fish too high when the center bridle line is tight. However, there is no way to determine how the line is being handled in the water: A slack center bridle line would allow the TED to drag on the bottom. Enforcement officers would be unable to effectively enforce any such exemption and ensure protection for sea turtles. Consequently, NMFS does not believe that tongue trawls should be exempt for the requirement to use floats.

Comment: Aluminum TEDs should be exempt from the flotation requirement. TEDs made from hollow, welded aluminum tubing can be positively buoyant, and light-weight aluminum rod constructions would not need additional flotation.

Response: In a June 14, 1994 news release, NMFS requested that shrimpers voluntarily attach flotation to bottomopening hard TEDs, except those constructed of aluminum tubing. NMFS made this request prior to publication of the interim final rule, and at that time believed that floats may not be necessary on aluminum TEDs. Further investigation by NMFS gear experts, however, revealed that aluminum single-grid TEDs also require supplemental flotation for proper buoyancy.

While hollow tube TEDs can retain air, all welds must be watertight. In the course of normal wear-and-tear, it is impossible to ensure that the welds will be able to exclude water under high hydrostatic pressure at fishing depths. The experience of NMFS enforcement personnel is that hollow TEDs can and do flood under actual use.

NMFS' experience with solid rod aluminum TEDs is that they, too, need flotation to achieve neutral buoyancy. NMFS divers have filmed solid aluminum single-grid TEDs dragging hard on the bottom when insufficient flotation is used. Therefore, NMFS included aluminum TEDs in the flotation requirement in both the interim final rule and this final rule.

NMFS does recognize that the interim rule may have required too much flotation on TEDs that are constructed of very light materials. Likewise, too little flotation may have been required on TEDs that are constructed of very heavy materials. To address that problem, this final rule includes a provision for matching the buoyancy of the floats to the weight of each TED.

Comment: The specifications in the interim rule, based on the physical dimensions of the floats, do not allow for the use of floats of different shapes and sizes or multiple, smaller floats whose buoyancy may be equivalent. Fishermen who attempted to use other types and combinations of floats were

complying with the intent of the regulation, but were not complying with the letter of the regulation.

Response: NMFS agrees that there are many possible combinations of floats that would produce sufficient buoyancy to prevent TEDs from dragging on the bottom, and trapping sea turtles. When the buoyancy of each float can be easily determined, allowing the use of different numbers and sizes of floats would provide much greater flexibility to shrimpers in configuring their gear, based on their personal experience and preference. Therefore, provisions for the use of various combinations of floats of marked buoyancy have been incorporated in this final rule at 50 CFR 227.72(e)(4)(i)(I)(3)

Comment: Expanded ethylene vinyl acetate (EVA) should be considered as an alternative float material. Expanded EVA has the same characteristics as expanded PVC.

Response: NMFS agrees that floats constructed of expanded EVA could be used in place of expanded PVC. Provisions for the use of expanded EVA floats have been incorporated in this final rule.

Final Rule and Changes From the Interim Final Rule

As a result of comments and recommendations received, the final rule differs from the interim rule in several areas.

1. The interim final rule required flotation on only bottom-opening singlegrid hard TEDs because these TEDs are the ones most frequently used and an need to rapidly address the emergency situation presented by the strandings last spring. Bottom-opening hooped hard TEDs and bottom-opening Jones TEDs which make up only a small portion of TEDs in use, also have the same dragging problem. Therefore, the final rule extends the flotation requirement to all bottom-opening hard and special hard TEDs, including hooped hard TEDs and a single special hard TED, the Jones TED.

2. The final rule allows for the use of floats constructed from expanded EVA as an alternative to floats constructed from expanded PVC. NMFS gear experts determined that the characteristics of expanded EVA are substantially similar to expanded PVC. Allowance of this material expands the options available to fishermen to comply with this rule.

3. The interim final rule specified required flotation solely on the basis of the size of the floats and the circumference of the TED. These measurements provide useful and enforceable approximations of the buoyancy provided by the floats and the

buoyancy required by the TED. They do not, however, provide a means for exactly matching the weight of the TED to the buoyancy, nor do they provide for the use of equivalent amounts of flotation by floats that do not meet the size specifications. The final rule provides three alternatives by which shrimpers can comply with the requirement to use floats. These alternatives address many of the comments expressed above and provide for maximum flexibility for shrimp fishermen. The first alternative, 50 CFR 227.72(e)(4)(i)(I)(1), provides the same requirement as that of the interim rule with respect to amount of flotation for TEDs with a circumference of 120 inches or greater and for TEDs with a smaller circumference.

The second alternative, 50 CFR 227.72(e)(4)(i)(I)(2), provides that floats of any size and in any combination may be attached so that the combined buoyancy of the floats equals or exceeds the weight of the TED provided that the floats and TEDs are marked by the manufacturers with their buoyancy and weight as specified in the regulation. NMFS has held informal discussions with some TED and float manufacturers who indicated that, while marked floats and TEDs are currently not generally available, they could be produced without great difficulty. NMFS believes that marked floats and TEDs will become more widely available, as manufacturers respond to demand from fishermen for labeled gear that will enable them to comply with this provision. Furthermore, previously manufactured TEDs may be weight marked by returning them to a registered manufacturer. By simply adding up the flotation values of the floats used and comparing that value to the imprinted weight of the TED, both fishermen and enforcement officials can quickly and easily determine whether sufficient flotation is being used to prevent bottom-opening TEDs from entrapping turtles. At the same time, shrimpers can be assured that they are not using excess flotation, which could result in handling difficulties or decreased catches.

The third alternative, at 50 CFR 227.72(e)(4)(i)(I)(*3*), provides for the use of floats of any size and in any combination, provided that the floats are marked as required, to achieve a certain buoyancy based on the circumference of the TED. This provision is established in order to increase the flotation options available before weight-marked TEDs become widely available in the industry. By allowing shrimpers to select different sizes and combinations of floats based