DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

50 CFR Part 622

[Docket No. 111104664-1798-01]

RIN 0648-BB61

Fisheries of the Caribbean, Gulf of Mexico, and South Atlantic; Shrimp Fisheries of the Gulf of Mexico and South Atlantic; Revisions of Bycatch Reduction Device Testing Protocols

AGENCY: National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), Commerce.

ACTION: Proposed rule; request for comments.

SUMMARY: In accordance with the framework procedures for adjusting management measures of the Fishery Management Plan for the Shrimp Fishery of the Gulf of Mexico (Gulf FMP) and the Fishery Management Plan for the Shrimp Fishery of the South Atlantic Region (South Atlantic FMP), this rule would certify two new bycatch reduction devices (BRDs) for use in the Gulf of Mexico (Gulf) and South Atlantic shrimp fisheries, and revise a harvesting restriction for shrimp vessels fishing in Federal waters of the Gulf. Both BRDs represent modifications to the Composite Panel BRD, which is provisionally certified through May 24, 2012. This rule would incorporate these BRDs to the list of allowable BRDs, and provide technical specifications for
the construction and subsequent legal enforcement of these BRDs. Additionally, this rule would revise the shrimp effort reduction threshold for the Gulf shrimp fishery. The intended effect of this proposed rule is to improve bycatch reduction efforts in the Gulf and South Atlantic shrimp fisheries, provide greater flexibility to the industry, reduce the social and economic impacts to fishing communities, and meet the requirements of National Standard 9 of the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act).

DATES: Written comments must be received on or before [insert date 30 days after date of publication in the FEDERAL REGISTER].

ADDRESSES: You may submit comments, identified by NOAA-NMFS-2011-0274, by any one of the following methods:

- Mail: Steve Branstetter, Southeast Regional Office, NMFS, 263 13th Avenue South, St. Petersburg, FL 33701.

Instructions: No comments will be posted for public viewing until after the comment period has closed. All comments received are a part of the public record and will generally be posted to http://www.regulations.gov without change. All Personal Identifying Information (for example, name, address,
etc.) voluntarily submitted by the commenter may be publicly accessible. Do not submit Confidential Business Information or otherwise sensitive or protected information.

To submit comments through the Federal e-Rulemaking Portal at http://www.regulations.gov, enter “NOAA-NMFS-2011-0274” in the keyword search, then select “Send a Comment or Submission.” NMFS will accept anonymous comments. Attachments to electronic comments will be accepted in Microsoft Word, Excel, Wordperfect, or Adobe PDF file formats only.

Comments received through means not specified in this rule will not be considered.

FOR FURTHER INFORMATION CONTACT: Steve Branstetter, telephone: 727-824-5305, fax: 727-824-5308, e-mail: Steve.Branstetter@noaa.gov.

SUPPLEMENTARY INFORMATION: The shrimp fishery in the exclusive economic zone (EEZ) of the Gulf is managed under the Gulf FMP prepared by the Gulf of Mexico Fishery Management Council (Gulf Council), and the shrimp fishery in the EEZ of the South Atlantic is managed under the South Atlantic FMP prepared by the South Atlantic Fishery Management Council (South Atlantic Council). The Gulf and South Atlantic FMPs are implemented under the authority of the Magnuson-Stevens Act by regulations at 50 CFR part 622.

Management Measures Contained in this Proposed Rule
This rule would certify two new BRDs for use in the Gulf and South Atlantic shrimp fisheries, and revise a harvesting restriction for shrimp vessels fishing in Federal waters of the Gulf.

**BRD Certifications**

BRDs are modifications to trawl nets that limit the amount of non-targeted species caught during a fishing trip. Federal regulations require BRDs to be installed in shrimp trawls in nearly all southeastern shrimp fisheries conducted in Federal waters. The South Atlantic Council established this requirement in 1997 (April 16, 1997, 62 FR 18536). Similar requirements were established by the Gulf Council in 1998 for the western Gulf (April 14, 1998, 63 FR 18139), and in 2004 for the eastern Gulf (January 9, 2004, 69 FR 1538).

