OVATEK EXAMINATION GUIDE















Pages 2-3 are an examination checklist for USCG Approved Ovatek Rigid Life Rafts (4 or 7 person) equipped with SOLAS A, B or Coastal equipment packs. The remainder pages include the Ovatek Step by Step inspection checklist for reference.

The Commercial Vessel Compliance Fishing Vessel Safety Division (CG-CVC-3) supports using the Ovatek Examination Guide (which includes Ovatek Manufacturer's Recommended Maintenance) as a tool to offer visibility of recommended servicing standards on USCG Approved Ovatek Rigid Liferafts. This guidance is intended to act as an instrument to familiarize Examiners, Boarding Team Members and vessel operators on best-practices. This guidance is not intended to take the place of manufacturer recommendations.

Developed by Marine Safety Unit Portland
Fishing Vessel Safety
6767 N. Basin Ave, Portland, OR 97217
503-240-9337 FVSPortland@uscg.dhs.gov

OVATEK RIGID LIFE RAFT EXAMINATION CRITERIA

Examiners should familiarize themselves with the Step by Step inspection checklist for Ovatek 4 & 7 person rigid life rafts at the end of this guide, as well as the Operator's Manual.

The owner of the vessel is responsible for ensuring annual and periodic maintenance is being performed as recommended by the manufacturer. During CFVS dockside exams, examiners should verify that the piece of lifesaving equipment is in compliance, is serviceable and arranged as per the regulations and manufacturer's guidelines.

USCG Approval 160.018—Ovatek Rigid Liferaft (4 person)
USCG Approval 160.118—Ovatek Rigid Liferaft (7 person)

EXAMINATION CHECKLIST	
EXTERIOR	
Craft is located in a float-free location, clear of overhead obstructions	**O Yes O No**
Cradle is well secured to the deck or stand	**O Yes O No**
HRU is current and correctly installed (may use Hammar HRU)	**O Yes O No**
Quick-snap release and SS wire are correctly routed and installed	**O Yes O No**
Painter line is correctly attached to the HRU and front lug of survival craft	**O Yes O No**
Sea anchor is attached to the front lug	**O Yes O No**
Yellow tie-down belt is securely fastened	**O Yes O No**
Lock bolts on the adjustable turnbuckle are tight	**O Yes O No**
INTERIOR	
Hatch rubber seals are free from cracks and deterioration	**O Yes O No**
Hatches should close securely with good latch overlap (min 3/16")	**O Yes O No**
Pump is stowed correctly	**O Yes O No**
Paddles are stowed correctly	**O Yes O No**
Front and rear vents are in the closed position	**O Yes O No**
Batteries for interior and exterior lights not expired	**O Yes O No**
Safety knife, bailer & sponge, sea anchor, quoit, operations manual and SOLAS kit stowed correctly	**O Yes O No**
Release wire is routed properly and free from chafing	**O Yes O No**
Additional equipment not originally provided with the craft should NOT be stowed inside the craft	**O Yes O No**

SOLAS KIT INSPECTION				
*Recommend following procedures in Annex B (4 person) or C (7 person) of Ovatek Inspection Checklist for proper packing of SOLAS kit		QUANTITY		
ITEM	**YRS OF LIFE**	**A**	**B**	**C***
Parachute rockets	3.5	4	2	-
Hand flares	3.5	6	3	-
Smoke signals	3.5	2	1	-
Flashlight (1), spare batteries (2) & bulb (1)	4	1	1	1
Anti-seasickness pills (100 ea)	4	1	1	-
Food rations (2378 cal/502 g per person)	5	4/7	-	-
Drinking water (1500 ml per person)	5	4/7	-	-
First Aid Kit	4	1	1	-
Buoyant quoit and 30m of line	N/A	1	1	1
Buoyant bailer	N/A	1	1	1
Sponge	N/A	2	2	1
Radar reflector & attachment	N/A	1	1	1
Safety can openers	N/A	3	-	-
Whistle	N/A	1	1	1
Flashlight & spare bulb	N/A	1	1	1
Signaling mirror	N/A	1	1	1
Fishing tackle	N/A	1	-	-
Graduated drinking vessel	N/A	1	-	-
Thermal protective aids	N/A	2	2	-
Lifesaving signal card	N/A	1	1	-
Rain water plastic bags	N/A	1	1	1
Seasickness bags	N/A	4/7	4/7	-
Buoyant knife & line	N/A	1	1	1
Sea anchors & 100 ft of line	N/A	2	2	1
Buoyant paddles	N/A	2	2	2
Hand pump	N/A	1	1	1
Operations Manual	N/A	1	1	1
Instructions on how to survive	N/A	1	1	1

***C**=Coastal Service Pack

Step by step inspection checklist for Ovatek 4 & 7 persons rigid life rafts

1.0- Annual Inspection - Autumn

- Ø Remove all the accessories inside the life raft and wash the interior /exterior with fresh water and dry it with a soft cloth. Keep hatches temporarily open for drying the interior. A smelly environment will reduce drastically the spirit of your crew!
- Ø The exterior surface of the life raft should be waxed with a high quality car or yacht wax containing U. V. protection and polished with a soft cloth. This will extend considerably the shine of your gelcoat.
- Ø Close the air vents to prevent water accumulation inside the life raft.
- Ø The rubber seal around the hatches should be lubricated generously with a silicone based grease to prevent freezing damage and seizing due to ice. Lubricate the inside edge of the hatches too. DO NOT USE PETROLEUM JELLY!
- Ø Make sure both hatches are closed properly. You will hear the latches on each hatch "click".

