

# INFLATABLE LIFE JACKETS by Ed Lieblein DVC-VE

## Inflatable PFD approval and history

In 1996, the U.S. Coast Guard began approving inflatable personal flotation devices (PFDs) to meet the requirement to have onboard for one PFD per person. An inflatable PFD may be approved without conditions as a Type I, II or III PFD for persons over 36.3 Kg/80 lbs. if it meets the requirements of this 46 CFR 160.076 (Inflatable Recreational Personal Flotation Device). Type V life jackets can be approved if it meets performance levels for a Type I, II or III. It is important the vessel examiner read the label or data printed inside on the PFD to determine its **type**, **performance levels** and any **restrictions**. Inflatable PFDs are more complicated than standard lifejackets. The main characteristic for inflatables is that it has a chamber or bladder that is filled either by a compressed air cartridge or by mouth.

## Who may use the inflatable PFDs?

Unfortunately, not everyone was approved to wear the inflatable PFDs. The inflatable PFD is not approved for children (under 16 years of age) and is not recommended for use by non-swimmers. They are not approved for water skiing, riding PWCs, white water paddling, knee boarding or similar towed uses. Inflatables are approved by the Coast Guard for stand-up paddleboards. These recreational PFDs, (low profile) have Type III performance and only approved when **worn**. There are inflatables approved for recreational use only and not approved to meet carriage requirements on commercial vessels.

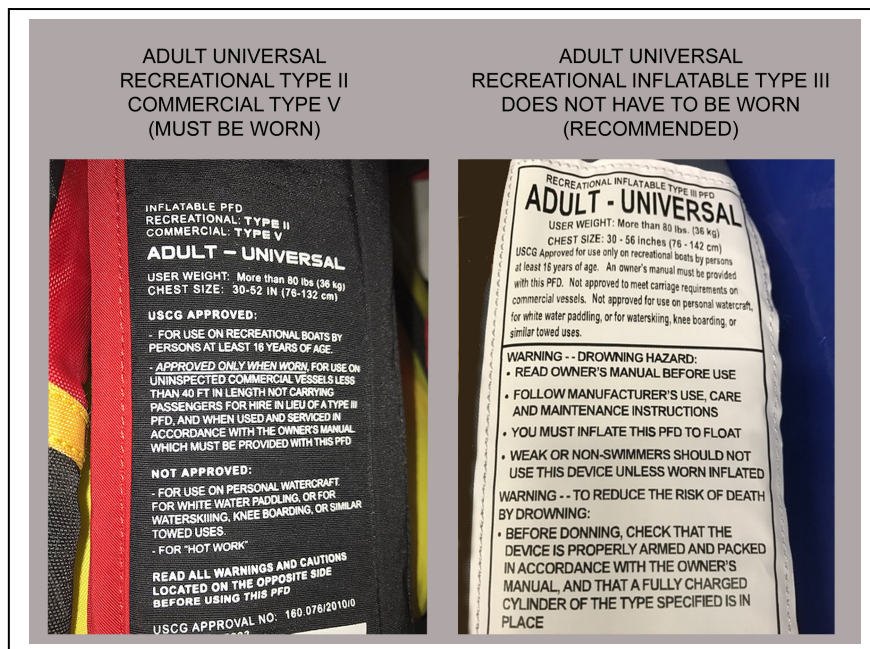
## Why are there several types of inflatable PFDs?

Inflatable PFD devices are classified into various types based on the environment in which they are designed to perform and their intended use. The design of the PFD is tested on its characteristics of buoyancy and in the water performance. For example, the Type I will be effective for all waters, especially open, rough and remote waters where rescue may be delayed. It is designed to turn **most** unconscious wearers in the water to a face-up position. Type II PFDs are designed for use where the water is calmer and rescue can be expected in a shorter period than in open seas. Type III PFDs are designed in protected waters where water rescue can be expected in a short period of time.

