



# Standard Guide for Water Rescue Personal Flotation Device (PFD)<sup>1</sup>

This standard is issued under the fixed designation F1823; the number immediately following the designation indicates the year of original adoption or, in the case of revision, the year of last revision. A number in parentheses indicates the year of last reapproval. A superscript epsilon ( $\epsilon$ ) indicates an editorial change since the last revision or reapproval.

## 1. Scope

1.1 This guide covers the minimum performance and safety requirements of a water rescue lifejacket/PFD (Personal Flotation Device).

1.2 In recognition of many broad and varied applications of such PFD's, many options are included.

1.3 *This standard does not purport to address all of the safety concerns, if any, associated with its use. It is the responsibility of the user of this standard to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to use.*

## 2. Referenced Documents

2.1 *Code of Federal Regulations:*<sup>2</sup>

160.047 Buoyant Vests

160.052 Buoyant Vests

160.053 Work Vests

160.060 Buoyant Vests

160.064 Marine Buoyant Devices

160.076 Inflatable Lifejackets

160.077 Hybrid Inflatable Personal Flotation Device

160.071 Immersion Suits

## 3. Terminology

3.1 *Definitions:*

3.1.1 *Personal Flotation Device, PFD, n*—a buoyant device suitable for use by one person in water emergencies. These devices may be vests, ring buoys, life preservers, cushions, and other special purpose buoyant devices.

<sup>1</sup> This guide is under the jurisdiction of ASTM Committee F32 on Search and Rescue and is the direct responsibility of Subcommittee F32.01 on Equipment, Testing, and Maintenance.

Current edition approved July 1, 2012. Published August 2012. Originally approved in 1997. Last previous edition approved in 2007 as F1823 – 97(2007). DOI: 10.1520/F1823-97R12.

<sup>2</sup> Title 33 and Title 46, Code of Federal Regulations. Copies available from the U.S. Government Printing Office, Superintendent of Documents, 732 N. Capitol St., NW, Mail Stop: SDE, Washington, DC 20401.

## 4. Significance and Use

4.1 This guide is applicable to all water rescue situations. The water situation, weather situation, and size of rescuer, will dictate what type of PFD to utilize.

4.2 This guide will assist government agencies; state, local, or regional organizations; fire departments; rescue teams; and others who are responsible for purchasing and equipping personnel who respond to water emergencies.

4.3 This guide establishes criteria that shall be considered in the performance, specification, purchase, and acceptance testing of a water rescue PFD.

## 5. Classification

5.1 This guide includes the following types of PFD's:

5.1.1 *Type I*—Off Shore Life Preserver.

5.1.2 *Type II*—Near Shore Buoyant Vest.

5.1.3 *Type III*—Special Purpose Flotation Aid.

5.1.4 *Type IV*—Throwable Devices.

5.1.5 *Type V*—Special Use Devices.

## 6. General Requirements

6.1 All PFD's should conform to standards set by the appropriate national regulatory authority, that is, the U.S. Coast Guard in the United States, and be in good and serviceable condition.

## 7. Performance Requirements

7.1 Highly visible.

7.2 Adequate flotation for individual and water rescue situation.

7.3 Proper size and fit for individual.

7.4 Offer unrestricted mobility.


7.5 Construction allows for impact protection for rescuer utilizing foam panels.

7.5.1 Design offers protection from hypothermia and heat illness associated with use.

7.5.2 Multiple closure devices for a secure fit.

## 8. Keywords

8.1 lifejacket; PFD; water rescue

 **F1823 – 97 (2012)**

*ASTM International takes no position respecting the validity of any patent rights asserted in connection with any item mentioned in this standard. Users of this standard are expressly advised that determination of the validity of any such patent rights, and the risk of infringement of such rights, are entirely their own responsibility.*

*This standard is subject to revision at any time by the responsible technical committee and must be reviewed every five years and if not revised, either reapproved or withdrawn. Your comments are invited either for revision of this standard or for additional standards and should be addressed to ASTM International Headquarters. Your comments will receive careful consideration at a meeting of the responsible technical committee, which you may attend. If you feel that your comments have not received a fair hearing you should make your views known to the ASTM Committee on Standards, at the address shown below.*

*This standard is copyrighted by ASTM International, 100 Barr Harbor Drive, PO Box C700, West Conshohocken, PA 19428-2959, United States. Individual reprints (single or multiple copies) of this standard may be obtained by contacting ASTM at the above address or at 610-832-9585 (phone), 610-832-9555 (fax), or [service@astm.org](mailto:service@astm.org) (e-mail); or through the ASTM website ([www.astm.org](http://www.astm.org)). Permission rights to photocopy the standard may also be secured from the ASTM website ([www.astm.org/COPYRIGHT/](http://www.astm.org/COPYRIGHT/)).*