2.0- Annual Inspection – Spring

- Ø Wipe the extra grease from the rubber seals around the hatches frame and on the inside hatch edge.
- Ø If required, wash the interior /exterior of the life raft with fresh water and dry it with a soft cloth. Keep hatches temporarily open for drying the interior. A smelly environment will reduce drastically the spirit of your crew!
- Ø The exterior surface of the life raft should be waxed with a high quality car or yacht wax containing U. V. protection and polished with a soft cloth. This will extend considerably the shine in your gelcoat.
- Ø Check the painter line to make sure it`s attach/secure to the hydrostatic and to the front lug of the life raft. Make sure the spool of loose rope is attach with a tie-wrap to the front lug of the life raft and that it`s ***not tangled***. DON`T USE ROPE OR TAPE TO TIE THE SPOOL. USE A TIE-WRAP!
- Ø Confirm that the end of the rope of one sea anchor is attach/secure to the front lug of the life raft and going through the front hatch and secured to the sea anchor.
- Ø Check the adjustment of the yellow tie-down strap. Make sure it`s tight.
- Ø Closed the air vents to prevent water accumulation inside the life raft.
- Ø Make sure both hatches are closed properly. You will hear the latches on each hatch "click".

3.0- Fourth year inspection

3.0.1 Front and rear hatch

- Check the condition of the rubber seal around the opening of the front and rear hatch. Replace if it's damaged.
- Check the water tightness of the rubber seal.
- Verification and lubrication of the hinges on both hatches with *«penetrating oil*". Wipe the extra oil. Make sure the hatches can open easily. A seize hinge could pull out the stainless steel rivets from the fiberglass and could result in a serious problem during an actual emergency situation.
- Lubrication of the latches on each hatch with *«penetrating oil"*. Wipe the extra oil.
- Verification for wear of the stainless steel wire that activates the latches on the front and rear hatch. Wear could be found near the latches.
- Always make sure both hatches are closed properly. You will hear the latches on each hatch "click" when secured. Confirm that the ladder retrieval rope don't get caught between the bottom of the rear hatch and the rubber seal.

  Note: It`s imperative to have the hatches properly closed *"at all time".* Throwing an Ovatek life raft overboard without properly closed hatches could damage the hatches or even flood the unit!

3.0.2 Front and rear Vents

- Verification if both vents open and close properly.
- Closed the vents after verification to prevent water accumulation inside the life raft.

3.0.3 Turnbuckle (Fig.1)

- Grease with *"anti-seize grease"* the turnbuckle located on the yellow tie-down strap. Wipe the extra grease.
- If it`s too stiff to turn it manually, dismantle the turnbuckle. Brush the threads with a manual wire brush to remove dried grease and possible oxidation. Clean and grease them thoroughly and re-assemble c/w the two lock nuts.
- After *firmly* tightening the yellow tie-down strap *manually*, insert the shaft of a screwdriver in the holes in the barrel of the turnbuckle and make *2 complete turns*. Double check the belt tension by pulling on it. Tight the nut on each side of the turnbuckle to lock it in position.

3.0.4 Shackles (Fig.1)

- Lubricate all the shackles on each side of the yellow tie-down strap with *"penetrating oil*".

3.0.5 Quick snap release (Fig.1)

- Lubricate the pivot points of the *spring loaded lever* with a "*penetrating oil*" and loose it up. *Note*: Make sure the spring loaded leaver can open with not too much restriction. This is a *"critical component"* of the release system. *Test it* by pulling the release wire and if it feels too stiff after lubrication, replace it with a new one!
- Make sure the quick snap release is orientated toward the back of the Ovatek so that the stainless steel wire is pulling on the end of the spring loaded lever.

3.0.6 Hydrostatic release (Fig.1)

- Replace the hydrostatic release with a new one. The round black puck is orientated toward the Ovatek. Confirm that the bolts on each shackle are tight.
- Re-attach the painter line to the stainless steel shackle located on the hydrostatic release

3.0.7 S/S Release wire (Fig.1 & 3)

- Verification for wear of the stainless steel release wire attach to the hydrostatic. Wear could be found in the area where the wire touches the edge of the mushroom vent.
- A ``Release wire instruction sticker`` or transparent tape (Fig.3) is required to keep the wire inside the life raft at all time! If a tape is required, simply put tape the release wire over the instruction sticker.
- Make sure the stainless steel release wire goes under the life line as per Fig.1. Otherwise, someone could trigger the manual launching system by just pulling on the lifeline.

3.0.8 Painter line (Fig.1 & 4)

- Check the painter line to make sure it`s attach/secure to the hydrostatic (Fig.1) and to the front lug of the life raft. Make sure the spool of loose rope is attach with a tie-wrap to the front lug of the life raft and that it`s *not tangled*.
- Don`t use rope or tape to tie the coil of rope. Use a tie wrap so that the coil of rope will break free when launching the life raft.

