

INFLATABLE LIFERAFT

OPERATION MANUAL FOR LIFERAFTS

OPEN REVERSIBLE TYPE

Contents

- 1. Structure Introduction
- 2. Features
- 3. Installation
- 4. Launch the liferaft
- 5. Free-Floating
- 6. Boarding
- 7. Self-protection and SOS
- 8. Maintenance and repair

OCEANO OR – Open Reversible inflatable liferafts are special liferafts designed and manufactured by LALIZAS. These liferafts are applicable for high-speed crafts engaged in warm sea area in China and in the international voyages only.

The floor of the liferaft is between the buoyancy tubes. After the inflation, the occupants can board immediately, whichever side of the liferaft is above the sea level.

1. Structure Introduction

- **1.1** This inflatable liferaft is composed of upper and lower buoyancy tubes, floor and so on (Picture 1).
- **1.2** The section of the upper and lower buoyancy tubes is round-shaped; the appearance of the body is round or polygon when it is looked from above.
- 1.3 The upper and lower buoyancy tubes and its connected inflation tubes are two separate gas chambers. These chambers have their own inflation system and can be inflated automatically by steel cylinders with mixed gas of CO2 & N2 at the same time.
- **1.4** The floor is made of single-layer antiskid fabric, which is between the two buoyancy tubes. Both the upper and lower sides have one or two discharge systems.
- 1.5 The buoyancy tubes are equipped with lighting or indication lights and reflective materials.

- **1.6** The upper and lower buoyancy tubes are each equipped with a safety valve and an inflation/deflation valve.
- **1.7** The upper and lower buoyancy tubes are each equipped with 1-2 semi-rigid boarding ramps.
- **1.8** The upper and lower buoyancy tubes are each equipped with certain quantities of water-pockets on their tops.

2. Features

2.1 OCEANO OR – Open Reversible inflatable liferaft is a life-saving appliance for rescuing victims when marine perils happen. The liferaft is mainly made of rubberized fabric. When operating, throw it outside the shipboard, it will inflate fully by its carried CO2 gas and float on the water, so the crew and victims can board the liferaft to be rescued.

2.2 There are the following sizes of Open Reversible inflatable liferafts: OR-6, OR-10, OR-25, OR-30, OR-50, OR-65 & OR-100.

3. Installation

The liferaft packed in canister is usually located on the cradle alongside the shipboard. When installing, the liferaft shall be fixed by special lashing. One end of the lashing is connected to a slide hook, which is connected to hydrostatic release unit fixed to the cradle. Besides, the painter line of the canister shall be fixed firmly to a connecting ring of the hydrostatic release unit.

There is an easy-broken rope, which is fixed to the clamping plate of the hydrostatic release unit, on this connecting ring (Picture 2). In the normal time, it is prohibited to pull out the painter line from the canister.

4. Launch the liferaft

When it is necessary to use the liferaft, throw it into the water, inflate it fully by following the operating processes below:

- **4.1** Release the slide hook of lashing. Firstly pull out the pin, then push upward the slide ring, the slide hook will then be released from the lashing (Picture 3).
- **4.2** After releasing the lashing, if there is an inclined slideway, the canister will fall into the water due to its own gravity (Picture 4). Otherwise, take the canister out of the cradle and throw it into the water.
- **4.3** Pull out the painter line immediately, until the operating head of the gas cylinder is activated in order to inflate the cylinder fully (Picture 5).
- **4.4** After the liferaft is fully inflated, pull the painter line to draw the liferaft close to the ship.

5. Free-floating

When the ship is sinking so rapidly that it is impossible to release the liferaft manually,

the canister will sink together with the ship. When it sinks to 2-4 meters below the water surface, the lashing of the canister will be released automatically by the hydrostatic release unit due to water pressure, and then the canister will float freely on the water. During the continuous sinking of the ship, the painter line will be pulled out continuously with the help of its own buoyancy, until activate the operation head of the cylinder to fully inflate the liferaft. When the ship sinks further, the easy-broken line will break, thus the liferaft will separate from the sinking ship. (Picture 6)

6. Boarding

- **6.1** After the liferaft is close to the shipboard, the passengers can board the liferaft through boarding ramp or boarding ladder or other ways. If the passenger's position is not far away from the water surface, he or she can jump into the liferaft directly. The passengers fallen into the water shall swim close to the liferaft, and then board the liferaft through boarding ramp or boarding ladder.
- **6.2** After boarding, except seating orderly, the occupants shall search the others in the water and help them to board the liferaft. The occupants can throw the rescue quoit with enough length of rope to the persons in the water and pull them to the liferaft side after they grab the rescue quoit, then help them to board into the liferaft. During the night, the occupants can search the sea surface by electric torch and whistle to raise the attention of the persons in the sea.
- **6.3** After all the passengers evacuate to the liferaft, cut off the painter line to separate the liferaft from the sinking ship, and then paddle away the liferaft from the sinking ship. (Picture 7)
- **6.4** When the liferaft is away from the sinking ship and in a safe position, launch the sea anchor to avoid liferaft floating too far away from the sinking ship for the sake of rescuing in time.

