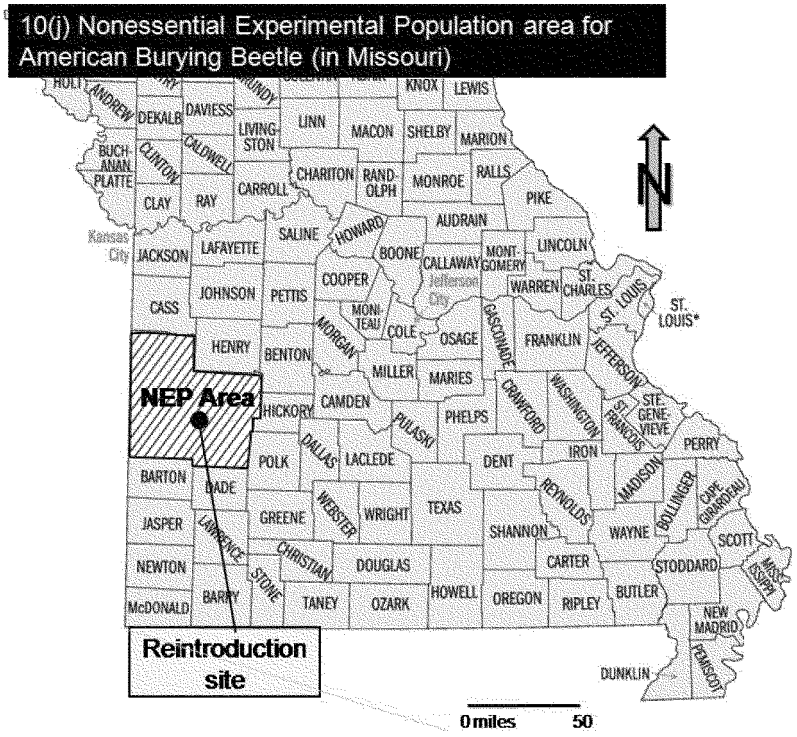

Dated: March 12, 2012.

Rachel Jacobson,

Acting Assistant Secretary for Fish and Wildlife and Parks.

[FR Doc. 2012–6779 Filed 3–21–12; 8:45 am]

BILLING CODE 4310–55–P

DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

50 CFR Part 217

[Docket No. 100217098–2125–02]

RIN 0648–AY64

Taking and Importing Marine Mammals; Naval Explosive Ordnance Disposal School Training Operations at Eglin Air Force Base, Florida

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

ACTION: Final rule.

SUMMARY: NMFS, upon application from the U.S. Department of the Air Force, Headquarters 96th Air Base Wing (U.S. Air Force), Eglin Air Force Base (Eglin AFB) is issuing regulations to govern the taking of Atlantic bottlenose dolphins, by Level B harassment, incidental to Naval Explosive Ordnance Disposal School (NEODS) training operations at Eglin AFB, Florida, for a 5-year period. The U.S. Air Force activities are considered military readiness activities pursuant to the Marine Mammal Protection Act (MMPA), as amended by the National Defense Authorization Act of 2004 (NDAA). These regulations, which allow for the issuance of Letters of Authorization (LOAs) for the incidental take of marine mammals during the described activities and specified time frames, prescribe the permissible methods of taking and other means of effecting the least practicable adverse impact on marine mammal species and their habitat, as well as requirements pertaining to the monitoring and reporting of such taking. NMFS issued annual Incidental Harassment Authorizations (IHAs) pursuant to section 101(a)(5)(D) of the MMPA for similar specified activities in 2005, 2006, 2007, and 2008. No activities have occurred to date under those IHAs.

DATES: Effective April 23, 2012, through April 24, 2017.

ADDRESSES: A copy of the application containing a list of the references used in this document may be obtained by writing to Tammy Adams, Acting Chief, Permits and Conservation Division, Office of Protected Resources, National Marine Fisheries Service, 1315 East-West Highway, Silver Spring, MD 20910–3225, and telephoning the contact listed below (see **FOR FURTHER INFORMATION CONTACT**), or visiting the internet at: *http://www.nmfs.noaa.gov/pr/permits/incidental.htm.* Documents cited in this notice may be viewed, by appointment, during regular business hours, at the aforementioned address. NMFS has prepared an Environmental Assessment (EA) and Finding of No Significant Impact (FONSI) in accordance with the National Environmental Policy Act (NEPA) as implemented by the regulations published by the Council on Environmental Quality (CEQ).

FOR FURTHER INFORMATION CONTACT: Howard Goldstein or Jolie Harrison, Office of Protected Resources, NMFS, 301–427–8401.

SUPPLEMENTARY INFORMATION:

Background

Paragraphs 101(a)(5)(A) and (D) of the MMPA (16 U.S.C. 1361 *et seq.*) direct the Secretary of Commerce (Secretary), upon request, to allow for a period of not more than 5 years, the incidental, but not intentional, taking of marine mammals by U.S. citizens who engage in a specified activity (other than commercial fishing) within a specified geographical region if certain findings are made and regulations are issued. Alternatively, if the taking is limited to harassment, certain determinations are made and the authorization does not exceed one year, an IHA may be issued. Upon making a finding that an application for incidental take is adequate and complete, NMFS commences the incidental take authorization process by publishing in the **Federal Register** a notice of a receipt of an application for the implementation

of regulations or a proposed IHA initiating a period for public review and comment.

An authorization for the incidental takings may be granted if NMFS finds that the taking during the period of the authorization will have a negligible impact on the species or stock(s), will not have an unmitigable adverse impact on the availability of the species or stock(s) for subsistence uses (where relevant), and if the permissible methods of taking and requirements pertaining to the mitigation, monitoring and reporting of such takings are set forth to achieve the least practicable adverse impact.

NMFS has defined ''negligible impact'' as: ''* * * an impact resulting from the specified activity that cannot be reasonably expected to, and is not reasonably likely to, adversely affect the species or stock through effects on annual rates of recruitment or survival.''

The National Defense Authorization Act of 2004 (NDAA) (Pub. L. 108–36) modified the MMPA by removing the ''small numbers'' and ''specified geographic region'' limitations and amended the definition of ''harassment'' as it applies to a ''military readiness activity'' to read as follows (section 3(18)(B) of the MMPA):

''(i) any act that injures or has the significant potential to injure a marine mammal or marine mammal stock in the wild (Level A harassment); or (ii) any act that disturbs or is likely to disturb a marine mammal or marine mammal stock in the wild by causing disruption of natural behavioral patterns, including, but not limited to, migration, surfacing, nursing, breeding, feeding, or behavioral patterns are abandoned or significantly altered (Level B harassment).''

Summary of Request

On November 6, 2009, NMFS received a letter from the U.S. Air Force requesting an authorization for the take of marine mammals incidental to NEODS training operations. These training operations are properly considered ''military readiness activity'' under the provisions of the NDAA. On January 15, 2010, NMFS published a notice of receipt (75 FR 2490) in the **Federal Register** for the U.S. Air Force's NEODS training operations and determined that its application was adequate and complete. The **Federal Register** notice solicited comments from the public. After the close of the public comment period and review of comments, NMFS, on October 1, 2010, NMFS published a proposed rule (75 FR 60694) in the **Federal Register** to authorize the take of marine mammals pursuant to the U.S. Air Force's NEODS training operations and solicited public comments. On November 30, 2010, NMFS received a revised application from the U.S. Air Force which addressed public comments received during the comment period for the proposed rule. This application re-estimated the Zones of Influence (ZOI) and associated takes on revised thresholds for Level A and Level B harassment. On December 5, 2011, NMFS received a revised application from Eglin AFB with revised monitoring and mitigation measures to reduce the potential for lethal take of bottlenose dolphins, in response to an event involving the mortality of common dolphins associated with similar explosive training operations at the U.S. Navy's Silver Strand Training Complex near San Diego, California.

The U.S. Air Force states and NMFS concurs that underwater explosive detonations could result in the take by harassment of marine mammals by exposing them to sound. The requested regulations would establish a framework for authorizing incidental take with one or more future LOAs over a period not to exceed five years. These LOAs, if approved, would authorize the take, by Level B (behavioral) harassment, of Atlantic bottlenose dolphins (*Tursiops truncatus*) incidental to conducting NEODS training operations and testing at Eglin Gulf Test and Training Range (EGTTR) at property off Santa Rosa Island (SRI), Florida, in the northern Gulf of Mexico (GOM). Based on the application, estimated take, without considering mitigation effectiveness, would average approximately 10 animals per year; approximately 50 animals over the five year period. NMFS issued annual IHAs pursuant to section 101(a)(5)(D) of the MMPA for almost identical activities in 2005 (70 FR 51341; August 30, 2005), 2006 (71 FR 60639; October 16, 2006), 2007 (72 FR 58290; October 15, 2007), and 2008 (73 FR 56800; September 30, 2008). No missions have occurred under previous IHAs because of a separate concern about the safety of demolition charges being transported under a bridge. NEODS missions would involve underwater detonations of small, live explosive charges adjacent to inert mines. The U.S. Air Force states that underwater detonation of the specified explosive charges may expose bottlenose dolphins in the area to noise and pressure resulting in non-injurious temporary threshold shift (TTS) (temporary hearing loss).

Additional information on the NEODS training operations is contained in the application, which is available upon request (see **ADDRESSES**).

Description of the Specified Activities

Background

The EGTTR encompasses approximately 222,739 km^2 (86,000 mi^2) within the GOM and consists of the airspace over the GOM, which is scheduled and operated by Eglin AFB. Potential impacts to marine mammals from NEODS testing are expected to occur at the NEODS test areas of Eglin AFB shown in Figure 1–1 of Eglin AFB's application, which are located approximately three nautical miles (nmi) from shore, in approximately 18.3 m (60 ft) of water and in area W–151 of the EGTTR.

The mission of NEODS is to detect, recover, identify, evaluate, render safe, and dispose of unexploded ordnance (UXO) that constitutes a threat to people, material, installations, ships, aircraft, and operations. The U.S. Navy EOD force of approximately 1,000 personnel has the equipment, mobility, and flexibility to tackle the global spectrum of threats in all world environments. Mine Countermeasures (MCM) detonations is one function of the U.S. Navy EOD force, which involves mine-hunting and mine-clearance operations. The NEODS facilities are located at Eglin AFB, Florida. The training at Eglin AFB involves focused training on basic EOD skills. Examples of these fundamental skills are recognizing ordnance, reconnaissance, measurement, basic understanding of demolition charges, and neutralization of conventional and chemical ordnance.

The NEODS at Eglin AFB plan to use the GOM waters off of SRI for a portion of the NEODS class. The NEODS would utilize areas approximately one to three nmi offshore of Test Site A–15, A–10 or A–3 for MCM training (see Figure 1–1 of Eglin AFB's application). A ''test site'' is a specific location on EGTTR where the mission activities actually occur. The goal of the training is to give NEODS students the tools and techniques to implement MCM and for neutralizing mines by diving and hand-placing charges adjacent to the mines through real scenarios. The students would be taught established techniques for neutralizing mines by diving and hand-placing charges adjacent to the mines. The detonation of small, live explosive charges adjacent to the mine disables the mine function. Inert mines are utilized for training purposes. This training would occur offshore of SRI up to eight times annually, at varying times within the year.

NEODS Operations

MCM training classes are 51 days in duration, with four days of on-site training in the GOM. Two of these four days will be utilized to lay the inert mines prior to the training. The other two days will require the use of live detonations in the GOM. One large safety vessel and five MK V inflatable 3.1 m (10 ft) rubber boats with 50 horsepower (HP) engines would be used to access the GOM waters during training activities. The training procedures during the two ''live demolition'' days are described as follows.

First Live Demolition Day: Five inert mines will be placed in a compact area on the GOM floor in approximately 60 ft of water. These five mines will be utilized for the one or two live demolition days. Divers will locate the mines by hand-held sonars (AN/PQS–2A acoustic locator and the Dukane Underwater Acoustic Locator System), which detect the mine casings (mine shape reacquisition). The hand-held sonar has been evaluated by the U.S. Navy and the sound source levels and sonar frequency ranges are below the threshold considered Level B harassment for marine mammals for sonar use (see Table 1–1 of Eglin AFB's application). Approximately 50,000 hrs of use would be required to affect one dolphin. It is expected that maximum sonar use associated with NEODS operations will be approximately 300 hrs annually. Therefore, potential noise impacts from sonar use are not included in this analysis.

Five charges packed with C–4 explosive material (either 2.3 kg or 5 pound [lb] net explosive weight [NEW] or 4.6 kg [10 lb] NEW) will be set up adjacent to the mines. A charge includes detonation cord, non-electric caps, time fuses and fuse igniters. No more than five charges will be utilized over the 2-day period. Live training events will occur eight times annually, averaging once every six to seven weeks. Four of the training events will involve 5-lb charges, and four events will involve 10-lb charges. Because five detonations (maximum) are expected during each event, there will be up to twenty 5-lb detonations and twenty ten-lb detonations annually, for a total of 40 detonations.