3.0.9 Interior/Exterior light (Fig.3)

- Replacement of the lithium batteries inside the life raft with a new tie-wrap.
- Verification of the outside and inside light bulbs.
- Verification of the base of the lights. Make sure it`s not damaged.

3.0.10 SOLAS bag (Fig.2)

- The SOLAS bag needs to be packed in sequence so that you don`t have to empty the bag to find the flares for example. See the Annex B & C for the *"Step by step instructions"* for the replacement of your perishables inside the SOLAS bag.

- Ø Confirm that the yellow SOLAS bag is "*permanently*" secured in position with a rope at the front of the life raft. If a life raft is thrown overboard at a significant height, the impact could damage the equipment inside the SOLAS bag (50lbs approx.) if it`s not secured.

3.0.11 Sea anchors (Fig.2 & 4)

- Ø Confirm that one of the two sea anchors is secured to the front lug of the life raft.
- Ø Tape the rope (Fig.2) inside the raft at a position where it doesn't interfere with the latch of the front hatch.
- Ø Make sure a stainless steel swivel is on the rope near the sea anchors.
- Ø A minimum of 100`of rope is required for each sea anchors (2)

3.0.12 Paddles

- Ø The telescopic aluminium paddles shaft needs to be lubricated with lithium grease.

3.0.13 Interior components (Fig.2 & 3 & 5)

- Ø Confirm that the plastic bailer with sponge (Fig.2) is secured to a rope and tied to the stainless steel pad eye. Make sure it can`t be damaged during boarding of the life raft.
- Ø Confirm that the red safety knife (Fig.2) is secured to a rope and attach to a stainless steel pad eye. It is on the interior wall of the life raft, near the front hatch. It`s required to cut the painter line to free the life raft from the ship in distress.
- Ø Confirm that the buoyant quoit (Fig.2) is secured to a line and the other end should be attached to a stainless steel pad eye in the raft.
- Ø Confirm that the pump and paddles (Fig.5) are secured in place.
- Ø Confirm that the Operation manual (Fig.2) is secured to a rope and attach to the stainless steel pad eye at the front of the life raft.
- Ø *Attention*: The Ovatek life raft is not a storage area!!!

Your Ovatek gelcoat is chalky or losing its shine? Call us for instruction on how you can shine it up!!

Step by step inspection checklist for Ovatek 4 & 7 persons rigid life rafts

ANNEX A

LIST OF MATERIAL INSIDE & OUTSIDE THE OVATEK 4 & 7 RIGID LIFERAFTS

#	Item description	Years of life	Expiration date marked	Size	Ovatek 4 (4 persons) SOLAS		Esperanto 6 (6 persons) SOLAS		Ovatek 7 (7 persons) SOLAS	
					A	B	A	B	A	B
1	Parachute rockets (*)	4	yes	Unit	4	2	4	2	4	2
2	Hand flares (*)	4	yes	Unit	6	3	6	3	6	3
3	Smokes signals (*)	4	yes	Unit	2	1	2	1	2	1
4	Flashlight batteries (*)	4	yes	Unit	4	4	4	4	4	4
5	Anti-seasickness pills (*)	4	yes	100 pills	1	1	1	1	1	1
6	Foods rations (*)	5	yes	Unit (502 gr)	4	0	6	0	7	0
7	Drinking water (*)	5	yes	1500 ml	4	0	6	0	7	0
8	Interior/exterior lights batteries	5	yes	Unit	2	2	2	2	2	2
9	Hydrostatic release (1)	4	yes	Unit	1	1	1	1	1	1
10	Buoyant quoit and 30 meters line	na	no	Unit	1	1	1	1	1	1
11	Buoyant bailer	na	no	Unit	1	1	1	1	1	1
12	Sponge (*)	na	no	Unit	2	2	2	2	2	2
13	Radar reflector & attachment (*)	na	no	Unit	1	1	1	1	1	1
14	Safety can openers (*)	na	no	Unit	3	0	3	0	3	0
15	Whistle (*)	na	no	Unit	1	1	1	1	1	1
16	Flashlight complete (*)	na	no	Unit	1	1	1	1	1	1
17	Spare bulb for flashlight (*)	na	no	Unit	1	1	1	1	1	1
18	Signaling heliograph mirror (*)	na	no	Unit	1	1	1	1	1	1
19	First aid kit (*)	4	yes	Unit	1	1	1	1	1	1
20	Set of fishing tackle (*)	na	no	Unit	1	0	1	0	1	0
21	Graduated drinking vessel (*)	na	no	Unit	1	0	1	0	1	0
22	Thermal protective aids (*)	na	no	Unit	2	2	2	2	2	2
23	Life saving signal card (*)	na	no	Unit	1	1	1	1	1	1
24	Rain water plastics bags (*)	na	no	Unit	2	2	2	2	2	2
25	Waterproof operation manual	na	no	Unit	1	1	1	1	1	1
26	Instructions on how to survive (*)	na	no	Unit	1	1	1	1	1	1
27	Seasickness bags (*)	na	no	Unit	4	4	6	6	7	7
28	Buoyant knife & line	na	no	Unit	1	1	1	1	1	1
29	Sea anchors & 100' line	na	no	Unit	2	2	2	2	2	2
30	Buoyant paddles	na	no	Unit	2	2	2	2	2	2
31	Hand pump	na	no	Unit	1	1	1	1	1	1
32	SOLAS yellow empty bag	na	no	Unit	1	1	1	1	1	1

