

INSTRUCTION MANUAL FOR RIGID LIFERAFTS

**IMPORTANT!
THIS WATER RESISTANT
COPY MUST REMAIN TIED
IN THE RAFT AT
ALL TIMES.**

**WARNING!
OVATEK LIFERAFTS ARE TO BE USED FOR LIFE SAVING AT
SEA AND ARE NOT SUITABLE FOR ANY OTHER USE.**

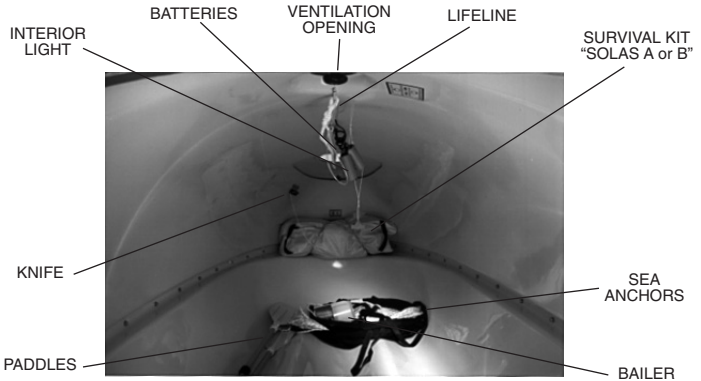


OVATEK Inc.
2256, rue Industrielle,
Bas-Caraquet, NB,
E1W 5Z2 CANADA

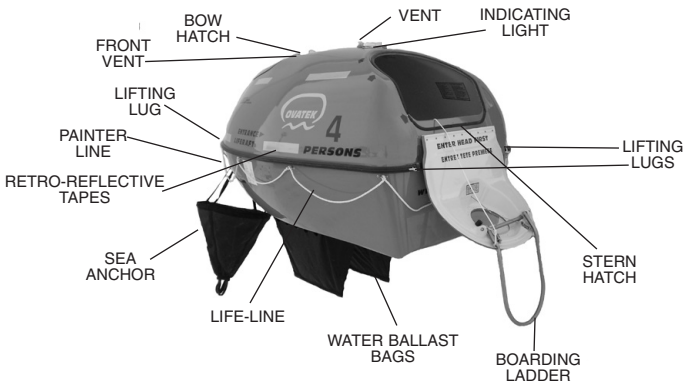
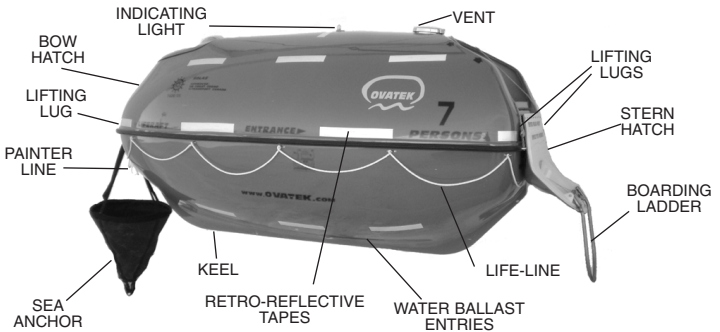
☎ +1 506 727 50 39
☎ +1 877 682 83 54
info@ovatek.com
Skype: ovatek

www.OVATEK.com

INTERIOR



EXTERIOR PICTURES



CONTENT

INTRODUCTION.	2
SECTION 1: OPERATION.	3
1.1 LAUNCHING.	3
1.2 BOARDING.	5
1.3 CLOSING THE HATCH.	6
1.4 DEWATERING.	6
1.5 RELEASING THE PAINTER LINE.	7
1.6 PROPULSION AND STEERING.	7
1.7 VENTILATION.	8
1.8 SEA ANCHORS.	8
1.9 LOCATOR AND INTERIOR LIGHTS.	8
1.10 SURVIVAL KIT.	9
SECTION 2: ROUTINE INSPECTION.	10
2.1 BIWEEKLY INSPECTION.	10
2.2 MONTHLY INSPECTION.	10
2.3 ANNUAL INSPECTION.	10
2.4 MATERIAL CHECK LIST	10
SECTION 3: RAFTMANSHIP.	13
3.1 DRIFT CONTROL	13
3.2 INTERIOR DRYNESS.	13
3.3 RAFT STABILITY.	13