NMFS and the U.S. Air Force expect that 60 percent of the training events will occur in summer, and 40 percent will occur in winter, and analyses of potential marine mammal impacts in Section 6 of Eglin AFB's application reflect this seasonal distribution. Overpressure from the detonation is intended to disrupt the electrical charge on the mine, rendering it safe. The five charges will be detonated individually with a maximum separation time of 20 minutes between each detonation. The time of detonation will be limited to an hour after sunrise and an hour before sunset. Mine shapes and debris will be recovered and removed from the GOM waters when training is completed.

Second Live Demolition Day: Each team has two days to complete their entire evolution (detonation of five charges). The second day will be utilized only for teams not completing their evolution on day one.

TABLE 1—(TABLE 1–1 OF THE APPLICATION) HAND-HELD SONAR CHARACTERISTICS

	AN/PQS–2A	Dukane
Operating Frequency	115 kHz to 145 kHz	37.5 kHz +/− 1 kHz.
Sound Pressure Level	178.5 dB re 1 μPa @ 1m	157 to 160.5 dB re 1 μPa @ 1m.

The AN/PQS–2A sonar system produces a non-continuous audible tone in the diver's headset when a target is located. The AN/PQS–2A sonar's frequency range is within the hearing range of Atlantic bottlenose dolphins. The U.S. Navy evaluated the use of AN/PQS–2A sonar (in addition to many other types of sonar systems) in a 2009 Environmental Impact Statement for activities in the Panama City, Florida area. Using a bottlenose dolphin density of 0.81 animals/km^2, it would require approximately 50,000 hrs of use to reach a take level of 0.5 animals. As a point of comparison, if the AN/PQS–2A sonar was in use for 12 hrs per day on every day of training in the GOM, the total number of hrs of use would be 384 annually. Eglin AFB considers that there would be no impacts to bottlenose dolphins from AN/PQS–2A sonar use.

Additional details regarding the NEODS training operations can be found in Eglin AFB's LOA application and NMFS' Environmental Assessment on the Promulgation of Regulations and the Issuance of Letters of Authorization to Take Marine Mammals, by Level B Harassment, Incidental to Naval Explosive Ordnance Disposal School Training Operations at Eglin Air Force Base, Florida (EA). The EA can also be found online at: *http://www.nmfs.noaa.gov/pr/permits/incidental.htm#applications.*

Military Readiness Activity

NEODS supports the Naval Fleet by providing training to personnel from all four armed services, civil officials, and military students from over 70 countries. The NEODS facility supports the Department of Defense Joint Service Explosive Ordnance Disposal training mission. According to the application, the U.S. Navy and the U.S. Marine Corps believe that the ability of personnel to detect, characterize, and neutralize mines from their operating areas at sea, on the shore, and inland, is vital to their doctrines.

As the U.S. Air Force notes in its application, the U.S. Navy believes that an array of trans-national, rogue, and sub-national adversaries now pose the most immediate threat to American interests. Because of their relative low cost and ease of use, mines will be among the adversaries' weapons of choice in shallow-water situations, and they will be deployed in an asymmetrical and asynchronous manner. The U.S. Navy needs organic means to clear mines and obstacles rapidly in three challenging environments: Shallow water; the surf zone; and the beach zone. The U.S. Navy also needs a capability for rapid clandestine surveillance and reconnaissance of minefields and obstacles in these environments. The U.S. Air Force has determined and NMFS concurs that the NEODS mission in the GOM offshore of Eglin AFB is a military readiness activity for purposes of the MMPA as amended by the National Defense Authorization Act for Fiscal Year 2004 (NDAA, Pub. L. 108–236 referencing the definition in section 315 (f) of Pub. L. 107–314).

Dates, Duration, and Location of Specified Activity

NEODS missions will occur over the next five years utilizing resources within the Eglin Military Complex, including three sites in the EGTTR (Figure 1–1 of Eglin AFB's application). There will be eight training events annually, with an average of one event occurring every six to seven weeks. Half

of the events will involve 5-lb charges and half will involve 10-lb charges.

Area W–151: The inshore and offshore boundaries of W–151 are roughly parallel to the shoreline contour. The shoreward boundary is 3 nmi from shore, while the seaward boundary extends approximately 85 to 100 nmi offshore, depending on the specific location. W–151 covers a surface area of approximately 35,145 km² (10,247 nmi²), and includes water depths ranging from approximately 35 to 700 m (114.8 to 2,296.6 ft). This range of depth includes continental shelf and slope waters. Approximately half of W–151 lies over the shelf. Latitude/Longitude of corners of W–151:

- 30.24006° North, −86.808838° West.
- 29.539011° North, −84.995536° West.
- 28.03949° North, −85.000147° West.
- 28.027598° North, −85.199395° West.
- 28.505304° North, −86.799043° West.

Area W–151A: W–151–A extends approximately 60 nmi offshore and has a surface area of 8,797 km² (2,565 nmi²). Water depths range from approximately 35 to 350 m (114.8 to 1,148.3 ft) and include continental shelf and slope zones. However, most of W–151A occurs over the continental shelf, in water depths less than 250 m (820.2 ft). Latitude/Longitude of four corners of W–151A:

- 30.24006° North, −86.808838° West.
- 30.07499° North, −85.999327° West.
- 29.179968° North, −85.996341° West.
- 29.384439° North, −86.802579° West.

Description of Marine Mammals and Habitat Affected in the Activity Area of the Specified Activities

Marine mammal species that potentially occur within the EGTTR include several species of cetaceans and one sirenian, the West Indian manatee (see Table 1 below). The marine mammals that generally occur in the training operations area belong to three taxonomic groups: Mysticetes (baleen whales), odontocetes (toothed whales and dolphins), and sirenians (the manatee). Marine mammal species listed as Endangered under the U.S. Endangered Species Act (ESA), include the humpback, sei, fin, blue, North Atlantic right, sperm whale, and Florida manatee. Table 2 below outlines the marine mammal species, their habitat in the region of the project area, and their ESA and MMPA conservation status.

During winter months, manatee distribution in the GOM is generally confined to southern Florida. During summer months, a few may migrate north as far as Louisiana. However, manatees primarily inhabit coastal and inshore waters and rarely venture offshore. NEODS missions would be conducted one to three nmi from shore. Therefore, effects on manatees are considered very unlikely, and the discussion of marine mammal species is confined to cetaceans. The primarily cetacean occurring in the NEODS area of interest, EGTTR sub-area 197 (Figure 3–1 of Eglin AFB's application), is the Atlantic bottlenose dolphin and this analysis will focus on that species.

TABLE 2—THE HABITAT AND CONSERVATION STATUS OF MARINE MAMMALS INHABITING THE ACTION AREA IN THE GULF OF MEXICO OFF OF FLORIDA

Species	Habitat	ESA [1]	MMPA [2]
Mysticetes:			
North Atlantic right whale (*Eubalaena glacialis*).	Coastal and shelf	EN	D.
Humpback whale (*Megaptera novaeangliae*).	Pelagic, nearshore waters, and banks	EN	D.
Bryde's whale (*Balaenoptera edeni*)	Pelagic and coastal	NL	NC.
Minke whale (*Balaenoptera acutorostrata*)	Pelagic and coastal	NL	NC.
Blue whale (*Balaenoptera musculus*)	Pelagic and coastal	EN	D.
Sei whale (*Balaenoptera borealis*)	Primarily offshore, pelagic	EN	D.
Fin whale (*Balaenoptera physalus*)	Slope, mostly pelagic	EN	D.
Odontocetes:			
Sperm whale (*Physeter macrocephalus*)	Pelagic, deep seas	EN	D.
Cuvier's beaked whale (*Ziphius cavirostris*).	Pelagic	NL	NC.
Gervais' beaked whale (*Mesoplodon europaeus*).	Pelagic	NL	NC.
True's beaked whale (*Mesoplodon mirus*)	Pelagic	NL	NC.
Blainville's beaked whale (*Mesoplodon densirostris*).	Pelagic	NL	NC.
Sowerby's beaked whale (*Mesoplodon bidens*).	Pelagic	NL	NC.
Dwarf sperm whale (*Kogia sima*)	Offshore, pelagic	NL	NC.
Pygmy sperm whale (*Kogia breviceps*)	Offshore, pelagic	NL	NC.
Killer whale (*Orcinus orca*)	Widely distributed	NL EN—Southern Resident.	NC D—Southern Resident, AT1 Transient.
Short-finned pilot whale (*Globicephala macrorhynchus*).	Inshore and offshore	NL	NC.
False killer whale (*Pseudorca crassidens*)	Pelagic	NL	NC.
Melon-headed whale (*Peponocephala electra*).	Pelagic	NL	NC.
Pygmy killer whale (*Feresa attenuata*)	Pelagic	NL	NC.
Risso's dolphin (*Grampus griseus*)	Pelagic, shelf	NL	NC.
Bottlenose dolphin (*Tursiops truncatus*)	Offshore, inshore, coastal, estuaries	NL	NC.

TABLE 2—THE HABITAT AND CONSERVATION STATUS OF MARINE MAMMALS INHABITING THE ACTION AREA IN THE GULF OF MEXICO OFF OF FLORIDA—Continued

Species	Habitat	ESA [1]	MMPA [2]
			S—33 stocks inhabiting the bays, sounds, and estuaries along GOM coast. D—Western North Atlantic Coastal.
Rough-toothed dolphin (*Steno bredanensis*).	Pelagic	NL	NC.
Fraser's dolphin (*Lagenodelphis hosei*)	Pelagic	NL	NC.
Striped dolphin (*Stenella coeruleolba*)	Pelagic	NL	NC.
Pantropical spotted dolphin (*Stenella attenuata*).	Pelagic	NL.	NC D—Northeastern Offshore.
Atlantic spotted dolphin (*Stenella frontalis*)	Coastal to pelagic	NL	NC.
Spinner dolphin (*Stenella longirostris*)	Mostly pelagic	NL	NC. D—Eastern.
Clymene dolphin (*Stenella clymene*)	Pelagic	NL	NC.
Sirenians:			
West Indian (Florida) manatee (*Trichechus manatus latirostris*).	Coastal, rivers, and estuaries	En	D.

[1] U.S. Endangered Species Act: EN = Endangered, T = Threatened, and NL = Not listed.
[2] U.S. Marine Mammal Protection Act: NC = Not classified, D = Depleted, and S = Strategic.

The three species of marine mammals that are known to commonly occur in close proximity to the NEODS training area of the GOM are the West Indian (Florida) manatee, Atlantic spotted dolphin, and Atlantic bottlenose dolphin.

Florida Manatee

The West Indian manatee in Florida and U.S. waters is listed as Endangered under the Endangered Species Act (ESA). They primarily inhabit coastal and inshore waters. Because the Florida manatee is managed under the jurisdiction of the U.S. Fish and Wildlife Service (USFWS) it is not considered further in this analysis.

Atlantic Spotted Dolphins

The Atlantic spotted dolphin is endemic to the Atlantic Ocean in temperate to tropical waters (Perrin *et al.,* 1987, 1994). In the GOM, Atlantic spotted dolphins occur primarily from continental shelf waters 10 to 200 m (33 to 656 ft) deep to slope waters greater than 500 m (1,640 ft) deep (Fulling *et al.,* 2003; Mullin and Fulling, 2004). Atlantic spotted dolphins were seen in all seasons during GulfCet aerial surveys of the northern GOM from 1992 to 1998 (Hansen *et al.,* 1996; Mullin and Hoggard, 2000). It has been suggested that this species may move inshore seasonally during spring, but data supporting this hypothesis are limited (Caldwell and Caldwell, 1966; Fritts *et al.,* 1983).

Eglin AFB has included Atlantic spotted dolphins in previous requests for IHAs to be conservative, although their occurrence is considered unlikely. The stock assessment reports for the northern GOM describes the shoreward range of Atlantic spotted dolphins as 10 m (33 ft) depth. NEODS activities can occur from one to three miles offshore. Maximum water depth of the activities is 18.3 m (60 ft), but they often train in approximately 9.1 m (30 ft) of water, so this species range occurs at the very edge of the activities. Therefore, the chance of impacting Atlantic spotted dolphins is remote, especially given the monitoring and mitigation measures described below.

Atlantic Bottlenose Dolphins

The marine mammal species most likely to be affected by the NEODS training operations is the Atlantic bottlenose dolphin. Atlantic bottlenose dolphins are distributed worldwide in tropical and temperate waters. Atlantic bottlenose dolphins occur in slope, shelf, and inshore waters of the entire GOM, and their diet consists mainly of fish, crabs, squid, and shrimp (Caldwell and Caldwell, 1983). In addition, a coastal and an offshore form of the bottlenose dolphin have been suggested. Baumgartner *et al.* (2001) suggest a bimodal distribution in the northern GOM, with a shelf population occurring out to the 150 m (492 ft) isobath and a shelf break population out to the 750 m (2,460.6 ft) isobath. Occurrence in water with depth greater than 1,000 m (3,280.8 ft) is not considered likely and is not applicable to this assessment. Migratory patterns from inshore to offshore are likely associated with the movements of prey rather than a preference for a particular habitat characteristic (such as surface water temperature) (Ridgeway, 1972; Irving, 1973; Jefferson *et al.,* 1992).