(*) Items which are inside the yellow SOLAS bag
(1) Items outside the life rafts

ANNEX B

Instructions to replace past due items in or on an Ovatek 4 persons rigid liferafts:

1. Detach and bring out of the raft the yellow bag containing the SOLAS items.
2. Open the bag and take out all of the items.
3. Clean the interior of the yellow bag.
4. First, put the radar reflector on the center bottom of the yellow bag.
5. Next put the 4 new water packs (if supplied) one beside the other on the round back of the bag.
6. Next put over the water packs, one sponge followed by the 4 new food rations (if supplied) one beside the other.
7. Next put the 2 thermal protective aids on the bottom middle of the bag and put one new smoke canister (if supplied) on each side of the protective aids.
8. Next, put the 4 new parachute rockets (if supplied) and the 6 new hand flares (if supplied) on top of the protective aids.
9. Next replace the 2 batteries in the flashlight with new ones (if supplied), check that it is working and put the flashlight back in.
10. Open the larger baggie bag and replace the other 2 flashlight batteries in the small baggie bag with new ones (if supplied). Leave the spare flashlight bulb there.
11. Also in the larger baggie bag, replace the bottle of pills with new one (if supplied).
12. Close correctly, by expulsing the air, that larger baggie bag and put it in the yellow bag.
13. Next replace the first-aid kit bag (if supplied) and put it in the yellow bag.
14. Close (zip) the yellow bag, put it back to its place in the front top and attach it correctly to the raft with the rope. (The yellow bag *MUST* be *PERMANENTLY* attached)
15. The buoyant quoit and line should be outside of the yellow bag and one end of the line should be attached to a pad eye in the raft.
16. The buoyant bailer, with one sponge in, should also be outside of the yellow bag and attached to a pad eye in the raft.
17. Replace the 2 (or 1) lithium batteries (if supplied) located in the interior ceiling of the raft and attach them properly with the tie rap.
18. Replace the hydrostatic release mechanism (if supplied) on the exterior of the raft.

ANNEX C

Instructions to replace past due items in or on Ovatek 7 persons rigid liferafts:

1. Detach and bring out of the raft the yellow bag containing the SOLAS items.
2. Open the bag and take out all of the items.
3. Clean the interior of the yellow bag.
4. First, put the radar reflector on the center bottom of the yellow bag.
5. Next put the 7 new water packs (if supplied) one beside the other on the round back of the bag.
6. Next put over the water packs, one sponge followed by the 7 new food rations (if supplied) one beside the other.
7. Next put the 2 thermal protective aids on the bottom middle of the bag and put one new smoke canister (if supplied) on each side of the protective aids.
8. Next, put the 4 new parachute rockets (if supplied) and the 6 new hand flares (if supplied) on top of the protective aids.
9. Next replace the 2 batteries in the flashlight with new ones (if supplied), check that it is working and put the flashlight back in.
10. Open the larger baggie bag and replace the other 2 flashlight batteries in the small baggie bag with new ones (if supplied). Leave the spare flashlight bulb there.
11. Also in the larger baggie bag, replace the bottle of pills with new one (if supplied).
12. Close correctly, by expulsing the air, that larger baggie bag and put it in the yellow bag.
13. Next replace the first-aid kit bag (if supplied) and put it in the yellow bag.
14. Close (zip) the yellow bag, put it back to its place in the front top and attach it correctly to the raft with the rope. (The yellow bag *MUST* be *PERMANENTLY* attached)
15. The buoyant quoit and line should be outside of the yellow bag and one end of the line should be attached to a pad eye in the raft.
16. The buoyant bailer, with one sponge in, should also be outside of the yellow bag and attached to a pad eye in the raft.
17. Replace the 2 (or 1) lithium batteries (if supplied) located in the interior ceiling of the raft and attach them properly with the tie rap.
18. Replace the hydrostatic release mechanism (if supplied) on the exterior of the raft.