## Is this the right PFD for you and your boating activity?

Vessel examiners should know the performance level for each type inflatable PFD as well as the advantages and disadvantages. The booklet "THINK SAFE" and the inflatable owner's manual provided with every PFD are excellent reference materials. Each person buying an inflatable should evaluate their needs and read the label before the purchase. Some of the disadvantages and advantages of each type include:

PFD TYPE	DISADVANTAGE	ADVANTAGE
Type I	<ul style="list-style-type: none"><li>Needs regular inspection</li><li>Not for non-swimmers</li></ul>	<ul style="list-style-type: none"><li>Use in offshore remote waters</li><li>Turns most unconscious face -up</li><li>Floats you the best, highly visible</li></ul>
Type II	<ul style="list-style-type: none"><li>Needs regular inspection</li><li>Not for non-swimmers</li><li>Not for activities w/water entry</li></ul>	<ul style="list-style-type: none"><li>Very comfortable when hot</li><li>Highly visible color when inflated</li><li>Good for calm or inland wearers</li></ul>
Type III	<ul style="list-style-type: none"><li>Needs regular inspection</li><li>Not for non-swimmers</li><li>Not for long hours in water</li></ul>	<ul style="list-style-type: none"><li>Good for calm or inland wears</li><li>Keep wearers face up after inflation</li></ul>
Type V (Special Use Devices)	<ul style="list-style-type: none"><li>May require more than one step for proper inflation</li><li>May only be approved when worn</li></ul>	<ul style="list-style-type: none"><li>Equal to either Type I, II, or III performance as noted on label</li><li>Continuous wear prevents being caught without protection</li></ul>



## Frequently asked questions/answers provided by U.S. Coast Guard Boating Safety Division

**Question:** Why are some inflatables classified as Type III and others Type V. What is the difference between them for the difference in classification?

**Answer:** The difference between the two different classifications is primarily due to the design and complexity of the particular PFD.

**Question:** Why do some inflatables have to be worn to count while others do not have to be worn?

**Answer:** Some inflatables are more difficult to don, or have different arming characteristics, than others. The more time it takes to don a life jacket, the more likely it will be required to be worn to count.

**Question:** Do all Type V's have to be worn?

**Answer:** It all depends on the labeling instructions, but in general, most Type Vs are required to be worn, or have other specific conditions that must be met, to meet carriage requirements.

**Question:** Some Type V inflatables PFD with Type III performance are approved only when worn.

**Answer:** The explanation is contained in the hang tag (pamphlet) attached to all new PFDs.

Here is more general information about life jackets, including the new “life jacket harmonization” project between the US and Canada and what it means for future life jacket labeling:

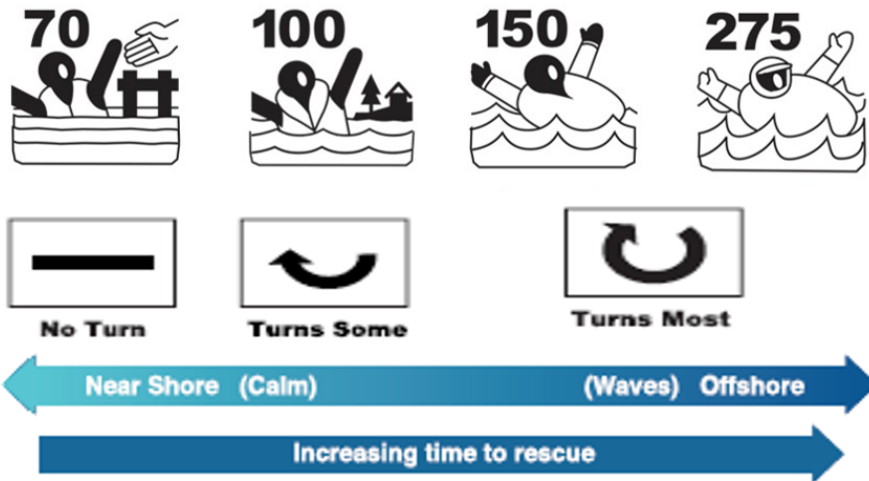
Wearable PFD means a PFD that is intended to be worn or otherwise attached to the body. **There are 4 “Types” of wearable life jackets.** A PFD marked as Type I, Type II, Type III, or Type V with Type (I, II or III) performance is considered a wearable PFD.

The labeling instructions on all wearable PFDs will show the Type (I, II, III or V). Type V does will indicate whether the PFD must be worn to be “counted” as meeting the carriage requirements or for a particular activity.