Based on a combination of geography, ecological, and genetic research, Atlantic bottlenose dolphins have been divided into many separate stocks within the GOM. Within the EGTTR, there are four defined stocks of bottlenose dolphins: The Northern GOM Oceanic Stock, the Northern GOM Continental Shelf Stock, the Eastern GOM Coastal Stock, and the Northern GOM Coastal Stock. In addition, there are 33 stocks of bottlenose dolphins inhabiting the bays, sounds, and estuaries along the GOM coast (Waring *et al.,* 2007). NEODS training operations occur offshore of Eglin AFB's SRI property in water depths of approximately 60 ft. This location most closely coincides with the defined boundary of the Northern GOM Coastal Stock, which is considered to occur from the GOM shoreline to the 20 m (65.6 ft) isobath. However, individuals from the Northern GOM Bay, Sound, and Estuarine Stocks may also potentially enter the training areas, as movement between various communities has been documented (see Waring *et al.,* 2009).

NEODS training operations occur geographically between the Pensacola/East Bay and Choctawhatchee Bay stocks, although individuals from other

locations could potentially travel through the training areas as well. The Northern GOM coastal stocks and all bay, sound, and estuarine stocks are designated as strategic under the MMPA. Strategic stocks are defined by the MMPA as a marine mammal stock for which the level of direct human-caused mortality exceeds the potential biological removal level; which, based on the best available scientific information, is declining and is likely to be listed as a threatened species under the ESA within the foreseeable future; or which is listed as a threatened or endangered species under the ESA, or is designated as depleted under the MMPA. For the coastal stocks, total human-caused mortality and serious injury for each stock is not known and there is insufficient information available to determine whether the total fishery-related mortality and serious injury for each stock is insignificant and approaching zero mortality and serious injury rate. Because for each stock the stock size is currently unknown and potential biological removal (PBR) undetermined, and because there are documented cases of human-related mortality from a number of sources, each stock is a strategic stock. For the bay, sound, and estuarine stocks, human-caused mortality and serious injury for each of these stocks is not known, but considering the evidence from stranding data, the total fishery-related mortality and serious injury exceeds 10 percent of the total known PBR or previous PBR, and, therefore, it is probably not insignificant and approaching the zero mortality and serious injury rate. Because most of the stock sizes are currently unknown, but likely relatively few mortalities and serious injuries would exceed PBR, NMFS considers that each of these stocks is a strategic stock (NMFS, 2009).

Prior to the 2007 Garrison survey and model predictions, the best estimates of Northern GOM Atlantic bottlenose dolphin abundance were 7 to 15 years old, occurred during different seasons, and each of the surveys suffered from differing degrees of negative bias in abundance estimates because all surveys assumed that all animals on the trackline were seen. Therefore, estimates based on those surveys would be highly uncertain. Based on data from the Protected Species Habitat Modeling in the EGTTR, the total estimate of abundance of bottlenose dolphins from the winter 2007 survey was 65,861 (95 percent CI 36,699 to 118,200) and for the summer 2007 survey was 11,433 animals (95 percent CI 7,346 to 17,793) (Garrison, 2008). For the summer and winter surveys, the highest density of bottlenose dolphins occurred in the northern inshore stratum. The summer survey overall abundance estimate for bottlenose dolphins was approximately 50 percent lower than the winter survey (Garrison, 2008). Bottlenose dolphin stocks for the shelf edge and slope are not considered strategic. The PBR for shelf and slope stocks is 45 dolphins (Waring *et al.,* 2001). The exact structure of these stocks is complex and continues to be revised as research is completed.

The presence of fish in the stomachs of some individual offshore bottlenose dolphins suggest that they dive to depths of more than 500 m (1,640 ft). A tagged individual near Bermuda had maximum recorded dives of 600 to 700 m (1,969 to 2,297 ft) and durations of 11 to 12 minutes. Dive durations up to 15 minutes have been recorded for trained individuals. Typical dives, however, are more shallow and of a much shorter duration. Data from a tagged individual off Bermuda indicated a possible diel dive cycle (i.e., a regular daily dive cycle) in search of mesopelagic (living at depths between 180 and 900 m [591 and 2,953 ft]) prey in the deep scattering layer.

In the EGTTR as a whole, there were a total of 281 groups of bottlenose dolphins during the winter survey and 162 groups during the summer survey. According to the species-habitat model for bottlenose dolphins, densities were predicted to be highest in relatively shallow water, with an offshore peak in density between 40 to 60 m (131 to 196.9 ft) depth and in waters ranging between 27.5 to 28.5 °C (81.5 to 83.3 °F) (Garrison, 2008).

Bottlenose dolphin density estimates for the study area are derived from Protected Species Habitat Modeling in the EGTTR (Garrison, 2008). NMFS developed habitat models using new aerial survey line transect data collected during the winter and summer of 2007. The winter survey was conducted primarily during the month of February (water temperatures of 12 to 15 °C [53.6 to 59 °F]) while the summer survey was primarily during July (water temperatures >26 °C [78.8 °F]). In combination with remotely sensed habitat parameters (sea surface temperature and chlorophyll), these data were used to develop spatial density models for bottlenose dolphins within the continental shelf and coastal waters of the eastern GOM. Encounter rates during the aerial surveys were corrected for sighting probabilities and the probability that animals were available to be seen on the surface. The models predict the absolute density of bottlenose dolphins within the EGTTR. Given that the survey area (EGTTR sub-area 197, Figure 3–1 of Eglin AFB's application) completely overlaps the NEODS mission area and that this data is currently the best available survey data, these models best reflect the occurrence of bottlenose dolphins within the EGTTR. Most, but not all, of the NEODS mission area is contained within EGTTR subarea 197 (see Figure 3–1 of Eglin AFB's application). The two westernmost test areas lie within subarea 197, but the easternmost one does not. Dolphin density is not available for the area directly east of subarea 197. However, the physical and biological parameters used to develop density estimates in this subarea likely do not differ significantly between the training areas. The density estimate for subarea 197 is therefore considered the best currently available and is applied to all locations of NEODS training operations.

Table 3–1 of Eglin AFB's application provides median and adjusted bottlenose dolphin densities in EGTTR sub-area 197. These absolute estimates of density (animals per square kilometer [km^2] were produced by combining the spatial density model, sighting probability, and availability model (Garrison, 2008). All environmental terms were retained in the species-habitat model for the winter survey and the summer survey with the exception of glare for the summer survey. The model fits for the winter and summer were highly significant, explained a significant portion of the variability in the data, and resulted in effective predictions of spatial distribution of bottlenose dolphins.

NEODS missions may be executed at any time during the year. It is anticipated that approximately 60 percent of missions will be executed during summer months, and 40 percent will be executed during winter months. Separate summer and winter density estimates are provided in Table 3–1 of Eglin AFB's application. Months with high CV values (greater than 1) have high degrees of uncertainty in the model predictions. These months include May, June, September, October, and November where density was unknown. In order to compensate for the months without good estimates, interpolation was used between the available months by providing a means of estimating the function at intermediate points through presuming that there were linear seasonal trends. Interpolation assumes that the poorly estimated periods lie somewhere in the middle of the well estimated periods. Adjusted densities for each month were reached after

interpolation calculations (see Table 3–1 of Eglin AFB's application). Based on the adjusted densities, January, March, and July have the highest bottlenose dolphin densities while the months from August through December months have the lowest densities. On average, there are 0.81 bottlenose dolphins/km^2 throughout the year in EGTTR sub-area 197. Seasonally there are on average 0.84 dolphins/km^2 during summer and 0.78 dolphins/km^2 during winter in sub-area 197. NMFS has independently evaluated the foregoing approach for calculating the likely occurrence and density of bottlenose dolphins in the specified geographic area and determined that it yields the best scientific data available for purposes of determining the extent of impacts to affected stocks, the likely amount of incidental harassment, and informing the negligible impact determination.

TABLE 3—(TABLE 3–1 OF THE APPLICATION) BOTTLENOSE DOLPHIN DENSITIES FOR EGTTR SUB-AREA 197

Month	Median density (individuals/ km^2)	CV	Valid	Adjusted density (individuals/ km^2) [a]
November	0.00	31.62	0	0.51
December	0.52	0.25	1	0.52
January	1.24	0.22	1	1.24
February	0.73	0.20	1	0.73
March	1.22	0.28	1	1.22
April	0.84	0.46	1	0.84
Average Winter Density	.....	.....	.....	0.84
May	0.00	22.41	0	0.95
June	0.00	4.47	0	1.06
July	1.17	0.24	1	1.17
August	0.48	0.22	1	0.48
September	0.01	3.02	0	0.49
October	0.00	20.43	0	0.50
Average Summer Density	.....	.....	.....	0.78
Overall Average Density	.....	.....	.....	0.81

[a] Adjusted through interpolation.

NMFS anticipates that no bottlenose dolphins will be injured, seriously injured, or killed during the NEODS training operations. The specific objective of the U.S. Air Force's mitigation and monitoring plan is to ensure that no dolphins (or manatees) or other protected species are in the action area where they might be impacted by the explosive detonations. Because of the circumstances and the mitigation and monitoring requirements discussed in this document, NMFS believes it highly unlikely that the activities would result in injury (Level A harassment), serious injury, or mortality of bottlenose dolphins; however, they may temporarily avoid the area where the explosive demolitions will occur (after there has been at least one detonation). Eglin AFB has requested the incidental take of 10 bottlenose dolphin each year and approximately 50 animals during the five year duration of the action.

Further information on the biology, habitat, and local distribution of these species and others in the region can be found in Eglin AFB's application, which is available upon request (see **ADDRESSES**), and the NMFS Marine Mammal Stock Assessment Reports, which are available online at: *http://www.nmfs.noaa.gov/pr/species/*.

Comments and Responses

On January 15, 2010, NMFS published a notice of receipt of application for a LOA in the **Federal Register** (75 FR 2490) and requested comments, information, and suggestions from the public for 30 days. NMFS received comments from the Marine Mammal Commission (Commission) and a private citizen. The private citizen's comments opposed the issuance of an authorization without providing any specific rationale for that position. NMFS, therefore, cannot respond to this comment. NMFS' responses to the Commission's comments are addressed in the proposed rule (75 FR 60694, October 1, 2010). On October 1, 2010, NMFS published a Notice of Proposed Rule (75 FR 60694) on the U.S. Air Force's request to take marine mammals incidental to NEODS training operations at Eglin AFB and requested, comments, information, and suggestions concerning the request. During the 30-day public comment period for the proposed rule, NMFS received comments from two private citizens and the Commission. The following are the comments and NMFS' responses.

Comment 1: A comment from a private citizen does not support giving this permit to Eglin AFB because marine mammals ''deserve to live, not be bombed to death or have sonar cause brain hemorrhages so that they can't navigate and die from blood hemorrhages.''

Response: Eglin AFB and NMFS have evaluated the potential harm to marine mammals resulting from NEODS activities using the best currently available science. It is possible that bottlenose dolphins may be affected by underwater detonations. However, as discussed in the proposed rule, these effects will most likely be in the form of temporary behavioral disturbance, not injury or death. NMFS is requiring monitoring and mitigation measures to be implemented during all missions, and expects that these measures will significantly decrease the potential for impacts and reduce likely incidental harassment to a level that does not exceed negligible impact as defined by 50 CFR 216.103. The hand-held sonar used during NEODS activities are not likely to affect marine mammals. Due to the location of the NEODS training operations and required pre-mission monitoring, it is highly unlikely that manatees will be affected. In addition, section 101(a)(5)(A) of the MMPA requires that the Secretary to issue the

requested authorization to the U.S. Air Force only if the Secretary determines that the NEODS training operations will result in a negligible impact on the affected species or stocks, and the authorization prescribes the permissible methods of taking, mitigation measures for effecting the least practicable adverse impact to species or stocks, and requirements for monitoring and reporting.

Comment 2: A comment from a private citizen states that the proposed rule is an immediate threat to bottlenose dolphins and even manatees in the coastal waters surrounding Florida. The suggestion that Level B harassment to marine species is acceptable in order for Naval students to arm/disarm underwater mines is negligent and extreme, especially when our oceans are facing rapid change in temperature, over-fishing, and toxic waste.

Moreover, the Sarasota Dolphin Research Agency states ''evaluating the effects of * * * noise on marine mammals [in order to] expand understanding of * * * threats to bottlenose dolphins * * * observations made during * * * detonation * * * indicated that dolphins do exhibit behavioral responses'' (Buckstaff and Ganon, 2010; *http://www.sarasotadolphin.org/Human/ResponseConstruction.asp*). Essentially, not enough research has been conducted on long term outcome of sound and noise on bottlenose dolphins (or other marine life), and blatant disregard for marine environments is an abuse of the Naval authority.

The commenter challenges the rule in its entirety, and requests the U.S. Navy find other manners in which to test the student aptitude of arming/disarming underwater mines. Ordnance training can occur in simulated marine environments without posing needless harm to the animals and ecosystems of coastal waters.

Response: The NEODS training operations are necessary to train U.S. Navy personnel to detect, recover, identify, evaluate, render safe, and dispose of unexploded ordnance that constitutes a threat to people, material, installations, ships, aircraft, and operations. Although most NEODS components of the training operations are conducted on land and in controlled environments, the training described in this application is carried out in real-world conditions in order to make the training as effective as reasonably possible. Simulated environments (e.g., pools) generally do not effectively represent open-ocean conditions.