In 2008, NMFS published a final rule (February 13, 2008, 73 FR 8219) establishing a standardized criterion by which all BRDs are certified for use in the southeastern shrimp fisheries. To be certified for use in the fisheries, data collected under a standardized sampling procedure must demonstrate a BRD candidate reduces finfish biomass by at least 30 percent. To ensure the statistical certainty in regard to the sample mean value, under a Bayesian approach, the result must meet two probability statements:
1. “There is a 50 percent probability the true reduction rate meets the bycatch reduction criterion,” and  
2. “There is no more than a 10 percent probability the true reduction rate is more than 5 percent less than the bycatch reduction criterion.”

In addition, NMFS established a provisional certification status that applies to a BRD candidate not quite meeting the criteria for certification. A BRD provisional certification is effective for 2 years from the date of a publication in the Federal Register originally announcing the provisional certification. This time period is intended to allow additional wide-scale industry evaluation of the BRD candidate. The intent is to also further refine the design or application of the BRD candidate so it can eventually meet the certification criterion with greater certainty. To be provisionally certified, statistical analyses of the test results for a BRD candidate must demonstrate:

“There is at least a 50 percent probability the true reduction rate of the BRD candidate is no more than 5 percent less than the bycatch reduction criterion (i.e., the BRD candidate demonstrates a best point estimate [sample mean] of 25 percent or greater for finfish bycatch reduction).”
In 2008, NMFS published a final rule (February 13, 2008, 73 FR 8219) which provisionally certified the Composite Panel BRD for use in Federal waters throughout the Gulf and South Atlantic. The initial test data for this BRD indicated there is a 52 percent probability the true reduction rate of this BRD design is at least 25 percent.

The provisional certification of the Composite Panel BRD in the Gulf and South Atlantic, along with the Expanded Mesh BRD in the Gulf, was extended in 2010 through May 24, 2012 (May 24, 2010, 75 FR 28760). No new data were available to indicate these two BRDs no longer met the provisional certification criterion. As of May 25, 2012, 2 years after the provisional certification expires, both provisionally certified BRDs will be automatically decertified, and not allowed for use in the shrimp fisheries. It should be noted that the Expanded Mesh BRD remains fully certified for use in the South Atlantic after May 25, 2012.

Since 2010, subsequent industry testing has occurred for various modifications to the Composite Panel BRD following standardized procedures outlined by NMFS and using NMFS-approved observers to collect the data. Subsequently, NMFS’ Southeast Fisheries Science Center personnel conducted the statistical analyses of the data collected on two of these modified versions of the Composite Panel BRD. One version incorporates the
addition of a square mesh panel [Square Mesh Panel (SMP) Composite Panel BRD]; the other version incorporates the addition of a cone fish deflector in the cod end of the trawl behind the BRD (Cone Fish Deflector Composite Panel BRD). Results indicated the SMP Composite Panel BRD reduces finfish biomass by 49.9 percent with a 95 percent confidence interval of 44.1 to 55.6 percent. A Bayesian analysis indicates a 100 percent probability that the reduction rate exceeds the target 30 percent finfish biomass reduction, and there is less than a 1 percent probability that the reduction rate is less than the minimum threshold of 25 percent. Results for the Cone Fish Deflector Composite Panel BRD indicate it reduces finfish biomass by 51.3 percent with a 95 percent confidence interval of 45.0 to 57.7 percent. A Bayesian analysis indicates a 100 percent probability that the reduction rate exceeds the target 30 percent finfish biomass reduction, and there is less than a 1 percent probability that the reduction rate is less than the minimum threshold of 25 percent.

BRDs may have different capabilities under different fishing conditions, and having a wider variety of BRDs for use in the fisheries would allow fishermen to choose the most effective BRD for the specific local fishing conditions.