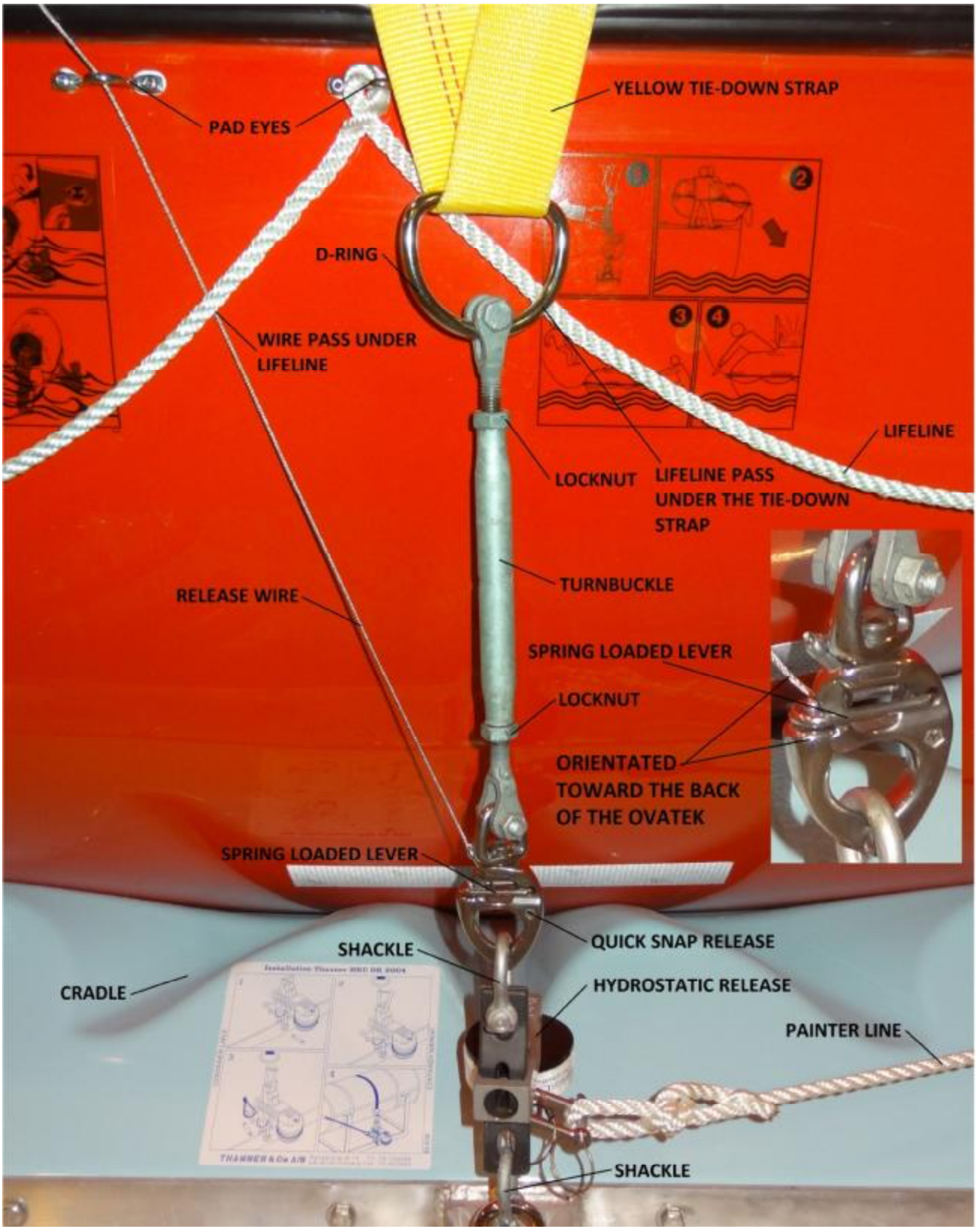

YELLOW TIE-DOWN STRAP
PAD EYES
D-RING
WIRE PASS UNDER LIFELINE
LIFELINE
LOCKNUT
LIFELINE PASS UNDER THE TIE-DOWN STRAP
TURNBUCKLE
RELEASE WIRE
SPRING LOADED LEVER
LOCKNUT
ORIENTATED TOWARD THE BACK OF THE OVATEK
SPRING LOADED LEVER
QUICK SNAP RELEASE
SHACKLE
CRADLE
HYDROSTATIC RELEASE
PAINTER LINE
SHACKLE