While better understanding the effects of underwater noise on marine species is an important goal, Eglin AFB and NMFS has evaluated the potential harm to marine mammals resulting from NEODS activities using the best currently available science. While bottlenose dolphins may be affected by underwater detonations, because of the infrequency and short duration of the detonations these impacts are expected to be minimal. Additionally, the U.S. Air Force and NMFS will require monitoring and mitigation measures to be implemented during all NEODS missions, and expects that these measures will result in the lowest practicable adverse impact on marine mammal species and stocks and reduce likely incidental harassment to a level that does not exceed a negligible impact as defined by 50 CFR 216.103. Due to the location of NEODS training operations and required pre-mission monitoring, it is highly unlikely that manatees will be affected.

Comment 3: The Commission recommends that the NMFS require the U.S. Air Force to describe in detail the environmental parameters and procedures used to determine the safety zones and subsequent takes and incorporate these in the final rule.

Response: Before issuing the final rule, NMFS required the U.S. Air Force to describe in detail the environmental parameters and procedures used to determine safety zones (i.e. ZOIs) and subsequent takes. Underwater noise propagation, and therefore the distance to which noise thresholds are estimated to extend, depends upon a number of environmental parameters. For estimating threshold distances in the U.S. Air Force's MMPA application for NEODS training operations, Eglin AFB used a proprietary application developed by a contractor, Science Applications International Corporation. The application permits users to input data related to underwater explosions into an Excel spreadsheet, including net explosive weight, number of detonations, and the desired noise threshold metrics. The possible metrics include energy expressed as decibel levels (total energy and/or greatest 1/3 octave band), peak pressure (psi), and positive impulse (psi-msec). The program output then displays the distance from source to which a particular threshold extends. Various threshold distances are provided according to depth of detonation, season (summer or winter), and province number.

The Warning Areas most frequently used for military testing and training exercises in the Gulf of Mexico (W–155, W–151, and W–470) have been divided into 16 acoustic provinces derived from U.S. Navy oceanographic and environmental databases. Within a given province, water depth, sound speed, and sediment properties are similar, and therefore acoustic properties are expected to be similar. NEODS training operations will occur in W–151. The relevant oceanographic and environmental data was entered into the spreadsheet, and noise threshold distances corresponding to the appropriate depth, season, and province number were provided and used to populate Table 6–2 in Eglin AFB's application. NMFS has included these environmental parameters and procedures used to determine the safety zones (i.e., ZOIs) and subsequent takes and incorporated these in the final rule.

Comment 4: The Commission recommends that before issuing the final rule, NMFS require the U.S. Air Force to re-estimate the safety zones and associated takes based on the Level A harassment (injury) threshold of 13 psi-msec and the Level B harassment (non-TTS) threshold of 177 dB re 1 μPa^2-sec.

Response: Before issuing the final rule, NMFS has required and Eglin AFB Natural Resources Section has re-estimated the safety zones and associated incidental takes so that they include 13psi-msec (Level A harassment) and 177 dB re 1 μPa^2-sec (Level B harassment) thresholds. Revisions were made in the application accordingly and are also reflected in NMFS' take estimates and final rule, and will be in subsequent authorizations. The application is available online on the NMFS Incidental Take Authorization Web site at: *http://www.nmfs.noaa.gov/pr/permits/incidental.htm#iha*. NMFS has relied on those revisions in establishing safety zones in the final rule.

Comment 5: The Commission recommends that before issuing the final rule, NMFS provide additional justification for its preliminary determination that the mitigation and monitoring measures would be sufficient to detect, with a high level of confidence, all marine mammals within or entering the identified safety zones; this would include describing changes in detection probability under various sea state and weather conditions. If such information is not available, then NMFS and the U.S. Air Force should undertake the studies needed to verify that the proposed mitigation and monitoring measures are likely to detect all or nearly all marine mammals in or near the safety zones and, if necessary, develop alternative means of detecting marine mammals in or near those zones. As it has noted in past correspondence, the Commission would be pleased to

discuss with NMFS and the U.S. Air Force the collection and analysis of such data and the design of such experiments to promote a better understanding of the utility and shortcomings of visual monitoring as an effective mitigation measure.

Response: The probability of sighting bottlenose dolphins within the monitoring zone is affected by animal behavior, observer effectiveness, and weather/Beaufort sea state and wind force. Species that occur in groups, exhibit conspicuous surface activity (e.g., leaping, splashing, and visible blows), and surface often are more likely to be observed than species for which one or more of these attributes is not applicable. Bottlenose dolphin behavior is considered conducive to effective observation. The typical group size of 2 to 15 individuals (DON, 2007a; Wursig *et al.,* 2000) is expected to occur in the area of NEODS training operations. Although dives of 10 to 15 minutes have been recorded for trained individuals, the typical dive time is 3 to 4 minutes (Wynne and Schwartz, 1999). Observation for dolphins will occur at least 30 minutes before detonations occur. Therefore, it is likely that at least one individual will be at the surface during the observation time frame. In addition, bottlenose dolphins are generally surface-active and, due to dive times, surface relatively frequently. Caretta *et al.* (2000) considered the likelihood of bottlenose dolphins being observed during surveys in the Pacific great enough that the possibility of missed individuals on the transect line was discounted.

Eglin AFB will require the use of trained observers during NEODS training operations involving detonations. Due in part to the dolphin behavioral characteristics and mission requirements described above, it is expected that observers will have a high detection rate in acceptable weather conditions. A Beaufort sea state of less than 3 is considered optimal for cetacean observation (Davis *et al.,* 2000), and mitigation measures stipulate that missions will be delayed if sea state is greater than 3. Detection probability generally decreases with distance from the observer. However NMFS expects that observation effectiveness will be acceptable within the specified range (880 m maximum or 2,887 ft).

Specific information on the probability of observing bottlenose dolphins from a stationary platform in the nearshore GOM is not available. Various authors have generally addressed the issue of observation effectiveness during cetacean surveys. Two types of bias are often discussed in this context, including perception and availability bias. Perception bias refers to the failure of observers to detect animals, although they are present in the survey area and available to be seen. Availability bias refers to animals that are in the survey area, but are not able to be seen because they are submerged when observers are present. The probability of detecting bottlenose dolphins on a transect line during shipboard surveys has been estimated by various authors as between 62 and 100 percent (DON, 2007b). These probabilities take into account perception and availability bias. However, these estimates are not necessarily applicable to NEODS operations because they represent results from survey efforts on moving vessels (NEODS observers will be stationary) and occur in different geographic locations.

Comment 6: The Commission recommends that NMFS condition the final rule and any LOA issued under that rule to require suspension of the proposed activities if a marine mammal is seriously injured or killed and the injury or death could be associated with the proposed activities and, if supplementary measures are unlikely to reduce the risk of serious injury or death to a very low level, require the U.S. Air Force to suspend its activities until an authorization for such taking has been obtained.

Response: Although Eglin AFB Natural Resources Section believes the required monitoring and mitigation measures will substantially reduce the potential for impacts to bottlenose dolphins, the U.S. Air Force is willing to require that NEODS activities be suspended if a marine mammal is seriously injured or killed and the injury or death can be associated by the U.S. Air Force with the NEODS operations. In addition, Eglin AFB agrees that, if supplementary measures are unlikely to reduce the risk of serious injury or death to a very low level, activities should be suspended until an authorization for such take has been obtained. This requirement has been added to the application under the Mitigation Procedures Plan and NMFS has included it as a requirement in the final rule.

Comment 7: In exchanged emails, the Commission and NMFS noted discrepancies within both the application and NMFS' proposed rule. In response, the U.S. Air Force made several clarifications and agreed to work with NMFS to correct the other discrepancies, including determining safety zones and estimated takes associated with Level B harassment (non-TTS) for multiple detonations. The Commission recommends that NMFS ensure that numerous discrepancies in the application and proposed rule are corrected in the final rule.

Response: Eglin AFB has addressed all issues noted in the Commission's comments submitted via email as well as those officially submitted during the public comment period for the proposed rule. NMFS has ensured that these discrepancies in the application and proposed rule are corrected in the final rule.

Potential Effects of Specified Activities on Marine Mammals and Estimates of Take by Harassment

In general, potential impacts to marine mammals from explosive detonations could include non-lethal injury (Level A harassment), serious injury, and mortality, as well as Level B harassment, which can consist of behavioral disturbance or temporary loss of hearing sensitivity. In the absence of monitoring and mitigation, marine mammals may be killed or injured as a result of an explosive detonation due to direct physiological effects such as the response of air cavities in the body, including the lungs and bubbles in the intestines. Effects are likely to be most severe in near surface waters where the reflected shock wave creates a region of negative pressure called ''cavitation.''

A second potential possible cause of mortality is the onset of extensive lung hemorrhage. Extensive lung hemorrhage is considered debilitating and potentially fatal. Suffocation caused by lung hemorrhage is likely to be the major cause of marine mammal death from underwater shock waves. The estimated range for the onset of extensive lung hemorrhage to marine mammals varies depending upon the animal's weight, with the smallest mammals having the greatest potential hazard range.

Marine mammals may potentially be harassed due to noise from NEODS mission involving underwater detonations. For example, exposing bottlenose dolphins to underwater noise from explosive detonations could result in disturbing important behavioral patterns. The potential numbers and species harassed by noise are assessed in this section. Three key sources of information are necessary for estimating potential noise effects on marine resources: (1) The number of distinct firing or test events; (2) the ZOI for noise exposure; and (3) the population density of animals that potentially occur within the ZOI. The ZOI reflects the geographic extent of the effects anticipated from the

action. The ''test site'' and ''mission area'' are both found within the ZOI.

For the acoustic analysis, the exploding charge is characterized as a point source. The impact thresholds used for marine mammals relate to potential effects on hearing from underwater detonation noise. No ESA-listed marine mammals would be affected given the location of the action in nearshore waters. The only ESA-listed marine mammal likely to be found in the northeastern GOM, the Federal and state-listed endangered sperm whale (*Physeter macrocephalus*), occurs farther out on the continental slope in water generally deeper than 600 m (1,968.5 ft). Manatees are not considered likely to occur in the mission areas (see Figure 1–1 of Eglin AFB's application) and are therefore not considered in this analysis.

For the explosives in question, actual detonation depths would occur at 60 ft near the sand bottom. The inert mines and sea floor may potentially interact with the propagation of noise into the water. However, effects on the propagation of noise into the water column cannot be determined without in-water noise monitoring at the time of detonation. Potential exposure of a sensitive species to detonation noise could theoretically occur at the surface or at any number of depths with differing consequences. A conservative acoustic analysis was selected to ensure the greatest direct path for the harassment ranges and to give the greatest impact range for the injury thresholds.

Criteria and thresholds that are the basis of the analysis of NEODS noise impacts to cetaceans were initially used in U.S. Navy Environmental Impact Statements for ship shock trials of the *Seawolf* submarine and the *Winston S. Churchill* (*Churchill*) vessel (DON, 1998; DON, 2001) and adopted by NMFS (NMFS, 2001). Supplemental criteria and thresholds have been introduced in the EGTTR Programmatic Environmental Assessment (U.S. Air Force, 2002), subsequent EGTTR LOA (U.S. Air Force, 2003) permit request, Precision Strike Weapons (PSW) LOA (U.S. Air Force, 2004), and Naval Surface Warfare Center Panama City Division LOA (U.S. Navy, 2008).

Standard impulsive and acoustic metrics were used to analyze underwater pressure waves in this document.

- Energy flux density (EFD) is the time integral of the squared pressure divided by the impedance. EFD levels have units of dB re 1 $\mu Pa^2 \cdot s$.
- 1/3-Octave EFD is the energy flux density in a 1/3-octave frequency band; the 1/3 octave selected is the hearing range at which the subject animals' hearing is believed to be most sensitive.
- Peak pressure is the maximum positive pressure for an arrival of a sound pressure wave that a marine mammal would receive at some distance away from a detonation.
- Positive impulse represents a time-averaged pressure disturbance from an explosive source with units in psi-milliseconds (psi-msec).
- Units used here are psi and dB levels.

Level A harassment is non-lethal injury, the onset of which is estimated based on levels associated with eardrum rupture (i.e., tympanic-membrane [TM] rupture) and the onset of slight lung injury. The threshold for TM rupture corresponds to a 50 percent rate of rupture (i.e., 50 percent of animals exposed to the level are expected to suffer TM rupture); this threshold is stated in terms of an EFD value of 1.17 $in\text{-}lb/in^2$, which is about 205 dB re 1 $\mu Pa^2 \cdot s$ EFD. Use of this value acknowledges that TM rupture is not necessarily a life-threatening injury, but is a useful index of possible injury that is well-correlated with measures of permanent hearing impairment. Ketten (1998) indicates a 30 percent incidence of permanent threshold shift (PTS) at the same threshold. The onset of slight lung injury is the second threshold considered indicative of non-lethal injury. A dolphin would be expected to recover from this type of injury. Slight lung injury is considered to occur at a positive impulse level of 13 psi-msec. At distances closer to the detonation, the pressure wave could cause extensive lung injury, leading to mortality. It is assumed that the range of extensive lung injury is less than that of slight injury; therefore, using the range of slight lung injury provides a more conservative take estimate.