INTRODUCTION

This guide and the training DVD are intended to provide operating, maintenance and raftmanship instructions for OVATEK rigid liferafts. The captain and the crew should review these documents on a regular basis and make sure that any newcomer on board is familiarized with the procedures.

UNLIKE INFLATABLE LIFERAFTS, ACTUAL IN THE WATER TRAINING CAN BE ACHIEVED AT NO COST AND WILL GREATLY IMPROVE CREW'S READINESS TO ABANDON SHIP. OVATEK INC. STRONGLY SUGGESTS THAT OWNERS AND CAPTAINS ORGANIZE SUCH TRAINING ON A REGULAR BASIS.

The instruction manual copy printed on water resistant paper must remain tied in the raft at all times. In addition, a gloss copy must be made available in each of captain's and crew's quarters.

OVATEK rigid liferafts have received the following approvals:

United States Coast Guard

Transport Canada

In addition, the OVATEK 7 complies SOLAS approved.

The following instructions cover rafts installed on original cradles. If the raft uses a special launching apparatus, refer to instructions supplied with the system.

OPERATION

Some of the emergency instructions shown in this manual are posted in the raft and on the vessel. The OVATEK liferaft should be launched or boarded on the captain's command or when following the vessel's emergency procedures.

OVATEK rafts have been designed to be boarded on the deck of a sinking ship to minimize the critical risks inherent to boarding a liferaft in the water. OVATEK Inc. recommends this type of boarding unless fire or special circumstances require to a standard launching.

Ovatek rafts are equipped with an hydrostatic release device that will automatically free the raft from its cradle when a depth between 1.5 to 4.0 meters is reached. Should the raft sink with the boat, the buoyancy reserve guarantees that the raft would quickly surface.

1.1 LAUNCHING

The following instructions cover rafts installed on original cradles. If the raft uses a special launching apparatus, refer to instructions supplied with the system.

1.1.1 LAUNCHING: IN THE WATER BOARDING

WARNING!

Do not launch the liferaft from the vessel with persons on board as serious injuries on impact may occur.

DO NOT CUT THE PAINTER LINE!

OVATEK 4

- Free the raft from the yellow web tiedown strap by pulling the stainless steel wire attached to the snap shackle on top of the hydrostatic release.
- Slightly lift the raft from its cradle.
- Throw the raft overboard while making sure that ballast pockets are free from obstacles.
- Be sure no one is in the way of the liferaft when launching it.

OVATEK 7

Free the raft from the yellow web tiedown strap by pulling the stainless steel wire attached to the snap shackle on top of the hydrostatic release.

If necessary orientate the raft on its cradle and push it overboard. Be sure no one is in the way of the liferaft when launching it.

1.1.2 LAUNCHING: BOARDING ON VESSEL'S DECK.

- Wait until everybody is on board.
- **CUT THE PAINTER LINE!** A buoyant knife is placed inside the raft near the front hatch.
- When the water reaches the raft, release the tiedown strap by pulling on the stainless steel wire located in the raft at the rear vent.

1.2 BOARDING.

1.2.1 BOARDING ON VESSEL'S DECK. (FIG. 1)

Open stern hatch by pulling handle on the hatch. The hatch will open outward and downward. To board, pull down the ladder fixed to the hatch. Enter the liferaft head first. The first person to board should sit at the bow. Each additional person should sit alternating side to side.