Gulf Shrimp Trawl Effort Threshold

To end overfishing of Gulf red snapper by 2010, the 2005
Southeast Data, Assessment and Review (SEDAR 7) stock assessment results indicated the benchmark 2001-2003 level of red snapper bycatch mortality attributable to shrimp fishing needed to be reduced by 74 percent. Regulations implementing Amendment 14 to the Gulf FMP (January 29, 2008, 73 FR 5117) established, for 2008 through 2010, an effort reduction threshold 74 percent less than the effort during the benchmark years. This threshold applies to fishing effort expended by the shrimp fleet between the 10 fathom (18.3 m) and 30 fathom (54.9 m) depth contours from Mobile Bay, Alabama to the Texas-Mexico border. The depth stratum in this geographic range is known to have higher concentrations of juvenile red snapper.

In establishing this regulation, the Gulf Council recognized that recovery of the red snapper stock would provide direct benefits through incremental increases in allowable catch to those persons in the directed reef fish fishery who target red snapper. However, there are no similar direct benefits accruable to the shrimp fishery for its contribution towards rebuilding the red snapper stock. Therefore, to provide some recovery benefit for the Gulf shrimp fishery, the Gulf Council decided to relax the threshold for bycatch mortality reduction over time. In Amendment 14, the Gulf Council decided the effort threshold for the shrimp fishery should be relaxed to a 67 percent reduction from the 2001-2003 benchmark beginning in
2011, contingent upon updated stock assessments indicating the red snapper stock is rebuilding on schedule, and that overfishing ended by 2010.

An update assessment for red snapper was conducted in August 2009. The conclusions of the update assessment projected that overfishing likely ended in 2009, and the stock appeared to be increasing in accordance with the rebuilding plan targets. Based on these results, the Gulf Council submitted regulatory amendments to the Gulf reef fish FMP in 2010 and 2011 to increase the allowable catch for the directed reef fish fishery in each of those years, and NMFS implemented the allowable harvest increases through subsequent rulemaking (May 1, 2010, 75 FR 23186; April 29, 2011, 76 FR 23911).

Given that the Gulf red snapper stock appears to be rebuilding at the expected levels, and overfishing is projected to have ended, the directed reef fish fishery for red snapper is recognizing the benefits of stock recovery. This rulemaking to relax the shrimp effort threshold is intended to provide similar benefits to the shrimp fleet, as intended by the Gulf Council.

Classification

Pursuant to section 304(b)(1)(A) of the Magnuson-Stevens Act, the NMFS Assistant Administrator has determined that this proposed rule is consistent with the Gulf and South Atlantic FMPs, other provisions of the Magnuson-Stevens Act, and other
applicable law, subject to further consideration after public comment.

This proposed rule has been determined to be not significant for purposes of Executive Order 12866.

The Chief Counsel for Regulation of the Department of Commerce certified to the Chief Counsel for Advocacy of the Small Business Administration that this rule, if adopted, would not have a significant economic impact on a substantial number of small entities. The factual basis for this determination is as follows.

This proposed rule would not impose any new requirements on fishing entities in the southeastern shrimp fisheries. There are 2,144 unique vessels with permits to harvest shrimp in the EEZ of the Gulf and South Atlantic. These shrimp trawlers are already required to have a BRD installed in their shrimp nets and fishermen can continue to use their existing BRD. The proposed action would certify two new BRDs and simply allow fishermen, at their discretion, to use an alternative BRD in their shrimp nets. It would also provide greater flexibility in the construction and installation requirements for the Composite Panel BRD. Any decision to use alternative gear would be expected to occur only if its use would result in improved performance by the fishing vessel. As a result, any economic effects on any entity - large or small - are expected to be
positive. Providing greater flexibility in the construction and installation requirements for the two new BRDs is also expected to lower costs and result in no additional adverse economic effects.

The proposed action to reduce the bycatch reduction threshold for juvenile red snapper in the Gulf shrimp fishery from 74 percent to 67 percent is also not expected to have direct economic effects on the 1,707 vessels with permits to harvest shrimp from the Gulf EEZ. If economic conditions in the fishery improve, decreasing the bycatch reduction threshold would allow vessels to increase their effort and thereby increase their gross revenue and potentially their profits. Further, the proposed reduction in bycatch threshold, and the resulting potential increase in fishing effort, is consistent with the red snapper rebuilding plan and the most recent red snapper stock assessment.