Public Law 108–136 (2004) amended the definition of Level B harassment under the MMPA for military readiness activities, such as this action (and also for scientific research on marine mammals conducted by or on the behalf of the Federal Government). For military readiness activities, Level B harassment is now defined as ''any act that disturbs or is likely to disturb a marine mammal or marine mammal stock in the wild by causing disruption of natural behavioral patterns including, but not limited to, migration, surfacing, nursing, breeding, feeding, or sheltering to a point where such behavioral patterns are abandoned or significantly altered.'' Unlike Level A harassment, which is solely associated with physiological effects, both physiological and behavioral effects may cause Level B harassment.

The physiological effect associated with non-injurious Level B harassment is known as temporary threshold shift (TTS), which is defined as a temporary, recoverable loss of hearing sensitivity (NMFS, 2001; DON, 2001). Two criteria are considered indicative of the onset of peak pressure at 23 psi (peak). This threshold is derived from the Environmental Impact Statement for the (*Churchill*) shock testing and was subsequently adopted by NMFS in its final rule on the unintentional taking of marine mammals incidental to the shock testing (NMFS, 2001). The original criteria in *Churchill* incorporated 12 psi (peak). The current criteria and threshold for peak pressure over all exposures was updated from 12 psi (peak) to 23 psi (peak) for explosives less than 907 kg (2,000 lb) based on an IHA issued to the U.S. Air Force for a similar action (NMFS, 2006a). See Table 4 (below) for NMFS' current criteria and thresholds for explosives. Peak pressure threshold are much greater than those for the energy metric when charge weights are small, even when source and animal are away from the surface. In order to more accurately estimate TTS for smaller detonations while preserving the safety feature provided by the peak pressure threshold, the peak pressure threshold is appropriately scaled for small shot detonations. This scaling is based on the similitude formulas (e.g., Urick, 1983) used in virtually all compliance documents for short ranges. Further, the peak-pressure threshold for TTS due to explosives offers a safety margin for source or animal near the ocean surface. The more conservative isopleth of the criteria for estimating TTS is used in take analysis.

Behavioral reactions may occur at noise levels below those considered to cause TTS in marine mammals, particularly in cases where multiple detonations occur. Behavioral effects may include decreased ability to feed, communicate, migrate, or reproduce, among others. Such effects are known as sub-TTS Level B harassment. Although repetitive exposures (below TTS) to the same animals are considered unlikely due to the infrequent test events (no more than 5 detonations over a one or two day period), the potential variability in target locations, and the continuous movement of marine mammals in the northeastern GOM, the potential exists for a marine mammal to be impacted during multiple detonations. In this document, behavioral effects associated with such a scenario are considered to occur at an EFD level of 177 dB re 1 $\mu Pa^2 \cdot s$ EFD. The tables below provide a

summary of threshold criteria and metrics for potential noise impacts to sensitive species.

TABLE 4—(TABLE 6–1 OF THE APPLICATION) NMFS' THRESHOLD CRITERIA AND METRICS UTILIZED FOR IMPACT ANALYSES FROM THE USE OF EXPLOSIVES

Mortality	Level A harassment (non-lethal injury)		Level B harassment (non-injurious; TTS and associated behavioral disruption [dual criteria])	Level B harassment (non-injurious behavioral, sub-TTS)
31 psi-msec (onset of severe lung injury [mass of dolphin calf]).	205 dB re 1 $\mu Pa^2 \cdot s$ EFD (50 percent of animals would experience TM rupture).	13 psi-msec positive pressure (onset of slight lung injury).	182 dB re 1 $\mu Pa^2 \cdot s$ EFD*; 23 psi peak pressure (< 2,000 lb) 12 psi peak pressure (> 2,000 lb).	177 dB re 1 $\mu Pa^2 \cdot s$EFD* (for multiple detonations only).

* **Note:** In greatest 1/3-octave band above 10 Hz or 100 Hz.

Noise ZOIs were calculated for bottom detonation scenarios at 60 ft for both Level A harassment (i.e., injury) and Level B harassment (significant behavioral disturbance). To determine the number of potential ''takes'' or animals affected, cetacean population information from surveys was applied to the various ZOIs. The impact calculations for this section utilize marine mammal density estimates that have been derived from a Legacy-funded NMFS/Air Force project (Garrison, 2008). The species density estimate data were adjusted to reflect the best available data and more realistic encounters of these animals in their natural environment (Garrison, 2008). These calculations and estimates are explained in detail in Section 3, and adjusted density estimates are provided in Table 3–1 of Eglin AFB's application. Although mission schedules are variable and may occur during any time of year, 60 percent (24 detonations) are expected to occur during summer and 40 percent (16 detonations) are expected to occur in winter. Therefore, seasonal bottlenose dolphin density estimates (0.78 dolphins/km^2) in summer and 0.84 dolphins/km^2 in winter) are used for take analysis.

Table 6–2 of Eglin AFB's application gives the estimated impact ranges for the two explosive weights. The test locations are one to three nmi south of SRI. NEODS detonations were modeled for bottom detonations at 60 ft.

TABLE 5—(TABLE 6–2 OF THE APPLICATION) ZOI FOR UNDERWATER EXPLOSIONS

Ordnance	NEW (lbs)	Depth of explosion (m)	Ranges for 205 dB re 1 $\mu Pa^2 \cdot s$ EFDL (m)	Ranges for 13 psi-msec (m)	Ranges for 182 dB re 1 $\mu Pa^2 \cdot s$ EFDL (m)	Ranges for 23 psi (m)	Ranges for 177 dB re 1 $\mu Pa^2 \cdot s$ EFDL (m)
Summer:							
NEODS MCM 2.3 kg (5 lb) charge	5	18	52.1	156	227.5	222	520
NEODS MCM 4.5 kg (10 lb) charge	10	18	77	225	385	280	845
Winter:							
NEODS MCM 5 lb charge	5	18	52.2	156	229.8	222	529
NEODS MCM 10 lb charge	10	18	77	226	389	280	880

EFDL = Energy Flux Density Level.

Applying the harassment ranges in Table 6–2 of the application to the species densities of Table 3–1 of the application, the number of animals potentially occurring within the ZOI was estimated. These results are presented in Tables 6–3, 6–4, and 6–5 of the application. For Level A harassment calculations (Table 6–3 of the application), the ZOI corresponding to 13 psi-msec is used because this radius is in all cases greater than the radius corresponding to 205 dB re 1 $\mu Pa^2 \cdot s$ EFD. For Level B harassment calculations (Table 6–4 of the application), the ZOI corresponding to the 182 dB re 1 $\mu Pa^2 \cdot s$ EFD metric is used because this radius is in all cases greater than the radius corresponding to 23 psi (peak). A whole animal (and potential take) is defined as 0.5 or greater, where calculation totals result in fractions of an animal. Where less than 0.5 animals are affected, no take is assumed. The calculations in Tables 6–3 and 6–4 of the application are based on the expected tempo of: (1) 40 total detonations per year; (2) one-half of detonations are of 5 lb charges, and one-half are of 10 lb charges; and (3) 60 percent of detonations occur in summer, and 40 percent occur in winter.

TABLE 6—(TABLE 6–3 OF THE APPLICATION) MARINE MAMMAL DENSITIES AND RISK ESTIMATES FOR LEVEL A HARASSMENT (13 PSI-MSEC POSITIVE PRESSURE)

Species	Density (animals/km²)	ZOI (km)		Number of animals exposed to level A harassment	
		5 lb charge	10 lb charge	5 lb charge	10 lb charge
Summer:					
Bottlenose Dolphin	0.78	0.156	0.225	0.72 (12 detonations)	1.49 (12 detonations).
Winter:					
Bottlenose Dolphin	0.84	0.156	0.226	0.51 (8 detonations)	1.08 (8 detonations).
Total Number Animals Potentially Exposed To Level A Harassment Annually			3.80		

TABLE 7—(TABLE 6–4 OF THE APPLICATION) MARINE MAMMAL DENSITIES AND RISK ESTIMATES FOR LEVEL B HARASSMENT (182 DB RE 1 μPA²·S EFD 1/3 OCTAVE BAND) NOISE EXPOSURE

Species	Density (animals/km²)	ZOI (km)		Number of animals exposed to Level B harassment (TTS)	
		5 lb charge	10 lb charge	5 lb charge	10 lb charge
Summer:					
Bottlenose Dolphin	0.78	0.2275	0.385	1.52 (12 detonations)	4.36 (12 detonations).
Winter:					
Bottlenose Dolphin	0.84	0.2298	0.389	1.11 (8 detonations)	3.19 (8 detonations).
Total number animals potentially exposed to Level B harassment (TTS and behavioral) annually			10.18		

TABLE 8—(TABLE 6–4 OF THE APPLICATION) MARINE MAMMAL DENSITIES AND RISK ESTIMATES FOR LEVEL B HARASSMENT (177 DB RE 1 μPA²·S EFD 1/3 OCTAVE BAND) NOISE EXPOSURE

Species	Density (animals/km²)	ZOI (km)		Number of animals exposed to level B harassment (behavioral)	
		5 lb charge	10 lb charge	5 lb charge	10 lb charge
Summer:					
Bottlenose Dolphin	0.78	0.520	0.845	7.95 (12 detonations)	20.99 (12 detonations).
Winter:					
Bottlenose Dolphin	0.84	0.529	0.880	5.91	16.35
Total number animals potentially exposed to Level B harassment (sub-TTS and behavioral) annually				51.20	

The tables above indicate that the potential takes of marine mammals for non-injurious (Level B) harassment, as well as the onset of injury (Level A harassment) to cetaceans is possible but low, even without implementing any monitoring and mitigation measures. Slightly fewer than four bottlenose dolphins are estimated to be exposed annually to a positive pressure level corresponding to Level A harassment (13 psi-msec). Noise levels corresponding to Level B harassment (182 dB re 1 $\mu Pa^2 \cdot s$ EFD) would potentially affect approximately 10 dolphins. Finally, approximately 50 dolphins could be exposed to noise levels associated with sub-TTS behavioral harassment. None of the above impact estimates take into account the monitoring and mitigation measures that will be employed by the proponent to minimize potential impacts to protected species. These monitoring and mitigation measures are described in Eglin AFB's application (see below) and are anticipated to substantially reduce the potential impacts to marine mammals.

Based on the analyses and results provided here and in Section 6 of Eglin AFB's application, approximately four Atlantic bottlenose dolphins could be exposed to pressure levels (13 psi-msec) corresponding to Level A harassment annually in the absence of monitoring and mitigation measures. Approximately 10 dolphins could be exposed to noise levels corresponding to Level B harassment (TTS and associated behavioral), while 50 individuals could be exposed to noise levels corresponding to Level B harassment. NMFS expects that monitoring and mitigation measures set forth in the final rule would substantially reduce the number of animals impacted. The individuals potentially affected could be part of the Northern GOM Coastal Stock and/or part of one or more of the Northern GOM bay, sound, and estuarine stocks. The Northern GOM coastal stock and all bay, sound, and estuarine stocks are considered

strategic. Although the NEODS training area lies outside the defined range of the bay, sound, and estuarine stocks, movement between such stocks has been documented in GOM coastal waters, as described in Waring *et al.* (2009). Movements have ranged from travel through adjacent communities to movement over several hundred kms off Texas, and may include seasonal movements into GOM waters. NEODS training operations will occur between the ranges of the Pensacola/East Bay and Choctawhatchee Bay Stocks, although individuals from other locations could potentially travel through the training areas as well. These stocks and their movements are not fully understood; therefore, it is possible that individuals from these stocks could be affected. PBR has not been determined for the coastal stock due to insufficient information. Similarly, PBR has not been determined for many of the bay, sound, and estuarine stocks, including the Pensacola/East Bay and Choctawhatchee Bay stocks.

Based on the calculation methods discussed above, NMFS estimated take numbers per year of 10 individuals and 50 individuals during the five-year rule for Atlantic bottlenose dolphins. The actual number of individual animals being exposed or taken may be less due to the U.S. Air Force's implementation of monitoring and mitigation measures.

Possible Effects of Activities on Marine Mammal Habitat

The primary source of marine mammal habitat impact is noise resulting from live NEODS missions. However, the noise does not constitute a long-term physical alteration of the water column or bottom topography, as the occurrences are of limited duration and are intermittent in time. Surface vessels associated with the missions are present in limited duration and are intermittent as well.

Other sources that may affect marine mammal habitat were considered and potentially include the introduction of fuel, debris, ordnance, and chemical residues in the water column. The effects of each of these components were considered in the NEODS BA and were determined to be unlikely to adversely affect protected marine species. Marine mammal habitat would not be affected, lost or modified.

NMFS anticipates that the action will result in no impacts to marine mammal habitat beyond rendering the areas immediately around the NEODS training operations in the EGTTR less desirable shortly after each demolition event. The impacts will be localized and instantaneous. Impacts to marine mammal, invertebrate, and fish species are not expected to be detrimental.

Mitigation

In order to issue an Incidental Take Authorization under section 101(a)(5)(A) and (D) of the MMPA, NMFS must set forth the permissible methods of taking pursuant to such activity, and other means of effecting the least practicable adverse impact on such species or stock and its habitat, paying particular attention to rookeries, mating grounds, and areas of similar significance, and on the availability of such species or stock for taking for certain subsistence uses. The NDAA of 2004 amended the MMPA as it relates to military readiness activities and the incidental take authorization process such that ''the least practicable adverse impact'' includes consideration of personnel, safety, practicality of implementation, and the impact on the effectiveness of the ''military readiness activity.'' NEODS training involves military readiness activities.