Fig. 1

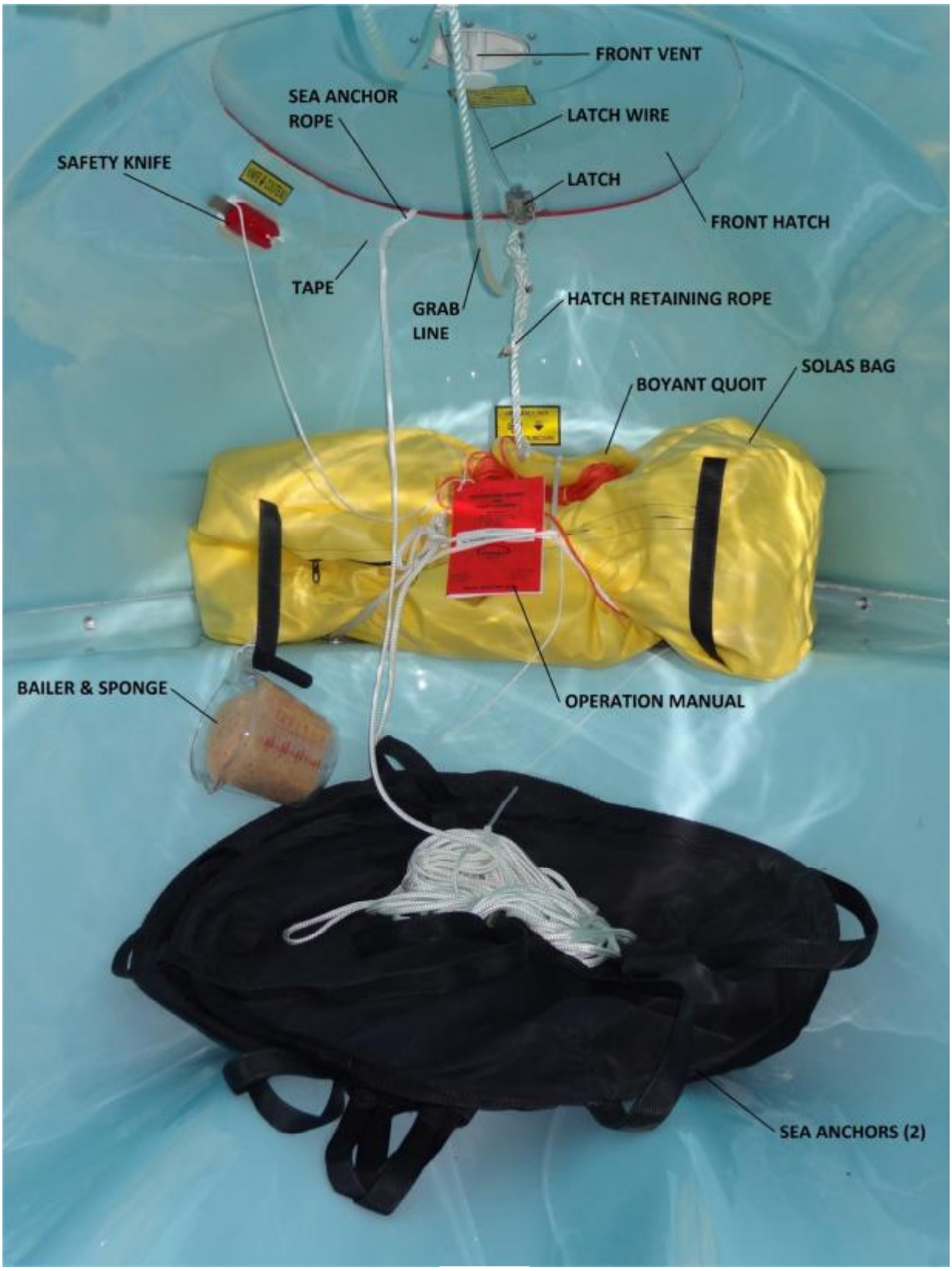

FRONT VENT
SEA ANCHOR ROPE
LATCH WIRE
SAFETY KNIFE
LATCH
FRONT HATCH
TAPE
GRAB LINE
HATCH RETAINING ROPE
BOYANT QUOIT
SOLAS BAG
BAILER & SPONGE
OPERATION MANUAL
SEA ANCHORS (2)