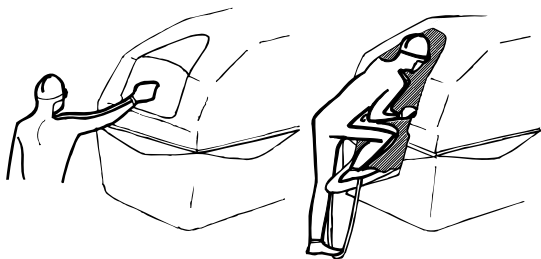


Fig. 1: Opening the hatch and boarding on the vessel's deck

After the liferaft is launched and still tied to the vessel, the crew should regroup around it and hold on the lifeline to help maintain stability for the first person to board. Open stern hatch by pulling the handle. The hatch will open outward and downward. To board, pull down the ladder and climb in head first by grabbing the interior grab strap. Each additional person should sit alternating side to side.

1.2.2 BOARDING IN THE WATER. (FIG. 2)

After the liferaft is launched and still tied to the vessel, the crew should regroup around it and hold on the lifeline to help maintain stability for the first person to board. Open stern hatch by pulling the handle. The hatch will open outward and downward. To board, pull down the ladder and climb in head first by grabbing the interior grab strap. Each additional person should sit alternating side to side.

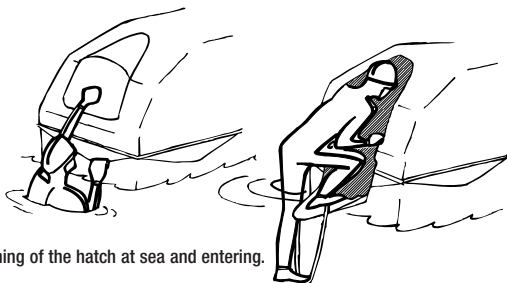


Fig. 2: Opening of the hatch at sea and entering.

1.3 CLOSING THE HATCH. (FIG. 3)

After everyone is safely on board and seated, pull up the ladder and close the stern hatch by pulling the cord attached to the ladder.

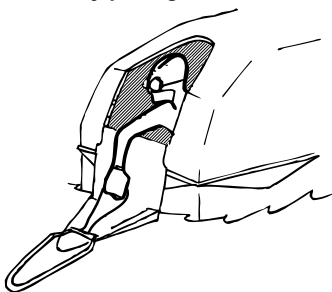


Fig. 3: Closing the hatch

1.4 DEWATERING. (FIG. 4)

A bailer and two (2) sponges are delivered with the raft and should be sufficient to dry the raft after boarding. However, should a large amount of water be present, the first one to board will use the hand pump to dewater the liferaft before the other survivors climb in. The ones outside the Ovatek holding the lifeline will help to stabilize the liferaft during dewatering. To proceed with pumping, both hatches must be closed and the pump hose slid through the fully open rear vent. Time required to empty the raft will depend on the amount of water but tests have demonstrated that it can be done in ten (10) minutes.

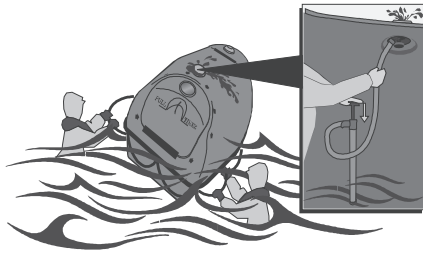


Fig. 4 Dewatering

1.5 RELEASING THE PAINTER LINE.

The person seated at the bow must open the bow hatch and cut the painter line. The painter line is attached to a weak link that will break if the vessel sinks.

1.6 PROPULSION AND STEERING. (FIG. 5)

To propel or manoeuvre the liferaft in calm seas, you may paddle positioned in the bow or stern hatch openings. A single paddler will find the liferaft more manoeuvrable using the bow hatch opening.

Paddlers position :

The stern paddler should be seated on the rear edge of the stern hatch opening leaning forward as he paddles. The bow paddler should kneel down in the bow hatch opening.