Because this rule, if implemented, is not expected to have a significant direct economic impact on a substantial number of small entities, an initial regulatory flexibility analysis is not required and none has been prepared.
List of Subjects in 50 CFR Part 622

Fisheries, Fishing, Puerto Rico, Reporting and recordkeeping requirements, Virgin Islands.


_________________________________________________________________
Samuel D. Rauch III,
Deputy Assistant Administrator for Regulatory Programs,
National Marine Fisheries Service.

For the reasons set out in the preamble, 50 CFR part 622 is proposed to be amended as follows:

PART 622--FISHERIES OF THE CARIBBEAN, GULF, AND SOUTH ATLANTIC

1.  The authority citation for part 622 continues to read as follows:

   Authority:  16 U.S.C. 1801 et seq.

2.  In § 622.34, the second sentence of paragraph (1) (1) is revised to read as follows:

   § 622.34  Gulf EEZ seasonal and/or area closures.

           * * * * *

(1) * * *
(1) * * * The RA’s determination of the need for such closure and its geographical scope and duration will be based on an annual assessment, by the Southeast Fisheries Science Center, of the shrimp effort and associated shrimp trawl bycatch mortality on red snapper in the 10-30 fathom area of statistical zones 10-21, compared to the 67-percent target reduction of shrimp trawl bycatch mortality on red snapper from the benchmark years of 2001-2003 established in the FMP. * * *

3. In § 622.41, paragraph (g)(3)(ii) is removed and reserved and paragraphs (g)(3)(i)(G) and (H) are added to read as follows:

§ 622.41 Species specific limitations.

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(g) * * *

(3) * * *

(i) * * *

(G) Cone Fish Deflector Composite Panel.

(H) Square Mesh Panel (SMP) Composite Panel.

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4. In Appendix D to part 622, paragraph (G) is revised and paragraph (H) is added to read as follows:

Appendix D to Part 622--Specifications for Certified BRDs

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G. Cone Fish Deflector Composite Panel

1. Description. The Cone Fish Deflector Composite Panel BRD is a variation to the alternative funnel construction method of the Jones-Davis BRD, except the funnel is assembled by using depth-stretched and heat-set polyethylene webbing with square mesh panels on the inside instead of the flaps formed from the extension webbing. In addition, no hoops are used to hold the BRD open.

2. Minimum Construction and Installation Requirements. The Cone Fish Deflector Composite Panel BRD must contain all of the following:

   (a) Webbing extension. The webbing extension must be constructed from a single rectangular piece of 1 1/2-inch to 1 3/4-inch (3.8-cm to 4.5-cm) stretch mesh number with dimensions of 24 1/2 meshes by 150 to 160 meshes. A tube is formed from the extension webbing piece by sewing the 24 1/2-mesh sides together. The leading edge of the webbing extension must be attached no more than 4 meshes from the posterior edge of the TED grid.

   (b) Funnel. The V-shaped funnel consists of two webbing panels attached to the extension along the leading edge of the panels. The top and bottom edges of the panels are sewn diagonally across the extension toward the center to form the funnel. The panels are 2-ply in design, each with an inner
layer of 1 1/2-inch to 1 5/8-inch (3.8-cm to 4.1-cm) heat-set and depth-stretched polyethylene webbing and an outer layer constructed of no larger than 2-inch (5.1-cm) square mesh webbing (1-inch bar). The inner webbing layer must be rectangular in shape, 36 meshes on the leading edge by 20 meshes deep. The 36-mesh leading edges of the polyethylene webbing should be sewn evenly to 24 meshes of the extension webbing 1 1/2 meshes from and parallel to the leading edge of the extension starting 12 meshes up from the bottom center on each side. Alternately sew 2 meshes of the polyethylene webbing to 1 mesh of the extension webbing then 1 mesh of the polyethylene webbing to 1 mesh of the extension webbing toward the top. The bottom 20-mesh edges of the polyethylene layers are sewn evenly to the extension webbing on a 2 bar 1 mesh angle toward the bottom back center forming a v-shape in the bottom of the extension webbing. The top 20-mesh edges of the polyethylene layers are sewn evenly along the bars of the extension webbing toward the top back center. The square mesh layers must be rectangular in shape and constructed of no larger than 2-inch (5.1-cm) webbing that is 18 inches (45.7 cm) in length on the leading edge. The depth of the square mesh layer must be no more than 2 inches (5.1 cm) less than the 20 mesh side of the inner polyethylene layer when stretched taught. The 18-inch (45.7-cm) leading edge of each square mesh layer must be sewn
evenly to the 36-mesh leading edge of the polyethylene section and the sides are sewn evenly (in length) to the 20-mesh edges of the polyethylene webbing. This will form a v-shape funnel using the top of the extension webbing as the top of the funnel and the bottom of the extension webbing as the bottom of the funnel.