## Future life jacket classifications provided by U.S. Coast Guard Boating Safety Division

With the new life jacket “harmonization” project between Canada and US, Type codes will be replaced by performance “levels” (70, 100, etc.). The USCG has asked the States to amend their current laws to simply state that there must be one *wearable* (appropriate size, good and serviceable condition, and properly stowed), USCG-approved life jacket for each person on a boat and drop the “Type” codes. This will allow inclusion of the new approved “level” PFDs (and all currently approved PFDs with Type codes) to meet the requirements for carriage.

Here are some examples of the icons that will be used for future PFDs



## Current life jacket information

All lifejackets currently approved with Type codes will continue to be approved for use as long as they remain in good and serviceable condition.

*Type I PFDs or OFF-SHORE LIFE JACKET* provides the most buoyancy. They are effective for all waters, especially open, rough or remote waters where rescue may be delayed. They are designed to turn most unconscious wearers in the water face-up.

*Type II, or NEAR-SHORE BUOYANCY VEST* is intended for calm inland water or where there is a good chance of quick rescue. Inherently buoyant PFDs of this type will turn some unconscious wearers from a face up position in the water, but the turning is not as pronounced as a Type I.

*Inflatable Type II PFDs turn as well as a Type I foam (or Hybrid) PFD.*

*Type III, or FLOTATION AID* is good for conscious users in calm inland water, or where there is a chance of quick rescue. It is designed so wearers can place themselves in a face up position in the water. The wearer may have to tilt their head back to avoid turning face down in the water. The Type III foam vest has the same minimum buoyancy as a Type II PFD. It comes in many styles, colors, and sizes and is generally the most comfortable type for continuous wear. Float coats, fishing vests and vests designed with various features suitable for various sports activities are examples of this type of PFD. This type inflatable turns as well as a Type II foam PFD.

*Type IV PFD, or THROWABLE DEVICE* is intended for calm, inland water with heavy boat traffic, where help is always present. It is design to be thrown to a person in the water and grasped and held by the user until rescued-It is not designed to be worn. Type IV devices include buoyant cushions, ring buoys, and horseshoe buoys. There are no inflatable Type IV devices.

*Type V PFD, or SPECIAL USE DEVICE* is intended for specific activities and may be carried instead of another PFD only if used according to the approval conditions on its label. A Type V provides performance of either a Type I, II or III PFD (as marked on its label). If the label says the PFD is “approved only when worn” the PFD must be worn, except for persons in enclosed spaces and used in accordance with the approval label, to meet carriage requirements. Some Type V devices provide significant hypothermia protection. Varieties include deck suits, work vests and vests with sailing harnesses.

There are some state requirements for wearing PFDs for the following:

- For water skiing and other towed activities (use a PFD marked for Water Skiing)
- While operating personal watercraft (use a PFD marked for Personal Watercraft or Water Skiing).
- During white water boating activities
- Children under a specific age
- Cold weather times of the year

Contact your state boating safety officials for specifics for your state.

### **Title 33 of the Code of Federal Regulations**

§ 175.15 - Personal flotation devices required.

Except as provided in §§ 175.17 and 175.25:

(a) No person may use a recreational vessel unless -

(1) At least one wearable PFD is on board for each person;

(2) Each PFD is used in accordance with any requirements on the approval label; and

(3) Each PFD is used in accordance with any requirements in its owner's manual, if the approval label makes reference to such a manual.

(b) No person may use a recreational vessel 16 feet or more in length unless one throwable PFD is onboard in addition to the total number of wearable PFDs required in paragraph (a) of this section.

(c) No person may operate a recreational vessel under way with any child under 13 years old aboard unless each such child is either -

(1) Wearing an appropriate PFD approved by the Coast Guard; or

(2) Below decks or in an enclosed cabin.

**175.25** (b) If the applicable State statute establishes any requirement for children of a certain age to wear an appropriate PFD approved by the Coast Guard, then that requirement applies on the waters subject to the State's jurisdiction instead of the requirement provided in § 175.15(c) of this part.

*Read the PFD label **carefully!** Some PFDs (and all inflatables) are not approved for certain age children, personal watercraft, whitewater, water skiing and similar towed uses.*