Fig.2

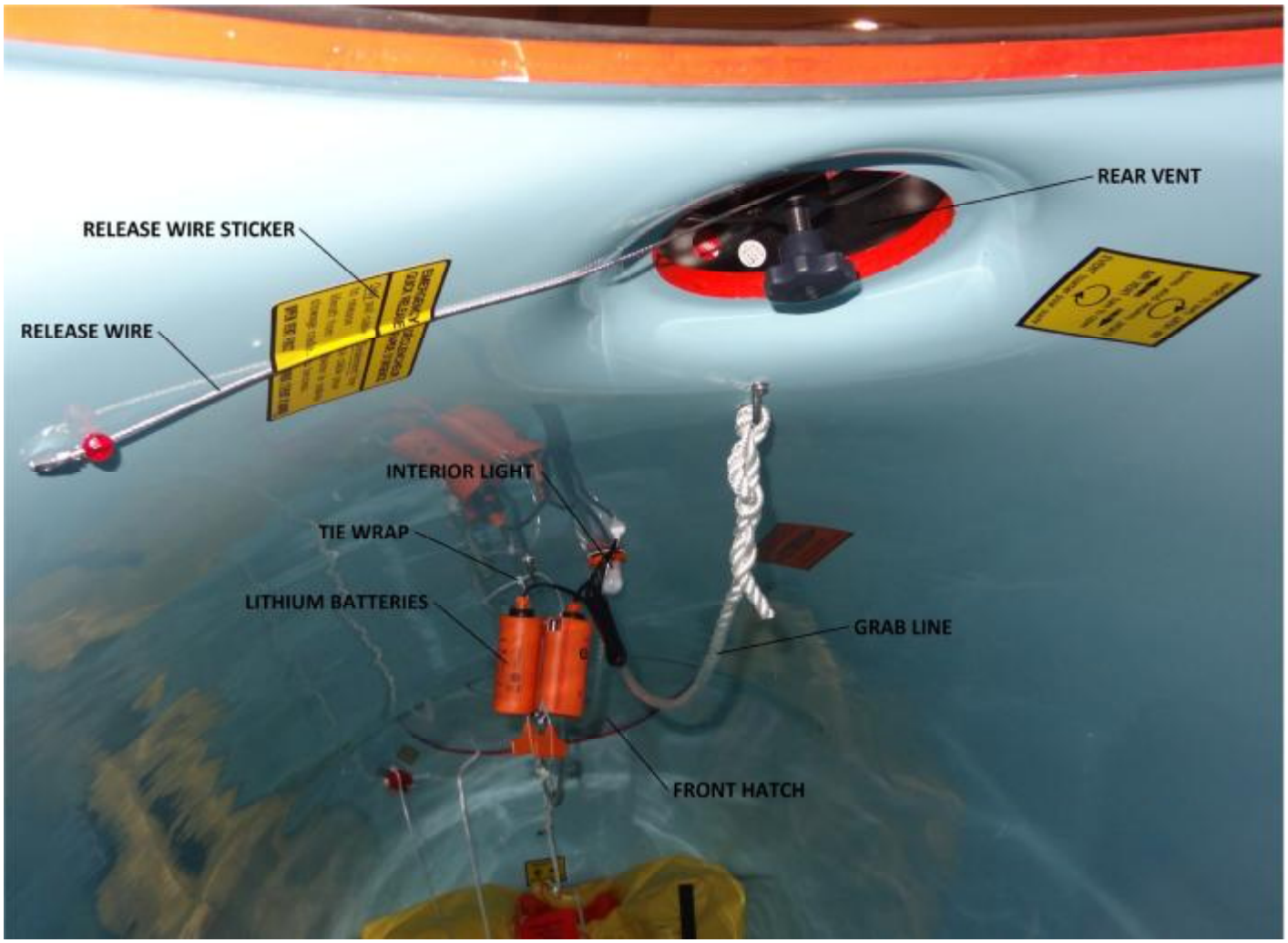

REAR VENT
RELEASE WIRE STICKER
RELEASE WIRE
INTERIOR LIGHT
TIE WRAP
LITHIUM BATTERIES
GRAB LINE
FRONT HATCH

Fig.3

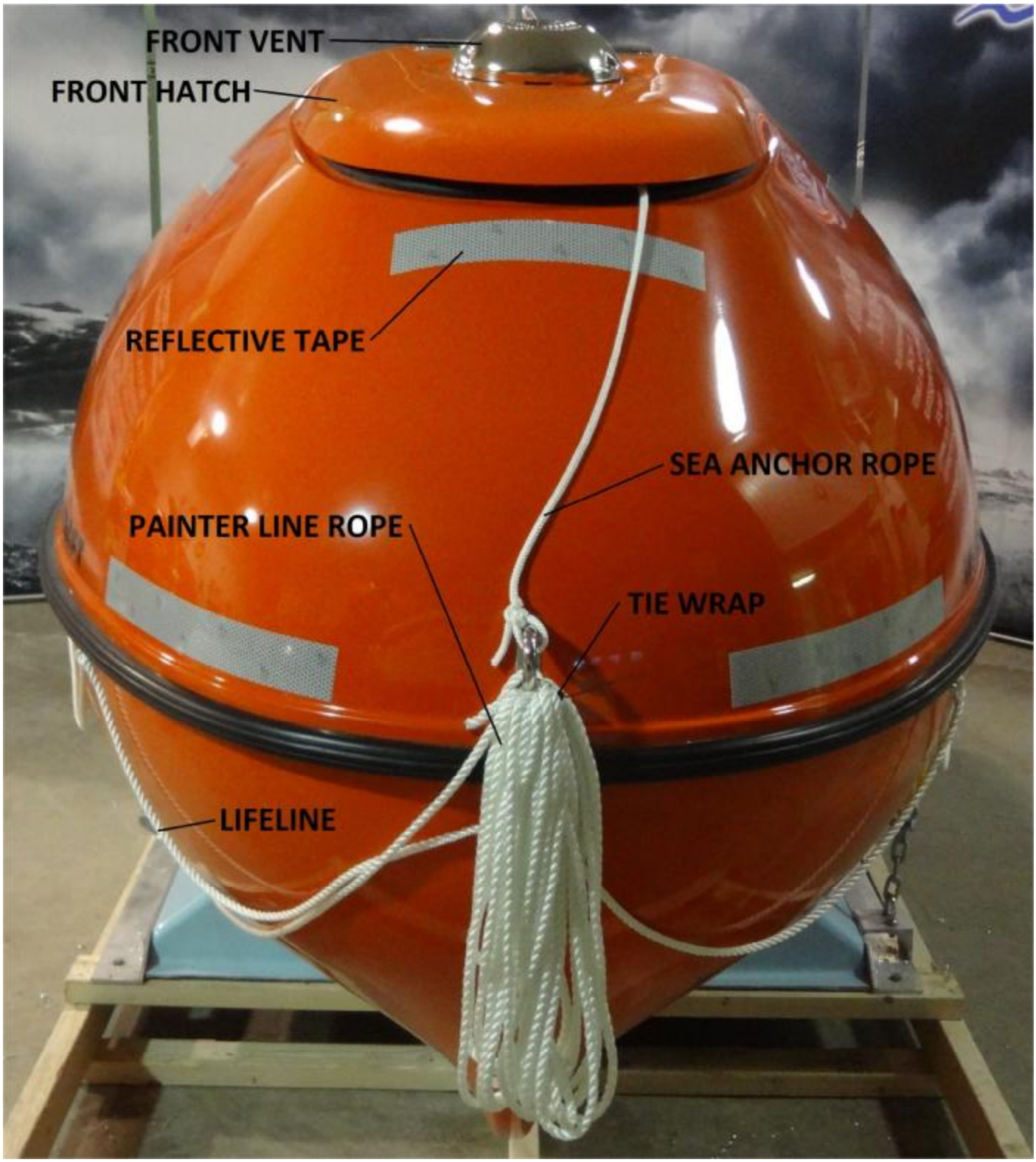

FRONT VENT
FRONT HATCH
REFLECTIVE TAPE
