the Hoisting Tackle will be rigged on each boat is essential for trouble free recovery. Minimum planning is as follows:

- ▣ Pick one or two halyards that could be used to hoist the top block of the Hoisting Tackle 10 feet above the deck. A main halyard or spinnaker halyard is recommended. Be sure everyone in the crew can physically reach the halyards chosen.
- ▣ Mark both the halyards and the mast when the hoist end is 10 feet above the deck. *It is very important that the upper block is hoisted 10 feet high.*
- ▣ Designate which turning blocks will be used to fair lead the fall line of the Hoisting Tackle to the largest cockpit winch or the anchor windlass. Existing sheet blocks or special purpose snatch blocks are recommended. Make sure that the fair lead does not override on the winch (leads should go onto the drum 10 degrees below the plane of the drum). Marking sheet blocks and special purpose snatch blocks and their attachment point(s) is highly recommended.

**Stuff Bag.** Proper stowage of the Hoisting Tackle in the Stuff Bag is key to its timely use. Twists or turns in the fall line will jam the blocks and result in total failure of the hoist. The following procedure is recommended:

- ▣ The block and tackle should be stowed in the two-blocked position. This is achieved by pulling the entire fall line through the blocks until they are nearly touching each other.
- ▣ The bitter end of the fall line is placed in the Stuff Bag first (without any stopper knots).
- ▣ The remainder of the fall line is fed hand over hand, without twists, into the Stuff Bag.
- ▣ The two-blocked tackle is put into the top of the Stuff Bag last with the upper block (marked red) closest to the top.
- ▣ The Stuff Bag should be stowed where it is readily available for use. Many people keep it at the bottom of the Lifesling stowage bag or container.

**CREW OVERBOARD VICTIM TIPS.** Know ahead of time how to use all of the equipment in/on your PFD (light, mirror, flares, laser, shark repellent, etc).

- ▣ Shout and try to attract attention as you are falling overboard.
- ▣ Don't swim after the boat. Swim to any floatation that is thrown over instead.
- ▣ Try to make yourself visible (Put hood up on foul weather gear, splash water around you, wave arms)
- ▣ Wait for the boat to circle you and look for the Lifesling and its retrieval/trailing line
- ▣ Keep clothing on, trapping air inside it if possible. Get rid of heavy non-buoyant items including boots that fill with water. Tighten your PFD and crotch strap, if they are loose.
- ▣ Let the Lifesling retrieval/trailing line slide through your hands until you reach the knots and bowline loop.
- ▣ Put the Lifesling over your head and under your armpits.
- ▣ Clip together the two sides of the buckle next to each D ring or towing loops, if you can find them.
- ▣ If the boat starts to pull you through the water before it stops **TURN AROUND** so that you will be towed backwards keeping the wake out of your face. ***This can be the most dangerous part of the whole procedure and must be avoided.***
- ▣ If the Lifesling is equipped with a thigh strap pull it down from the outer circumference of the sling to a point under your knees, adjusting it for comfort just before you are hoisted aboard.
- ▣ Help the remaining crew get you aboard if you can but don't take the Lifesling off until you are on deck.
- ▣ If the boat misses you, or can't immediately find you, try to get to a MOB Pole, MOM or other floating object if you see one.
- ▣ Don't shout needlessly. Blowing a whistle is more likely to be heard aboard the rescue vessel.
- ▣ If you have to wait to be rescued assume the Heat Escape Lessening Posture (HELP) as much as possible. Keep a hat on, your head out of the water, arms against your sides and across your chest and PFD, and your lower legs crossed, knees together and raised as the seas permit.
- ▣ At night activate a personal strobe, if you have one, and leave it on until the rescue boat makes its approach to pick you up. At that point turn the strobe off and an incandescent light on, if you have one, so that the flashes do not disorient the helmsman.