(c) Cutting the escape opening. There are two escape openings on each side of the funnel. The leading edge of the escape openings must be located on the same row of meshes in the extension webbing as the leading edge of the composite panels. The lower openings are formed by starting at the first attachment point of the composite panels and cutting 9 meshes in the extension webbing on an even row of meshes toward the top of the extension. Next, turn 90 degrees and cut 15 points on an even row toward the back of the extension webbing. At this point turn and cut 18 bars toward the bottom front of the extension webbing. Finish the escape opening by cutting 6 points toward the original starting point. The top escape openings start 5 meshes above and mirror the lower openings. Starting at the leading edge of the composite panel and 5 meshes above the lower escape opening, cut 9 meshes in the extension on an even row of meshes toward the top of the extension. Next, turn 90 degrees, and cut 6 points on an even row toward the back of the extension webbing. Then cut 18 bars toward the bottom
back of the extension. To complete the escape opening, cut 15 points forward toward the original starting point. The area of each escape opening must total at least 212 in² (1,368 cm²). The four escape openings must be double selvaged for strength.

(d) **Cone fish deflector.** The cone fish deflector is constructed of 2 pieces of 1 5/8-inch (4.1-cm) polypropylene or polyethylene webbing, 40 meshes wide by 20 meshes in length and cut on the bar on each side forming a triangle. Starting at the apex of the two triangles, the two pieces must be sewn together to form a cone of webbing. The apex of the cone fish deflector must be positioned within 12 inches (30.5 cm) of the posterior edge of the funnel.

(e) **11-inch (27.9-cm) cable hoop for cone deflector.** A single hoop must be constructed of 5/16-inch (0.79-cm) or 3/8-inch (0.95-cm) cable 34 1/2 inches (87.6 cm) in length. The ends must be joined by a 3-inch (7.6-cm) piece of 3/8-inch (0.95-cm) aluminum pipe pressed together with a 1/4-inch (0.64-cm) die. The hoop must be inserted in the webbing cone, attached 10 meshes from the apex and laced all the way around with heavy twine.

(f) **Installation of the cone in the extension.** The apex of the cone must be installed in the extension within 12 inches (30.5 cm) behind the back edge of the funnel and attached in four places. The midpoint of a piece of number 60 twine (or at
least 4-mesh wide strip of number 21 or heavier webbing) 3 ft (1.22 m) in length must be attached to the apex of the cone. This piece of twine or webbing must be attached within 5 meshes of the aft edge of the funnel at the center of each of its sides. Two 12-inch (30.5-cm) pieces of number 60 (or heavier) twine must be attached to the top and bottom of the 11-inch (27.9-cm) cone hoop. The opposite ends of these two pieces of twine must be attached to the top and bottom center of the extension webbing to keep the cone from inverting into the funnel.

H. Square Mesh Panel (SMP) Composite Panel

1. Description. The SMP is a panel of square mesh webbing placed in the top of the cod end to provide finfish escape openings.