7. Self-protection and SOS

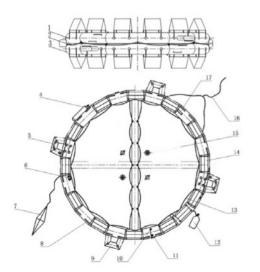
- 7.1 If there is accumulated water in the liferaft, open the cover of discharge system or use the bailer and sponge in the emergency bag to dry it.
- **7.2** Use SOS signal correctly in right time to get rescued as early as possible. You can reveal your position by using the following ways:
 - **7.2.1** Observe the sea and air condition, when finding airplanes and ships passing by, release the red flare signals immediately or send Morse signals by using electric torch. (Picture 8)
 - **7.2.2** Turn off the indication light to save electricity.
- 7.3 There is emergency pack(s) inside liferaft, which includes various equipments and ac-

cessories. Read the "Survival at Sea" Manual carefully to master the correct way of using all kinds of equipments and accessories and the correct processing methods in different emergencies. (Picture 17)

7.4 When the pressure of the buoyancy tube is insufficient, inflate it by the bellow manually.

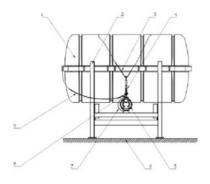
8. Maintenance and repair

- **8.1** Pay attention to the maintenance and repairing of the liferaft during the period of floating on the sea to keep it in good condition. Be very careful with the flammable fabric of the liferaft, which is also damageable to the sharp goods.
- **8.2** If the liferaft body is damaged, repair it immediately. There is repair kit inside the emergency pack of the liferaft, which includes repair tools and materials. Use rubber plug, repair clamp or fabric together with glue to repair according to different situation of damage. (Picture 18)
- **8.3** The liferaft shall be inspected and serviced by the service stations approved by LALIZAS every year.



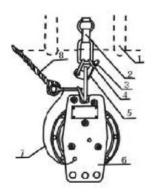
- Upper buoyancy chamber
- 2. Outer grab line
- 3. Lower buoyancy chamber
- Inflation system
- Boarding handle
- 6. Rescue quoit
- 7. Sea anchor
- Reflective tape
- 9. Boarding ramp
- 10. Interior light
- 11. Indication light12. Emergency bag
- 13. Inner grab line
- 14. Water pocket
- 15. Draining hole
- 16. Painter line
- 17. Safety Knife

Picture 1 Basic Construction of Open Reversible Liferaft



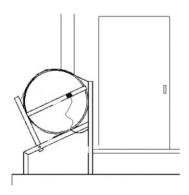
- Canister
- Cradle
- 3. Lashing
- Slide Hook.
- Hydrostatic release unit
- 6. Deck
- 7. Weak Link
- Connected ring Painter line 8.
- 9

Picture 2 Installation or Board

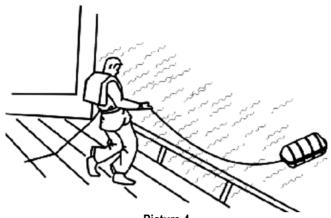


- Container 1.
- 2. Lashing
- 3. Pin
- Slip-ring Slip-hook 4.
- 5.
- Hydrostatic release unit Weak link cord 6.
- 7.
- Painter

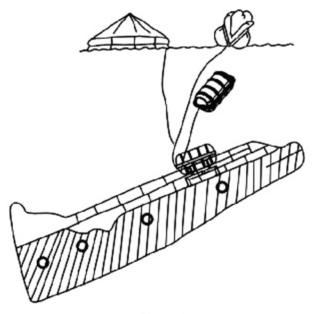
Picture 3 Loose Slip-hock



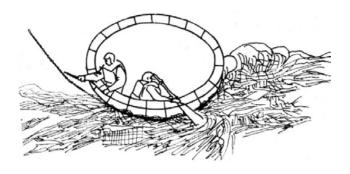
Picture 4 Canister slipping into water along the slideaway



Picture 4
Pulling Out Painter to Let Raft Inflated to Shape



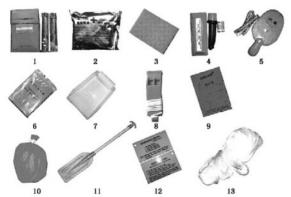
Picture 6 Free floating



Picture 7 Cut the Painter



Picture 8 Send SOS Signals to airplane or ships



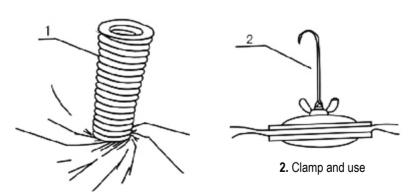
- Red flares
- First-aid kit
- Sponge Torch

- Pump Operational Manual
- Bailer
- 8. Whistle
- Log Book 10. Repair kit
- 11. Paddle
- 12. Emergency Actions Card13. Sea Anchor and rope

Picture 9 Miscellaneous Appliances Equipped in Liferaft



Picture 10 Inflate Chamber/Floor with Bellows (pump)



1. Conical plug for patching and its use

Picture 11 Liferaft's Repairing and maintenance

LALIZAS Hellas

3 Gounari, Piraeus P.C.18531, Greece Tel.: +30 210 4226274, Fax: +30 210 4226273 e-mail: info@lalizas.com, www.lalizas.com