

to ensure that prospective PFD purchasers receive information at the point of purchase necessary to select PFDs that are appropriate for them and their boating activities. Factors for boaters to consider include their body type, ability to swim, and the types of activities in which they will participate. The manufacturer is required to include an explanation in the pamphlet of the necessity to maintain an inflatable PFD in operational condition, and that if the user fails to appropriately maintain an inflatable PFD, it will not provide adequate safety.

Information in the pamphlets must be accessible to the prospective buyer at the point of sale. Once a pamphlet's contents are approved, each pamphlet provided by the manufacturer for the same PFD design must be printed exactly as approved by the Commandant or recognized laboratory. A sample layout with text is provided in appendix I to this IFR and copies may be obtained by contacting the Commandant as directed under **FOR FURTHER INFORMATION CONTACT**.

#### *Owner's Manual*

The owner's manual required by UL 1180 and § 160.076–37 must be submitted to the Coast Guard or recognized laboratory for review and approval. The Coast Guard will review the manual to ensure that it meets the requirements of § 160.076–37 and UL 1180. The owner's manual must warn against hazardous misuse, such as wearing the PFD under restrictive clothing. This IFR allows the pamphlet and owner's manual to be combined if selection and warning information are included on the PFD packaging.

#### *PFD Approval Type vs. Performance Type*

As written, UL 1180, which covers only wearable PFDs, designates PFDs in terms of their "performance type". The current Coast Guard PFD approval system designates PFDs in terms of a combination of the PFD's in-water performance and other characteristics. The Coast Guard approval types are: Types I, II, and III which are all wearable PFDs that have different in-water performance characteristics; Type IVs, which are all throwable PFDs; and Type Vs, which all have conditions on their approvals. Both the UL standard and this IFR introduce an additional classification factor for inflatable PFDs, i.e., their level of maintainability and serviceability.

This IFR departs from the UL standard in two important ways, as discussed below.

In the UL standard, PFDs with inflation system indicators with 2F and 3F use codes may be classified as performance Type II or III PFDs. However, the Coast Guard is requiring inflation system indicators with a 1F use code on all PFDs unless other features and methods are used to achieve the minimum LSI required by § 160.076–27. It is the position of the Coast Guard that a design with an inflation system indicator with 2F or 3F use code needs additional features to achieve adequate overall lifesaving potential, as discussed in the regulatory analysis on file in the rulemaking docket.

The other important departure from the UL standard in this IFR is that UL 1180 would allow belt-pack style PFDs that require secondary donning to be approved as performance type III PFDs. The Coast Guard's position, however, is that the difficulty in accomplishing second stage donning lowers the overall lifesaving potential of these PFDs. Therefore, additional features or methods are necessary to ensure that such a device provides adequate safety to the user. For example, a requirement that such PFDs be worn would elevate the LSI of the device such that it could be approved in accordance with the LSI requirements of § 160.076–27.

#### *Meeting Uninspected Commercial Vessel Carriage Requirements*

The Coast Guard is evaluating the desirability of allowing uninspected commercial vessels to use inflatable PFDs meeting the requirements of subpart 160.076 to meet the applicable PFD carriage requirements. Under the current regulations, these inflatable PFDs may only be carried and used on these vessels as additional equipment. Comments are therefore requested on two specific issues.

For uninspected vessels not carrying passengers for hire, the Coast Guard encourages crew members working in exposed locations to wear a PFD. PFDs meeting the requirements of subpart 160.076 could be worn while working. However, it is the Coast Guard's position that these PFDs should not be the only type of PFD carried and used unless they have been shown to have adequate durability for the intended service. Commercial hybrid PFDs are more suitable as the only required PFD. The Coast Guard requests comments on this matter.

Another matter on which the Coast Guard seeks comment pertains to uninspected vessels carrying passengers for hire. The Coast Guard is considering, as the subject of a future rulemaking, requiring the master to identify, by

position, the person responsible for keeping the inflatable PFD devices serviceable and properly armed. Also, the Coast Guard seeks comments on whether the frequency of required inspections and checks should be established in the regulations. The Coast Guard seeks comments regarding these issues as well as the desirability of approving inflatable PFDs meeting the requirements of subpart 160.076 as the sole PFD for each person on board.

#### **Number of Lives To Be Saved**

In both 1992 and 1993, approximately 670 recreational boating fatalities due to drowning occurred each year. The Coast Guard estimates that if two-thirds of boaters wore the inflatable PFDs to be approved under this rule, there would be 210 fewer recreational boating fatalities due to drowning each year. Unfortunately, even if inflatable PFDs are accepted by boaters, it will take time for boaters to change their behavior and for inflatable PFDs to replace their current PFDs. There is also no guarantee that inflatable PFDs will be worn or that two-thirds of boaters will buy them. However, it is believed that by the end of 2007 approximately 210 lives per year can be saved if an average wear rate of 66 percent is achieved.

#### *Other Additions and Exceptions to UL Standards*

In this IFR, the Coast Guard has supplemented the UL standards for inflatable PFDs and their components in several areas.

In § 160.076–3, the Coast Guard states that PFDs approved under subpart 160.076 may be used on recreational submersible vessels. Such PFDs would most likely be approved under the unique and novel provisions of the subpart as Type V PFDs.

Under § 160.076–21, inflation chamber materials must be of the same general quality as those used to pass the approval tests. Also, adhesives must be suitable for the intended application, and inflation mechanisms must be marked with a unique model number to prevent substitutions of less reliable devices (§ 160.076–31(f)).

In § 160.076–23, the design must not cause significant discomfort to the wearer during or after inflation; and fabrics must be treated to minimize unraveling.

Donning time for unconditionally approved PFDs must be more carefully controlled than conditionally approved PFDs which are approved only when worn. In § 160.076–25, donning time is relaxed for such conditionally approved PFDs because emergency donning should not be an issue. The PFD must