2. Minimum Construction and Installation Requirements. The SMP Composite Panel BRD must contain all of the following:

(a) Webbing extension. The webbing extension must be constructed from a single rectangular piece of 1 1/2-inch to 1 3/4-inch (3.8-cm to 4.5-cm) stretch mesh number with dimensions of 24 1/2 meshes by 150 to 160 meshes. A tube is formed from the extension webbing piece by sewing the 24 1/2-mesh sides together. The leading edge of the webbing extension must be attached no more than 4 meshes from the posterior edge of the TED grid.
(b) **Funnel.** The V-shaped funnel consists of two webbing panels attached to the extension along the leading edge of the panels. The top and bottom edges of the panels are sewn diagonally across the extension toward the center to form the funnel. The panels are 2-ply in design, each with an inner layer of 1 1/2-inch to 1 5/8-inch (3.8-cm to 4.1-cm) heat-set and depth-stretched polyethylene webbing and an outer layer constructed of no larger than 2-inch (5.1-cm) square mesh webbing (1-inch bar). The inner webbing layer must be rectangular in shape, 36 meshes on the leading edge by 20 meshes deep. The 36-mesh leading edges of the polyethylene webbing should be sewn evenly to 24 meshes of the extension webbing 1 1/2 meshes from and parallel to the leading edge of the extension starting 12 meshes up from the bottom center on each side. Alternately sew 2 meshes of the polyethylene webbing to 1 mesh of the extension webbing then 1 mesh of the polyethylene webbing to 1 mesh of the extension webbing toward the top. The bottom 20-mesh edges of the polyethylene layers are sewn evenly to the extension webbing on a 2 bar 1 mesh angle toward the bottom back center forming a v-shape in the bottom of the extension webbing. The top 20-mesh edges of the polyethylene layers are sewn evenly along the bars of the extension webbing toward the top back center. The square mesh layers must be rectangular in shape and constructed of no larger than 2-inch
(5.1-cm) webbing that is 18 inches (45.7 cm) in length on the leading edge. The depth of the square mesh layer must be no more than 2 inches (5.1 cm) less than the 20 mesh side of the inner polyethylene layer when stretched taught. The 18-inch (45.7-cm) leading edge of each square mesh layer must be sewn evenly to the 36-mesh leading edge of the polyethylene section and the sides are sewn evenly (in length) to the 20-mesh edges of the polyethylene webbing. This will form a v-shape funnel using the top of the extension webbing as the top of the funnel and the bottom of the extension webbing as the bottom of the funnel.

(c) Cutting the escape opening. There are two escape openings on each side of the funnel. The leading edge of the escape openings must be located on the same row of meshes in the extension webbing as the leading edge of the composite panels. The lower openings are formed by starting at the first attachment point of the composite panels and cutting 9 meshes in the extension webbing on an even row of meshes toward the top of the extension. Next, turn 90 degrees and cut 15 points on an even row toward the back of the extension webbing. At this point turn and cut 18 bars toward the bottom front of the extension webbing. Finish the escape opening by cutting 6 points toward the original starting point. The top escape openings start 5 meshes above and mirror the lower openings.
Starting at the leading edge of the composite panel and 5 meshes above the lower escape opening, cut 9 meshes in the extension on an even row of meshes toward the top of the extension. Next, turn 90 degrees, and cut 6 points on an even row toward the back of the extension webbing. Then cut 18 bars toward the bottom back of the extension. To complete the escape opening, cut 15 points forward toward the original starting point. The area of each escape opening must total at least 212 in² (1,368 cm²). The four escape openings must be double selvaged for strength.

(d) SMP. The SMP is constructed from a single piece of square mesh webbing with a minimum dimension of 5 squares wide and 12 squares in length with a minimum mesh size of 3-in (76-mm) stretched mesh. The maximum twine diameter of the square mesh is #96 twine (4 mm).

(e) Cutting the SMP escape opening. The escape opening is a rectangular hole cut in the top center of the cod end webbing. The posterior edge of the escape opening must be placed no farther forward than 8 ft (2.4 m) from the cod end drawstring (tie-off rings). The width of the escape opening, as measured across the cod end, must be four cod end meshes per square of the SMP (i.e. a cut of 20 cod end meshes for a SMP that is 5 meshes wide). The stretched mesh length of the escape opening must be equal to the total length of the SMP. No portion of the SMP escape opening may be covered with additional material or
netting such as chaffing webbing which might impede or prevent fish escapement.

(f) **Installation of the SMP.** The SMP must be attached to the edge of the escape opening evenly around the perimeter of the escape opening cut with heavy twine.