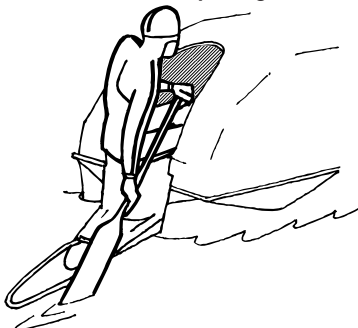


Fig. 5: Paddling with open hatch.

1.7 VENTILATION.

The design and construction of the Ovatek liferaft provides excellent thermal protection. As a result it is necessary to regulate the air flow and temperature inside. **OPEN BOTH VENTS FULLY IMMEDIATELY AFTER BOARDING TO PROVIDE SUFFICIENT AIR FOR OCCUPANTS.** Operating instructions are located adjacent to each vent. In calm seas additional air circulation can be achieved by opening the hatches.

1.8 SEA ANCHORS.

Once clear of the vessel in distress, the sea anchor should be deployed. Check that the line is attached to the bow lift lug before deploying. Deploy through the bow hatch. In the event the liferaft is to be under tow the sea anchor should be attached to the stern lift lug and deployed through the stern hatch. A second sea anchor is supplied with the raft.

1.9 LOCATOR AND INTERIOR LIGHTS.

The locator light should be activated once the liferaft is launched by pulling the battery cord. The interior light should be on during boarding at night and then only when needed. The maximum battery life is 12 hours.

1.10 SURVIVAL KIT.

The survival kit is kept in the stowage bag at the bow of the liferaft. As soon as possible, the anti-seasickness tablets and the seasickness bags should be distributed to the survivors. Administer first aid as needed. Regroup with other liferafts if any are present and secure together.

Rain water can be collected through rear hatch opening by installing the plastic collection bag as shown in figure 6.

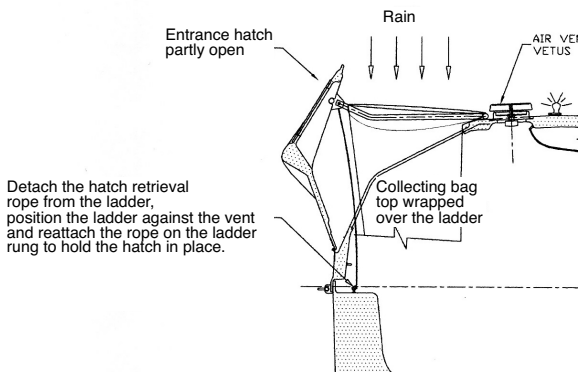


Fig. 6 Collecting rain water.

Section 2 : ROUTINE INSPECTION.

2.1 BIWEEKLY INSPECTION.

1. Wash the interior and exterior with fresh water and dry it with a soft cloth.
2. Leave the hatches open for drying.
3. Check the emergency kit and the tie down.
4. Visual check the exterior of the capsule for any damage.

2.2 MONTHLY INSPECTION.

1. Carry out emergency survival drill.
2. Insure that all equipment on the liferaft is fully operational.

2.3 ANNUAL INSPECTION

1. The exterior surface of the liferaft should be waxed with a high quality car or yacht wax containing U.V. protection and polished with a soft cloth.
2. The rubber seals around the hatches should be lubricated with a silicone based grease to prevent freezing damage. Do not use petroleum jelly
3. The hatches should be checked for water tightness.

2.4 MATERIAL CHECK LIST

N°	Description	SOLAS	
		A	B
1	One (1) buoyant rescue quoit attached to not less than 30 metres of buoyant line.	X	X
2	One (1) non-folding safety knife, having a buoyant handle and handguard, attached and stowed at the front inside the raft.	X	X