NEODS has employed a number of mitigation measures in an effort to substantially decrease the number of animals potentially affected. Eglin AFB is committed to assessing the mission activity for opportunities to provide operational mitigations while potentially sacrificing some mission flexibility.

Mitigation consists of visual monitoring of the mission site that is required in order to decrease the likelihood of potential impacts to marine mammals and other protected species. Pre- and post-mission surveys using trained observers are required for each NEODS mission. Surveys will be conducted from surface vessels and possibly helicopters. Missions will only be conducted during daylight hours (i.e., an hour after sunrise and an hour before sunset). Depending on visibility, surface observation would be effective out to several kms.

Trained observers onboard support boats would be staged from the highest point possible. The observer on the vessel will be familiar with marine life in the mission area and must be equipped with optical equipment with sufficient magnification (e.g., binoculars), which should allow the observer to sight and report surfacing marine mammals from a significant distance. The trained observer will have proper lines of communication to make recommendations to the Officer in Tactical Command so that he/she can then decide on whether or not the mission can proceed.

Weather that supports the ability to sight marine life is required in order to mitigate the test site effectively (DON, 1998). Wind, visibility, and surface conditions of the GOM are the most critical factors affecting mitigation operations. Higher winds typically increase wave height and create ''white cap'' conditions, limiting an observer's ability to locate surfacing marine mammals. NEODS missions would be canceled or delayed if the sea state were greater than the Scale Number 3 described on Table 9 (below) and in Eglin AFB's application.

TABLE 9—(TABLE 11–1 OF THE APPLICATION) BEAUFORT SEA STATE SCALE FOR MARINE MAMMAL OBSERVATION

Scale No.	Sea conditions
0	Flat calm, no waves or ripples.
1	Small wavelets, few if any whitecaps.
2	Whitecaps on 0 to 33 percent of surface; 0.3 to 0.6 m (1 to 2 ft) waves.
3	Whitecaps on 33 to 50 percent of surface; 0.6 to 0.9 m (2 to 3 ft) waves.
4	Whitecaps on greater than 50 percent of surface; greater than 0.9 m (3 ft) waves.

During a typical mission in the GOM, visual surveys are conducted out to a distance from the detonation point corresponding to the largest impact ZOI, which would be the Level B sub-TTS behavioral harassment range. However, due to recent dolphin mortalities associated with EOD activities at the Silver Strand Training Complex (SSTC) off of San Diego, California, new survey protocols will be implemented. These protocols represent an agreement between the U.S. Navy and NMFS regarding the size of the visual survey areas for training activities using time-delay fuses. Such fuses are used so that U.S. Navy personnel can safely vacate the area before detonation occurs. The

U.S. Air Force will ensure that the U.S. Navy complies with the mitigation and monitoring protocols set forth herein this document, and future reference will be to the U.S. Navy, as the U.S. Navy carries out the NEODS training operations.

Under the new protocol, the survey radius (distance from the detonation point) is increased so that marine mammals would not likely have time to swim into the affected area after the charge has been set and U.S. Navy divers have left the area. Once the system is armed and divers exit the water, they are typically not allowed back into the water to disarm the charge. Therefore, the distance that a dolphin could typically swim during the time delay is added to the survey distance. The typical swim speed for dolphin species is considered to be 5.6 km per hour (three knots), or approximately 93.3 m (102 yards [yd]) per minute. Table 10 (Table 11–2 of the application) lists the distance a dolphin might travel at this swim speed during various time delays. In addition, NMFS requested that an additional 182.9 m (200 yd) buffer be added to this distance to account for dolphins possibly swimming faster than the average speed of three knots. This additional buffer is shown in the table below.

TABLE 10—(TABLE 11–2 OF THE APPLICATION) POTENTIAL SWIM DISTANCE OF A DOLPHIN WITH AN ADDITIONAL 200 YD BUFFER

Typical dolphin swim speed	Time delay	Distance traveled during time delay	Distance traveled with additional 200 yd buffer
3 knots (102 yd/minute)	5 minutes	510 yd	710 yd.
	6 minutes	612 yd	812 yd.
	7 minutes	714 yd	914 yd.
	8 minutes	816 yd	1,016 yd.
	9 minutes	918 yd	1,118 yd.
	10 minutes	1,020 yd	1,220 yd.

The total distance potentially traveled during the time delay, as listed in Table 10, is then added to the range of the applicable NMFS injury criteria to determine the final survey radius. The more conservative (larger) of the ranges between the injury dual criteria is used, which for the document is the 13 psi-msec threshold (see Table 5 above or Table 6–2 of the application). If marine mammals are not observed within the mitigation-monitoring zone before the charge is set, they would be unlikely to swim into the injury zone during the time-delay window. The adjusted survey radius for various time delays is Table 11 below (see Table 11–3 of the application). The injury criterion range and final survey distance are shown in meters in order to be consistent with U.S. Navy standards established for the SSTC.

TABLE 11—(TABLE 11–3 OF THE APPLICATION) SURVEY RADIUS FOR TIME-DELAYED FIRING DEVICES

Charge weight (new)	13 psi-msec range	Survey radius for time delay, adjusted for swim distance and buffer					
		5 minutes	6 minutes	7 minutes	8 minutes	9 minutes	10 minutes
5 lb	171 * yd	881 yd	983 yd	1,085 yd	1,187 yd	1,289 yd	1,391 yd.
10 lb	247 * yd	957 yd	1,059 yd	1,161 yd	1,263 yd	1,365 yd	1,467 yd.

* Ranges from Table 5 are converted to yd.

In order to provide a more practical implementation of mitigation measures, the U.S. Navy and NMFS agreed to round survey ranges to distances more easily delineated in the field. Therefore, to be consistent with the method used for missions at the U.S. Navy's SSTC, the survey distances shown in Table 11 are rounded to either 914.4 or 1,280.2 m (1,000 or 1,400 yd). A different number of survey vessels are required for each distance. The final rounded distances are shown in Table 12 (Table 11–4 of the application).

TABLE 12—(TABLE 11–4 OF THE APPLICATION) FINAL ROUNDED SURVEY RADIUS FOR TIME-DELAYED FIRING DEVICES

Charge weight (new)	Final rounded survey radius by time delay					
	5 minutes	6 minutes	7 minutes	8 minutes	9 minutes	10 minutes
5 lb	1,000 yd	1,000 yd	1,000 yd	1,000 yd	1,400 yd	1,400 yd.
10 lb	1,000 yd	1,000 yd	1,000 yd	1,400 yd	1,400 yd	1,400 yd.

The following visual monitoring requirements will be implemented for each NEODS mission. These requirements are based on the agreement between NMFS and the U.S. Navy for EOD activities conducted in water depths of 7.3 m (24 ft) or greater.

- Underwater detonations using timed delay devices will only be conducted during daylight hours (i.e., an hour after sunrise and an hour before sunset).
- Time delays longer than 10 minutes will not be used. Initiation of the timer device will not start until the mitigation-monitoring zone is clear of marine mammals for 30 minutes.
- A mitigation-monitoring zone will be established around each underwater detonation location as indicated in Table 12 based on charge weight and

length of time-delay used. When conducting surveys within the mitigation-monitoring zone radius (but always outside the detonation plume radius/human safety zone) boats will travel in a circular pattern around the detonation point, surveying the inner (toward the detonation site) and outer (away from the detonation site) areas. For a survey radius of 1,000 yd, the boat will be positioned at 457.2 m (500 yd) from the detonation point. Similarly, for a survey radius of 1,400 yd, boats will be positioned at a distance of 640.1 m (700 yd).

- For a survey radius of 1,000 yd, two boats are required. For a radius of 1,400 yd, either three boats or two boats/one helicopter are required.
- When using two boats, each boat will be positioned on opposite sides of the detonation location, separated by 180 degrees. When using three boats, each boat will be separated by 120 degrees (equidistant from each other).
- Two observers in each boat will conduct continuous visual surveys of the mitigation-monitoring zone for the entire duration of the training event, including at least 30 minutes prior to detonation. Observers will search the mitigation-monitoring zone for the presence of marine mammals, and other marine species such as sea turtles, diving birds, large concentrations of fish or jellyfish, and large *Sargassum* mats. The presence of diving birds, fish, jellyfish, and *Sargassum* may indicate an increased likelihood of dolphin presence.
- The mission would be postponed if large concentrations of fish, jellyfish, and/or large *Sargassum* rafts are observed within the mitigation-monitoring zone. The delay would continue until the fish, jellyfish, and/or large *Sargassum* rafts that caused the postponement are confirmed to be outside the mitigation-monitoring zone.
- To the extent practicable, boats will maintain a 18.5 km per hour (10 knot or 11.5 miles per hour) search speed. This search speed is expected to ensure adequate coverage of the buffer zone. While weather conditions and sea state may require slower speeds in some instances, 10 knots is considered a prudent, safe, and executable speed that will allow adequate surveillance. For a 1,000-yd survey zone, a boat travelling at 10 knots and 500 yd from the detonation point would circle the point approximately 3.2 times during a 30-minute survey period. By using two boats, approximately 6.4 circles would be completed in total. Similarly, for a 1,400 yd radius, each boat would circle the detonation point approximately 2.3 times within 30 minutes, and use of three boats would result in 6.9 total circles.
- If available, a U.S. Navy helicopter can be used in lieu of one of the survey boats, so long as safety of flight is not jeopardized. U.S. Navy helicopter pilots are trained to conduct searches for relatively small objects in the water, such as a missing persons. A helicopter search pattern is dictated by standard U.S. Navy protocols and accounts for multiple variables, such as size and shape of the search area, size of the object, and environmental conditions, among others.
- The mitigation-monitoring zone will be surveyed for 30 minutes prior to detonation and continue for 30 minutes after detonation (concentrated on the area down current of the test site), in order to monitor for marine mammals and other protected species. It is the U.S. Navy's intent to conduct five successive detonations with a maximum time of 20-minutes between detonations, although a variety of factors can cause a delay of longer than 20 minutes, including a delay until the following day. Monitoring would continue during the 20 minute interval between detonations, and would serve as both post-detonation monitoring as well as pre-mission monitoring for the next detonation. If the time between detonations is delayed beyond 20 minutes, post-mission monitoring will be conducted for 30 minutes. At the conclusion of the final detonation, post-monitoring will be conducted for 30 minutes.
- Other personnel besides designated observers shall also maintain situational awareness of the presence of marine mammals within the mitigation-monitoring zone to the extent practicable given dive safety considerations.
- Divers placing the charges on mines will observe the immediate underwater area around the detonation site for marine mammals and other marine species such as diving birds, sea turtles, and Gulf sturgeon, and report sightings to surface observers.
- If a marine mammal is sighted within an established mitigation-monitoring zone or moving towards it, underwater detonation events will be postponed or suspended until the marine mammal that caused the postponement/suspension of training operations has voluntarily left the area and the area is clear of marine mammals for at least 30 minutes.
- If a marine mammal is detected within or about to enter an established mitigation-monitoring zone and subsequently cannot be reacquired, the mission will be postponed or suspended until the last verified location is outside the mitigation-monitoring zone, the animal is moving away from the area, and the area is clear of marine mammals for at least 30 minutes.
- Any marine mammal observed after an underwater detonation either injured or exhibiting signs of distress will be reported to the Eglin AFB. Eglin AFB will coordinate with other members of marine mammal stranding networks, as appropriate, and report these events to NMFS or USFWS. The report will contain date and time of sighting, location, species description, and indications of the animal's status (see section below for more information on reporting).

NEODS training operations will be suspended and the U.S. Air Force will re-initiate consultation under the MMPA with NMFS' Office of Protected Resources if (1) a marine mammal is killed or seriously injured and the injury or death could be associated with the NEODS training operations; and (2) implementing supplemental mitigation and monitoring measures is not likely to reduce the risk of serious injury or death to a very low level. The U.S. Air Force will suspend operations until the proper authorization for incidental take is obtained from NMFS.

Monitoring and Reporting

In order to issue an ITA for an activity, section 101(a)(5)(A) of the MMPA states that NMFS must set forth ''requirements pertaining to the monitoring and reporting of such taking.'' The MMPA implementing regulations at 50 CFR 216.104(a)(13) indicate that requests for ITAs must include the suggested means of accomplishing the necessary monitoring and reporting that will result in increased knowledge of the species and of the level of taking or impacts on populations of marine mammals that are expected to be present. Any authorization issued pursuant to this final rule will require the U.S. Air Force to conduct mitigation monitoring before, during, and after completion of training exercises in accordance with the procedures discussed above. Methods for monitoring will include trained observers positioned on vessels. Monitors will be required to record and report specific data to NMFS in an annual monitoring report.

Mitigation may include any supplemental activities that are designed and exercised to help reduce or eliminate the potential adverse impacts to the marine resources. The U.S. Air Force recognizes the importance of such ''in-place'' mitigations and is aware that NMFS

recommends an approved mitigation plan that outlines the scope and effectiveness of the action's mitigations.

