



# OWNER'S MANUAL

## Low Profile Flotation Collar (LPFC) ver. 5.0

### #742 (50 lbs Buoyancy)

#### **WARNINGS & CAUTIONS**

The Low Profile Flotation Collar is intended to be used by military and professional pilots and aircrew members. The collar must be integrated with a compatible vest/harness carrier assembly such as LSC's #745 Osprey series Professional Air Crew Harness and Vest.

When orally inflated, do not inflate with the CO2 inflation system. Prior oral inflation and subsequent CO2 inflation will cause damaging high pressure in the bladder.

Use only 25-gram CO2 cylinders (LSC #350) or equal. Inspect the seal on the threaded end of the cylinders prior to installation. Discard any cylinder showing any sign of puncture. Ensure that the CO2 inflation valve lever arms are in the up (armed) position prior to cylinder installation. Check for proper routing of the CO2 inflation lanyard.

The flotation collar must be visually inspected prior to use and functional tested per inspection procedures.

Do not allow the collar to become excessively soiled. Rinse the vest after exposure to salt or chlorinated water with fresh tap water and allow to completely air dry away from direct exposure to sunlight.

Do not enter the water from excessive heights with the bladder inflated. This could cause personal injury and/or damage to the flotation collar.

Do not inflate the bladder while below deck on a vessel or in the cabin of an aircraft. The additional buoyancy and bulk could restrict your egress.

#### **DESCRIPTION**

The #742 Low Profile Flotation collar provides approx. 50 lbs of buoyancy in a compact and lightweight case. The portion of the collar that lies across the shoulders is only 1/4" thick, eliminating interference with helmets. Dual chamber bladder ensures redundancy and allows for full buoyancy recovery should one chamber fail. Bladder is protected by arylon or aramid fabric case. Manual inflation requires two (2) 25-gram CO2 cylinders. Both cylinders are actuated by a single pull of the inflation lanyard. Flotation collar requires a compatible carrier assembly, such as LSC's #745 Osprey Pilot and Crew Vest/Harness.

#### **USING YOUR #742 LPFC**

Mount the flotation collar to a compatible vest/harness using the four (4) mini-buckles. Attach the mini-buckles to the mating hardware on the vest/harness. All buckles are located on the underside of the collar. Ensure proper orientation of the collar when mounting. Secure the two plastic snap fasteners on the underside of the collar to the vest/carrier (mating snaps may not be present on non-Osprey vests/carriers). When complete, don and adjust the vest/harness according to the manufacturer's instructions.

- Before packing the vest check the CO2 cylinders to ensure that they have not been punctured.
- Ensure the lanyard is properly attached. See separate repack instructions.
- Do not mount or lace equipment over the top of the flotation collar.

To inflate the vest, pull rapidly down on the beaded inflation lanyard. This action punctures both CO2 cylinders at once. The released gas immediately inflates the bladder. Both cylinders will require replacement after inflation.

Should the bladder not fully inflate, open the remaining portion of the case and pull out the bladder to be inflated orally. To open a partially closed case ensure the lanyard is fully separated from the case. Start from the right side of the collar and manually release the single snap fastener securing the pull-tab. Begin to part the closure zippers located at the pull-tab opening by sliding your fingers between the two zipper cords. Fully part both the long and short zippers. To open the long zipper continue parting the zipper starting from the pull-tab opening and proceed upward along the right extension, pass behind the neck and down the left extension. To open the short zipper start at the pull-tab opening and part the zipper proceeding downward along the right extension. Unpack the remaining portion of the bladder and locate the two oral tubes on the top of the right lobe of the bladder. Unlock one oral tube valve. Depress the end of the valve and blow air into the bladder. Either oral tube can be used for inflation. After inflation, lock the oral tube valve in the closed/sealed position. If the bladder will not inflate or does not retain air, try oral inflation with the second oral tube, which fills a separate chamber.

#### **NOTE**

Before placing in service, and thereafter once a year, LSC strongly recommends an in-water functional test of the vest, to familiarize the user with the flotation characteristics and to ensure proper functioning of the CO2 inflation mechanism. The test should be performed in the shallow end of a pool by actuating the CO2 inflation lanyard. It is also recommended that the user practice removing the bladder from the case to access the oral tubes in the event of a failed or partial CO2 inflation.

#### **INSPECTIONS**

While LSC has designed and manufactured the inflatable to be as reliable as possible, periodic testing and inspection are necessary to ensure functional reliability. The frequency of the inspection should be determined by the frequency and condition of use. However, the inspection shall not exceed six (6) months (may be extended to 12 months when maintained by trained life support personnel). Record inspections by serial number in a log book.

#### **VISUAL INSPECTION**

Thoroughly inspect the outer case, webbing, mini-buckles, and closure zippers for damage. Repair or replace the case as required. Open the case and unfold the stowed bladder. Remove the CO2 cylinders and check the bottom for pin punctures in the seal of the cylinders. Discard the CO2 cylinder if punctured and install new cylinders fully (1/4 turn after seal contact). Check the manual inflators for damage. Replace the lock pins if broken or missing.

Ensure that the inflator levers are in the up (armed) position before installing new cylinders. Refer to the repack instructions.

#### **FUNCTIONAL & LEAK INSPECTION**

1. Pull beaded lanyard to inflate the bladder. Both sides of the bladder should fully deploy from the cover. Deflate the cell by depressing both oral inflation tube valves and vacuuming or squeezing the CO2 out.
2. Inflate the bladder through the inboard oral tube (aft bladder chamber) with a low -pressure air source (2 psi max.) or by oral inflation. Depress the outboard oral tube valve to allow trapped air to escape. CAUTION: DO NOT OVER INFLATE. Bladder damage will result from overpressure. After four (4) hours, recheck the bladder for pressure. If the bladder has lost pressure recheck for leaks and replace the bladder if required. Prior to deflation, depress the outboard tube to check for leakage past the internal bulkhead. Leakage of the internal bulkhead will require replacement. Deflate the bladder.
3. Inflate and leak test the bladder through the outboard oral tube using the same procedure as in step 2.
4. After deflation relock the oral tube valves. Reinstall charged CO2 cylinders, refold the bladder and close the cover, refer to separate repack instructions.

#### **LEAK INSPECTION**

Complete steps 2, 3 & 4 as above.

#### **SERVICE LIFE**

On condition and passing of inspections. However, not to exceed ten (10) years from date of manufacture.

### FACTORY SUPPORT

Contact LSC for inspections and services, LSC will inspect and test your inflatable vest, LSC service #000-ID25.

### REPLACEMENT PARTS

#742-01	ARAMID CASE (SPECIFY COLOR) *Optional Nylon Case Available	#742-02	INFLATABLE BLADDER, 50 lbs.
#742-03	CO2 DUAL INFLATOR ASSEMBLY	#740-04	ZIPPER SLIDER w/PULL TAB, EA.
#350	CO2 CYLINDER, 25 GRAMS, EA.	#479	GASKET SET, CO2 CYLINDER, EA.
#488-S	GASKET, 3/8" CYLINDER SEAT, EA.	#HI014	NUT, CO2 STEM, EA.
#HI015	LOCK PIN RED, f/MANUAL INFLATORS, EA.		

### WARRANTY

LSC products are warranted to the first consumer purchaser to be free from defects in material or workmanship for a period of twelve (12) months. Please contact LSC for our complete Warranty information and Policies, or visit our website.

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