SEA ANCHOR ROPE
PAINTER LINE ROPE
TIE WRAP
LIFELINE

Fig.4

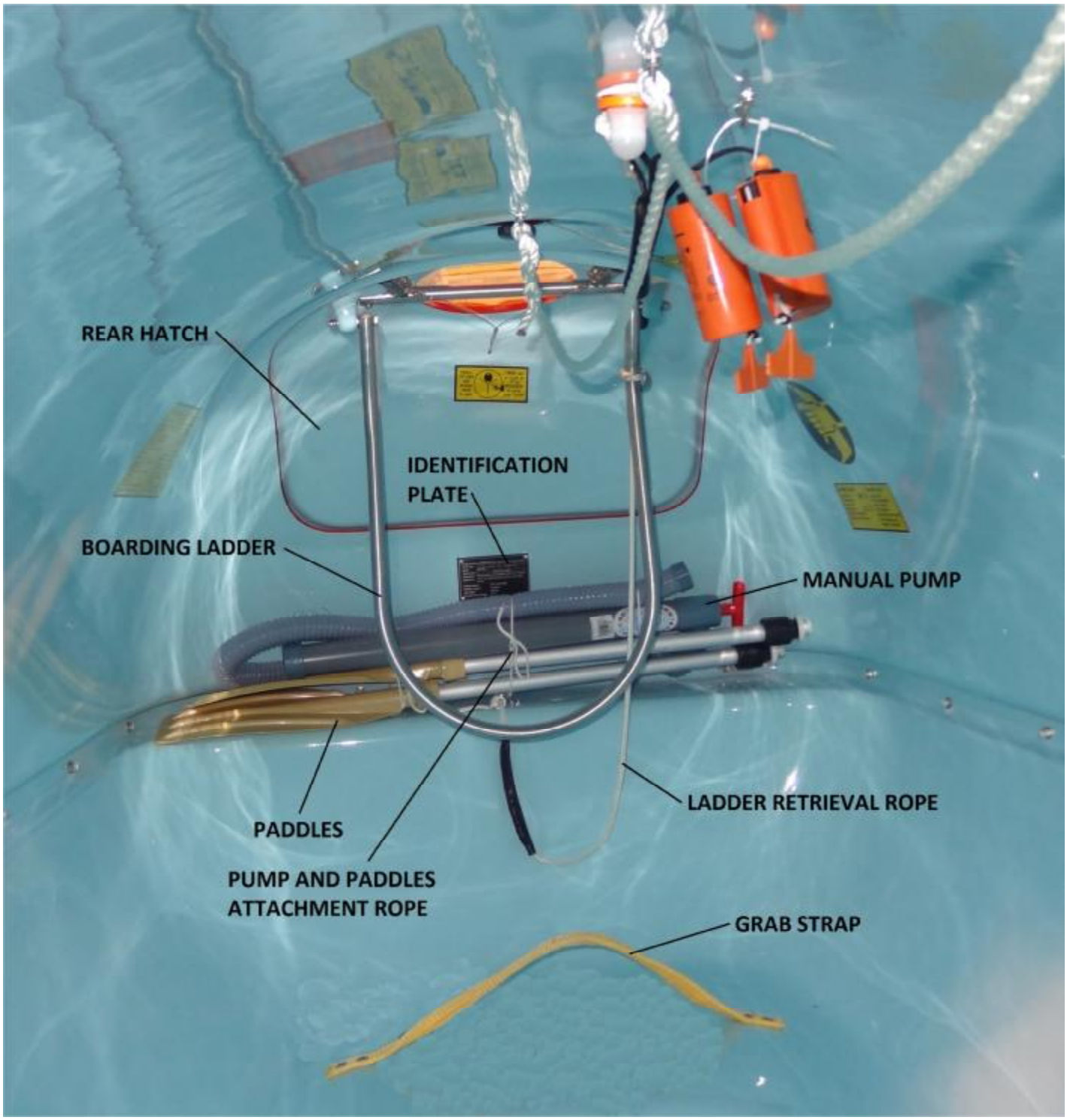

REAR HATCH
IDENTIFICATION PLATE
BOARDING LADDER
MANUAL PUMP
LADDER RETRIEVAL ROPE
PADDLES
PUMP AND PADDLES ATTACHMENT ROPE
GRAB STRAP

Fig.5