The risk of harassment (Levels A and B) to marine mammals has been determined to be relatively small. Eglin AFB has determined that with the implementation and commitment to utilizing the ''visual monitoring'' mitigations, potential takes are greatly reduced.

For NEODS testing, areas to be used in missions are visually monitored for marine mammal presence from a surface vessel prior to detonation of mine neutralization charges. Monitoring would be conducted before missions to clear marine mammals within the ZOI. If protected animals are inside the ZOI, firing would be postponed until they left the area. The following procedures will be conducted during the mission activities:

- Conduct survey clearance procedures using best operational methods possible.
- Clear ZOI and avoid all dolphins and protected species indicators (e.g., *Sargassum* rafts) to the maximum extent possible.
- Re-conduct clearance procedures if dolphins or protected species indicators (e.g., *Sargassum* rafts) are encountered.
- All observers must complete the Marine Observer Certification course annually.
- Conduct post-mission observation and report operations data as required by Eglin's Natural Resources Section, 96 CEG/CEVSN.
- Submit an annual summary (coordinated through 96 CEG/CEVSN) of mission observations to:

National Marine Fisheries Service, Southeast Regional Office, Protected Resources Division, 9721 Executive Center Drive North, St. Petersburg, FL 33702

and

National Marine Fisheries Service, Office of Protected Resources, 1315 East West Highway, Silver Spring, MD 20910.

Information recorded will include species counts, numbers of observed disturbances, and descriptions of the disturbance behaviors before, during, and after explosive activities. Observations of unusual behaviors, numbers, or distributions of marine mammals in the activity area will be reported to NMFS and USFWS so that any potential follow-up observations can be conducted by the appropriate personnel. In addition, observations of tag-bearing marine mammals, sea turtles, and fish carcasses as well as any rare or unusual species of marine mammals and fish would be reported to NMFS and USFWS.

Eglin AFB would notify NMFS and the Regional Office prior to initiating of each explosive demolition session. If at any time injury or death of any marine mammal occurs that may be a result of the NEODS activities, Eglin AFB would suspend activities and contact NMFS immediately to determine how best to proceed to ensure that another injury, serious injury, or death does not occur, and to ensure that the applicant remains in compliance with the MMPA. Any takes of marine mammals other than those authorized by the LOA, as well as any injuries or deaths of marine mammals, will be reported to the Southeast Regional Administrator, within 24 hours. An annual draft final report must be submitted to NMFS within 90 days after the conclusion of the NEODS activities. An annual report must be submitted at the time of renewal of the LOA as well. Also, a report must be submitted at least 180 days prior to the expiration of these regulations. The report will include a summary of the activities undertaken and information gathered pursuant to the monitoring requirements set forth in the regulations and LOA, including dates and times of detonations as well as pre- and post-blasting monitoring observations. A final report must be submitted to the Regional Administrator within 30 days after receiving comments from NMFS on the draft final report. If no comments are received from NMFS, the draft final report would be considered to be the final report.

In the unanticipated event that the specified activity clearly causes the take of a marine mammal in a manner prohibited by this rule, such as an injury, serious injury or mortality, Eglin AFB will immediately cease the specified activities and report the incident to the Chief of the Permits and Conservation Division, Office of Protected Resources, NMFS at (301) 427–8401 and/or by email to *Jolie.Harrison@noaa.gov* and *Howard.Goldstein@noaa.gov,* and the NMFS Southeast Region Marine Mammal Stranding Network at (877) 433–8299 (*Blair.Mase@noaa.gov* and *Erin.Fougeres@noaa.gov*) (Florida Marine Mammal Stranding Hotline at (888) 404–3922). The report must include the following information:

- Time, date, and location (latitude/longitude) of the incident;
- Description of the incident;
- Status of all noise-generating sources use in the 24 hours preceding the incident;
- Water depth;
- Environmental conditions (e.g., wind speed and direction, Beaufort sea state, cloud cover, and visibility);
- Description of all marine mammal observations in the 24 hours preceding the incident;
- Species identification or description of the animal(s) involved;
- Fate of the animal(s); and
- Photographs or video footage of the animal(s) (if equipment is available).

Activities shall not resume until NMFS is able to review the circumstances of the prohibited take. NMFS shall work with Eglin AFB to determine what is necessary to minimize the likelihood of further prohibited take and ensure MMPA compliance. Eglin AFB may not resume their activities until notified by NMFS via letter or email, or telephone.

In the event that Eglin AFB discovers an injured or dead marine mammal, and the lead observer determines that the cause of injury or death is unknown and the death is relatively recent (i.e., in less than a moderate state of decomposition as described in the next paragraph), Eglin AFB will immediately report the incident to the Chief of the Permits and Conservation Division, Office of Protected Resources, NMFS, at (301) 427–8401, and/or by email to *Jolie.Harrison@noaa.gov* and *Howard.Goldstein@noaa.gov,* and the NMFS Southeast Region Marine Mammal Stranding Network ((877) 433–8299) and/or by email to the Southeast Regional Stranding Coordinator (*Blair.Mase@noaa.gov*) and Southeast Regional Stranding Program Administrator (*Erin.Fougeres@noaa.gov*). The report must include the same information identified in the paragraph above. Activities may continue while NMFS reviews the circumstances of the incident. NMFS will work with Eglin AFB to determine whether modifications in the activities are appropriate.

In the event that Eglin AFB discovers an injured or dead marine mammal, and the lead observer determines that the injury or death is not associated with or related to the activities authorized in the final rule (e.g., previously wounded animal, carcass with moderate to advanced decomposition, or scavenger damage), Eglin AFB will report the incident to the Chief of the Permits and Conservation Division, Office of Protected Resources, NMFS, at (301) 427–8401, and/or by email to *Jolie.Harrison@noaa.gov* and *Howard.Goldstein@noaa.gov,* and the NMFS Southeast Regional Marine Mammal Stranding Network ((877) 433–8299), and/or by email to the Southeast

Regional Stranding Coordinator (*Blair.Mase@noaa.gov*) and Southeast Regional Stranding Program Administrator (*Erin.Fougeres@noaa.gov*), within 24 hours of discovery. Eglin AFB will provide photographs or video footage (if available) or other documentation of the stranded animals sighting to NMFS and the Marine Mammal Stranding Network.

Encouraging and Coordinating Research

Although Eglin AFB does not currently conduct independent Air Force monitoring efforts, Eglin's Natural Resources Section does participate in marine animal tagging and monitoring programs lead by other agencies. Additionally, the Natural Resources Section supports participation in annual surveys of marine mammals in the GOM with NMFS. From 1999 to 2002, Eglin AFB's Natural Resources Section, through a contract representative, participated in summer cetacean monitoring and research opportunities. The contractor participated in visual surveys in 1999 for cetaceans in the GOM, photographic identification of sperm whales in the northeastern GOM in 2001, and as a visual observer during the 2000 Sperm Whale Pilot Study and the 2002 sperm whale Satellite-tag (S-tag) cruise. In addition, Eglin's Natural Resources Section has obtained Department of Defense funding for two marine mammal habitat modeling projects. The latest such project (Garrison, 2008) included funding and extensive involvement of NMFS personnel so that the most recent aerial survey data could be utilized for habitat modeling and animal density estimates in the northeastern GOM.

Eglin AFB conducts other research efforts that utilize marine mammal stranding information as a means of ascertaining the effectiveness of mitigation techniques. Stranding data is collected and maintained for the Florida panhandle and GOM-wide areas. This is undertaken through the establishment and maintenance of contacts with local, state, and regional stranding networks.

Eglin AFB assists with stranding data collection by maintaining its own team of stranding personnel. In addition to simply collecting stranding data, various analyses are performed. Stranding events are tracked by year, season, and NMFS' statistical zone, both GOM-wide and on the coastline in proximity to Eglin AFB. Stranding data is combined with records of EGTTR mission activity in each water range and analyzed for any possible correlation. In addition to being used as a measure of the effectiveness of mission mitigations, stranding data can yield insight into the species composition of cetaceans in the region.

Negligible Impact Determination

As explained, NMFS will only issue an authorization to incidentally take marine mammals pursuant to section 101(a)(5)(A) of the MMPA if, based on review of the best scientific information available and consideration of applicable mitigation and their likely effectiveness, it determines that the total taking authorized over the five-year period will have a negligible impact on affected species or stocks of marine mammals. NMFS implementing regulations codified at 50 CFR 216.103 state that ''negligible impact is an impact resulting from the specified activity that cannot be reasonably expected to, and is not reasonably likely to, adversely affect the species or stock through effects on annual rates of recruitment or survival.''

In making a negligible impact determination NMFS evaluated factors such as:

(1) The number of anticipated injuries, serious injuries, or mortalities;

(2) The number, nature, intensity, and duration of Level B harassment (all relatively limited);

(3) The context in which the takes occur (i.e., impacts to areas of significance, impacts to local populations, and cumulative impacts when taking into account successive contemporaneous actions when added to baseline data);

(4) The status of stock or species of marine mammal (i.e., depleted, not depleted, decreasing, increasing, stable, and impact relative to the size of the population);

(5) Impacts on habitat affecting rates of recruitment or survival; and

(6) The effectiveness of monitoring and mitigation measures (i.e., the manner and degree in which the measure is likely to reduce adverse impacts to marine mammals, the likely effectiveness of the measures, and the practicability of implementation).

Tables 2, 3, 6, 7, and 8 in this document disclose the habitat, regional abundance, conservation status, density, and the number of individuals exposed to sound levels considered the threshold for Level A and B harassment. Also, there are no known important reproductive or feeding areas in the action area.

For reasons stated previously in this document, and in the proposed rule (76 FR 60694, October 1, 2010), the specified activities associated with the NEODS training operations are not likely to cause PTS or other non-auditory injury, serious injury, or death to affected marine mammals. As a result, no take by injury, serious injury, or death is anticipated or authorized, and the potential for temporary or permanent hearing impairment is very low and will be minimized through the incorporation of the monitoring and mitigation measures.

Approximately 50 Atlantic bottlenose dolphins are anticipated to incur hearing impairment (TTS). While some other species of marine mammals (none of which are ESA-listed) occur in the project area year-round, only Atlantic bottlenose dolphins are anticipated to be potentially impacted by the NEODS operations. Due to the nature, degree, and context of the Level B harassment anticipated, the activity is not expected to impact rates of recruitment or survival.

Many animals perform vital functions, such as feeding, resting, traveling, and socializing, on a diel cycle (24-hr cycle). Behavioral reactions to noise exposure (such as disruption of critical life functions, displacement, or avoidance of important habitat) are more likely to be significant if they last more than one diel cycle or recur on subsequent days (Southall *et al.,* 2007). Consequently, a behavioral response lasting less than one day and not recurring on subsequent days is not considered particularly severe unless it could directly affect reproduction or survival (Southall *et al.,* 2007). NEODS operations would occur up to eight times annually, at varying times within the year, and include two ''live demolition'' days. Therefore, the U.S. Air Force's NEODS operations will not be creating increased sound levels in the marine environment for prolonged periods of time.

The population estimates for the species that may be taken by harassment from the most recent U.S. Gulf of Mexico Stock Assessment Reports and Protected Species Habitat Modeling in the EGTTR were provided earlier in this document. From the most conservative estimates of both marine mammal densities in the action area and the size of the harassment thresholds, the maximum calculated number of individual Atlantic bottlenose dolphins that could potentially be harassed annually and over the five-year rule is 6 (summer) and 4 (winter) (10 total annually), which numbers amount to 0.05 percent (summer) and less than 0.01 percent (winter) of the total estimated population size.

Based on the analysis contained herein, of the likely effects of the specified activity on marine mammals and their habitat, and taking into

consideration the implementation of the mitigation and monitoring measures, NMFS has determined that NEODS operations by the U.S. Air Force will result in the incidental take of marine mammals, by Level B harassment only, and that the total taking from the NEODS training operations over the five-year period covered by the regulations would have a negligible impact on the affected species or stocks of marine mammals.

Impact on Availability of Affected Species for Taking for Subsistence Uses

Section 101(a)(5)(A) of the MMPA also requires NMFS to determine that the total of such taking authorized will not have an unmitigable adverse effect on the availability of marine mammal species or stocks for taking for subsistence uses. There is no subsistence hunting for marine mammals in the waters off of the coast of Florida that implicates section 101(a)(5)(A) of the MMPA.

Endangered Species Act (ESA)

For the reasons already described in this *preamble,* NMFS has determined that the described NEODS training operations and the accompanying LOA are not likely to affect marine mammal species managed under NMFS jurisdiction and protected by the ESA. The U.S. Air Force requested an informal section 7 consultation with NMFS SERO on May 9, 2010 and NMFS SERO concurred that the action may affect, but is not likely to adversely affect, ESA-listed species or designated critical habitat in a letter to the U.S. Air Force dated July 28, 2010.

National Environmental Policy Act (NEPA)

NMFS has conducted the necessary NEPA analysis and has prepared an ''Environmental Assessment on the Promulgation of Regulations and the Issuance of a Letter of Authorization to Take Marine Mammals, by Harassment, Incidental to Naval Explosive Ordnance Disposal School Training Operations at Eglin Air Force Base, Florida,'' which analyzes the project's purpose and need, alternatives, affected environment, and environmental effects for the action prior to making a determination on the final rule. Based on the analysis in the EA and the underlying information in the record, including the application, proposed rule, public comments and informal section 7 consultation, NMFS has prepared and issued a Finding of No Significant Impact determining that preparation of an Environmental Impact Statement is not required.