N ^o	Description	SOLAS	
		A	B
3	One (1) buoyant bailer.	X	X
4	Two (2) sponges and one (1) hand-pump.	X	X
5	Two (2) sea anchors.	X	X
6	Two (2) buoyant paddles.	X	X
7	Three (3) safety openers suitable for opening water and food containers.	X	
8	One (1) whistle or equivalent sound signal.	X	X
9	Four (4) parachute distress signals. Two (2) parachute distress signals.	X	X
10	Six (6) hand flares.Three (3) hand flares.	X	X
11	Two (2)buoyant smoke signals. One (1) buoyant smoke signal.	X	X
12	One (1) waterproof flashlight suitable for MORSE signaling with spare batteries and one (1) bulb in a waterproof container.	X	X
13	Seven (7) or four (4) doses of seasickness medicine and one (1) seasickness bag for each person.	X	X
14	One (1) daylight signalling mirror with instructions for signalling ships and aircraft.	X	X
15	One (1) first-aid kit.	X	X

N°	Description	SOLAS	
		A	B
16	One (1) illustrated copy of lifesaving.	X	X
17	Food rations (Not less than 10,000 kJ/ person).	X	
18	One (1) set of fishing tackle and fishing line.	X	
19	Watertight, rustproof receptacles containing a total of 1,5 liter of fresh water for each person.	X	
20	One (1) rustproof, graded drinking cup.	X	
21	Information about survival at sea.	X	X
22	Instructions about immediate actions after boarding.	X	X
23	Two (2) thermal blankets.	X	X
24	One (1) radar reflector.	X	X

INTERNATIONAL DISTRESS CALL (SOS):



Section 3 : RAFTMANSHIP

If no ship's officer is aboard the raft, a leader should be designated. The emergency supplies including food, water and flares should be under his/her control. He/she should be responsible for assigning all crew duties.

3.1 DRIFT CONTROL.

The liferaft will drift with wind and current. To minimize this effect, deploy the sea anchor as described in 1.8. This will help reduce the search area for rescuers.

3.2 INTERIOR DRYNESS.

Acceptable hygiene conditions and dryness will greatly contribute to good morale on board; it is important to clean and rinse the raft as often as needed.

3.3 RAFT STABILITY.

Should the raft be drifting onto a lee shore, the sea anchor should be kept streamed out to the full length of the line. Do not stand up, especially in hatches openings to avoid being thrown overboard. Remain seated to maintain a low center of gravity.

IMMEDIATE ACTIONS AFTER BOARDING.

- **CUT THE PAINTER LINE.**
- **FULLY OPEN BOTH AIR VENTS IMMEDIATELY AFTER BOARDING.**
- **GET AWAY FROM THE DISTRESS SHIP USING THE PADDLES.**
- **OPEN THE SURVIVAL KIT AND DISTRIBUTE SEASICKNESS TABLETS AND BAGS. ENSURE THAT THE TABLETS ARE TAKEN IMMEDIATELY!**
- **DEPLOY SEA ANCHOR THROUGH BOW HATCH. ENSURE THAT LINE IS PROPERLY SECURED TO BOW LIFT LUG.**
- **VERIFY THAT THE EXTERIOR LIGHT IS FUNCTIONAL.**
- **INSTALL THE RADAR REFLECTOR ON THE EXTERIOR OF THE RAFT.**

SEARCH AND RESCUE.

- **TO RESCUE A SURVIVOR AT SEA, THROW HIM THE RESCUE LINE ATTACHED TO QUOIT RING OR SLIP THE RING OVER YOUR ARM AND SWIM TOWARD HIM.**
- **IF THE SURVIVOR IS UNCONSCIOUS, GRAB UNDER THE ARMPITS AND DRAG HIM/HER INSIDE THROUGH STERN HATCH OPENING.**

SURVIVAL

- **FAMILIARIZE YOURSELF WITH THE CONTENTS OF SURVIVAL KIT. READ INSTRUCTIONS ON EACH ITEM BEFORE USING.**
- **BE READY FOR:**
 - **ARRIVAL OF RESCUE UNIT,**
 - **BEING TAKEN IN TOW,**
 - **HELICOPTER RESCUE.**

**STAY ALERT!
MAINTAIN MORALE!**