Determinations

Based on Eglin AFB's application, as well as the analysis contained herein, NMFS has determined that the impact of the described NEODS training operations will result, at most, in a temporary modification in behavior (Level B harassment) of Atlantic bottlenose dolphins, which are expected to temporarily vacate the action area to avoid NEODS training activities. The activities may also result in minor visual and acoustic disturbances from detonations. The effect of the NEODS training operations is expected to be limited to non-TTS behavioral disturbance and short-term and localized TTS-related behavioral changes.

Due to the infrequency, short time-frame, and localized nature of these activities, NMFS only expects and has thus authorized the incidental take of up to 50 Atlantic bottlenose dolphins. In addition, no take by injury, serious injury, or death is anticipated, and take by Level B harassment will be at the lowest level practicable due to incorporation of the monitoring and mitigation measures mentioned previously in this document. No injury (Level A harassment), serious injury, or mortality is expected or authorized for marine mammals, and take by harassment will be at the lowest level practicable due to incorporation of the monitoring and mitigation measures mentioned previously in this document. Further, NMFS has determined that the anticipated takes incidental to this activity are expected to result in a negligible impact on the affected species or stocks of marine mammals. The provision requiring that the activity not have an unmitigable adverse impact on the availability of the affected species or stock for subsistence uses does not apply to this action as there are no subsistence users within the specified geographic area of the project.

Classification

For purposes of Executive Order 12866, the Office of Management and Budget has determined that this rule stage is not significant.

Pursuant to section 605(b) of the Regulatory Flexibility Act, the Chief Counsel for Regulation of the Department of Commerce has certified to the Chief of Counsel for Advocacy of the Small Business Administration that this final rule would not have a significant economic impact on a substantial number of small entities. The factual basis for the certification was published in the proposed rule and is not repeated here. No comments were received regarding this certification. Accordingly, no regulatory flexibility analysis is required, and none has been prepared.

Authorization

As a result of these determinations, NMFS is issuing five-year regulations establishing a framework for the issuance of LOAs to Eglin AFB for the take of Atlantic bottlenose dolphins by Level B harassment incidental to NEODS training operations, provided the previously mentioned mitigation, monitoring, and reporting requirements are incorporated.

Changes From the Proposed Rule

In addition to minor edits to the rule for clarification, NMFS has made the following changes to the rule:

- Revised dates;
- Revised safety zones based on the weight of the charge;
- Revised analysis of takes based on the Level A harassment (injury) threshold of 13 psi-msec and the Level B harassment (non-TTS) threshold of 177 dB re 1 μPa^2-sec;
- Revised monitoring and mitigation measures to increase the probability of detecting all marine mammals within or entering the identified safety zones under various Beaufort sea state and weather conditions;
- Revised monitoring and mitigation measures to reduce the potential for lethal take of bottlenose dolphins, as occurred in similar explosive training operations at the U.S. Navy's Silver Strand Training Complex near San Diego, California; and
- Require suspension of the NEODS training operations if a marine mammal is seriously injured or killed and the injury or death could be associated with the Eglin AFB activities and, if supplementary measures are unlikely to reduce the risk of serious injury or death to a very low level, require the U.S. Air Force to suspend its activities until an authorization for such taking has been obtained.

List of Subjects in 50 CFR Part 217

Exports, Fish, Imports, Indians, Labeling, Marine mammals, Penalties, Reporting and recordkeeping requirements, Seafood, Transportation.

Dated: March 14, 2012.

Alan D. Risenhoover,

Acting Deputy Assistant Administrator for Regulatory Programs, National Marine Fisheries Service.

For reasons set forth in the preamble, 50 CFR part 217 is amended as follows:

PART 217—REGULATIONS GOVERNING THE TAKE OF MARINE MAMMALS INCIDENTAL TO SPECIFIED ACTIVITIES

■ 1. The authority citation for part 217 continues to read as follows:

Authority: 16 U.S.C. 1361 *et seq.*

■ 2. Subpart I is added to part 217 to read as follows:

Subpart I—Taking of Marine Mammals Incidental to Naval Explosive Ordnance Disposal School Training Operations

Sec.

Subpart I—Taking of Marine Mammals Incidental to Naval Explosive Ordnance Disposal School (NEODS) Training Operations

§ 217.80 Specified activity and specified geographical region.

(a) Regulations in this subpart apply only to the incidental taking of those marine mammals specified in paragraph (b) of this section by the United States Air Force, Headquarters 96th Air Base Wing, Eglin Air Force Base, and those persons who engage in activities described in paragraphs (a)(1) through (7) of this section and the area set forth in paragraph (b) of this section.

(1) NEODS missions involving underwater detonations of small, live explosive charges adjacent to inert mines in order to disable the mine function,

(2) Live training events occurring eight times annually, averaging one event occurring every 6 to 7 weeks,

(3) Four of the training events involving 5-lb charges, and four events involving 10-lb charges,

(4) Up to 20 5-lb detonations and twenty 10-lb detonations annually, for a total of 40 detonations,

(5) The five charges occurring for each training event shall be detonated individually with a maximum separation time of 20 minutes between each detonation,

(6) Mine shapes and debris shall be recovered and removed from the Gulf of Mexico waters when training is completed, and

(7) Each training team has two days to complete their entire evolution (i.e., detonation of five charges). If operations cannot be completed on the first live demolition day, the second live demolition day shall be utilized to complete the evolution.

(b) The incidental take of marine mammals at Eglin Air Force Base, within the Eglin Military Complex, including three sites in the Eglin Gulf Test and Training Range at property off Santa Rosa Island, Florida, in the northern Gulf of Mexico, under the activity identified in paragraph (a) of this section, is limited to the following species: Atlantic bottlenose dolphins (*Tursiops truncatus*).

(1) The latitude/longitude of corners of W–151 in the Eglin Gulf Test and Training Range are:

(i) 30.24006° North, −86.808838° West

(ii) 29.539011° North, −84.995536° West

(iii) 28.03949° North, −85.000147° West

(iv) 28.027598° North, −85.199395° West

(v) 28.505304° North, −86.799043° West

(2) The latitude/longitude of corners of W–151A in the Eglin Gulf Test and Training Range are:

(i) 30.24006° North, −86.808838° West

(ii) 30.07499° North, −85.999327° West

(iii) 29.179968° North, −85.996341° West

(iv) 29.384439° North, −86.802579° West

§ 217.81 Effective dates.

Regulations in this subpart are effective from April 23, 2012, through April 24, 2017.

§ 217.82 Permissible methods of taking.

(a) Under Letters of Authorization issued pursuant to § 216.106 of this chapter and § 217.87, the U.S. Department of the Air Force, Headquarters 96th Air Base Wing, Eglin Air Force Base (U.S. Air Force), its contractors, and clients, may incidentally, but not intentionally, take marine mammals by Level B harassment, within the area described in § 217.80, provided the activity is in compliance with all terms, conditions, and requirements of these regulations and the appropriate Letter of Authorization.

(b) The incidental taking of marine mammals is authorized for the species listed in § 217.80(b) and is limited to Level B harassment.

(c) The incidental taking of an average of 10 individuals annually and 50 individuals during the 5-year rule, for Atlantic bottlenose dolphins.

(d) The U.S. Air Force shall suspend NEODS training operations until it obtains additional authorization for the take of marine mammals if:

(1) A marine mammal is injured, seriously injured, or killed during training operations;

(2) The injury, serious injury, or death could be associated with the activities; and

(3) After coordination and concurrence with NMFS, the U.S. Air Force determines that supplementary measures are unlikely to reduce the risk of injury, serious injury or death to a very low level, require the U.S. Air Force to suspend its activities until an authorization for such taking has been obtained.

§ 217.83 Prohibitions.

Notwithstanding takings contemplated in § 217.80 and authorized by a Letter of Authorization issued under §§ 216.106 of this chapter and 217.87, no person in connection with the activities described in § 217.80 may:

(a) Take any marine mammal not specified in § 217.80(b);

(b) Take any marine mammal specified in § 217.80(b) other than by incidental take as specified in § 217.82(a) through (d);

(c) Take a marine mammal specified in § 217.80(b) if such taking results in more than a negligible impact on the species or stocks of such marine mammal; or

(d) Violate, or fail to comply with, the terms, conditions, and requirements of this subpart or a Letter of Authorization issued under §§ 216.106 of this chapter and 217.87.

§ 217.84 Mitigation.

(a) The activity identified in § 217.80(a) must be conducted in a manner that minimizes, to the greatest extent practicable, adverse impacts on marine mammals and their habitats. When conducting operations identified in § 217.80(a), the mitigation measures contained in the Letter of Authorization issued under §§ 216.106 of this chapter and 217.87 must be implemented. These mitigation measures include (but are not limited to):

(1) Underwater detonations using timed delay devices will only be conducted during daylight hours. The time of detonation shall be limited to an hour after sunrise and an hour before sunset.

(2) NEODS missions shall be postponed if:

(i) The Beaufort sea state is greater than scale number three. Such a delay would maximize detection of marine mammals.

(ii) Large concentrations of fish, jellyfish, and/or large *Sargassum* rafts are observed within the mitigation-monitoring zone. The delay would continue until the fish, jellyfish, and/or *Sargassum* rafts that cause the postponement are confirmed to be outside the mitigation-monitoring zone.

(3) Time delays longer than 10 minutes will not be used. Initiation of the timer device will not start until the mitigation-monitoring zone is clear of marine mammals for 30 minutes.

(4) A calculated mitigation-monitoring zone will be established around each underwater detonation location based on charge weight and length of time-delay used. When conducting surveys within the mitigation-monitoring zone radius (but always outside the detonation plume radius/human safety zone) and travel in a circular pattern around the detonation point, surveying the inner (toward the detonation site) and outer (away from the detonation site) areas. For a survey radius of 914.4 meters, the boat will be positioned at 457.2 meters from the detonation point. Similarly, for a survey radius of 1,280.2 meters, boats will be positioned at 640.1 meter distance.

(5) For a survey radius of 914.4 meters, two boats are required. For a radius of 1,280.2 meters, either three boats or two boats/one helicopter are required.

(6) When using two boats, each boat will be positioned on opposite sides of the detonation location, separated by 180 degrees. When using three boats, each boat will be separated by 120 degrees (equidistant from each other).

(7) Two observers in each boat will conduct continuous visual surveys of the mitigation-monitoring zone for the entire duration of the training event, including at least 30 minutes prior to detonation. Observers will search the mitigation-monitoring zone for the presence of marine mammals, and other marine species such as sea turtles, diving birds, large concentrations of fish or jellyfish, and large *Sargassum* mats. The presence of diving birds, fish, jellyfish, and *Sargassum* may indicate an increased likelihood of dolphin presence.

(8) To the extent practicable, boats will maintain 18.5 kilometer per hour search speed. This search speed is expected to ensure adequate coverage of the buffer zone. While weather conditions and sea state may require slower speeds in some instances, 18.5 kilometers per hour is considered a prudent, safe, and executable speed that will allow adequate surveillance. For a 914.4 meter survey zone, a boat traveling at 18.5 kilometers per hour and 457.2 meters from the detonation point would circle the point approximately 3.2 times during a 30 minute survey period. By using two boats, approximately 6.4 circles would be completed in total. Similarly, for a 1,280.2 meter radius, each boat would circle the detonation point approximately 2.3 times within 30 minutes, and use of three boats would result in 6.9 total circles.

(9) If available, a U.S. Navy helicopter can be used in lieu of one of the survey boats, so long as safety of flight is not jeopardized. U.S. Navy helicopter pilots are trained to conduct searches for relatively small objects in the water, such as a missing person. A helicopter search pattern is dictated by standard U.S. Navy protocols and accounts for multiple variables, such as size and shape of the search area, size of the object, and environmental conditions, among others.

(10) The mitigation-monitoring zone will be surveyed for 30 minutes prior to detonation and continue for 30 minutes after detonation (concentrated on the area down current of the test site), in order to monitor for marine mammals and other protected species. It is the U.S. Air Force's (on behalf of the U.S. Navy) intent to conduct five successive detonations with a maximum time of 20 minutes between detonations, although a variety of factors can cause a delay of longer than 20 minutes between detonations, although a variety of factors can cause a delay of longer than 20 minutes, including a delay until the following day. Monitoring would continue during the 20 minutes time between detonations, and would serve as both post-detonation monitoring as well as pre-mission monitoring for the next detonation. If the time between detonations is delayed beyond 20 minutes, post-mission monitoring will be conducted for 30 minutes. At the conclusion of the final detonation, post-monitoring will be conducted for 30 minutes.

(11) Other personnel besides designated observers shall also maintain situational awareness of the presence of marine mammals within the mitigation-monitoring zone to the extent practicable given dive safety considerations.

(12) Divers placing the charges on mines will observe the immediate underwater area around the detonation site for marine mammals and other marine species such as diving birds, sea turtles, and Gulf sturgeon, and report sightings to surface observers.

(13) If a marine mammal is sighted within an established mitigation-monitoring zone or moving towards it, underwater detonation events will be postponed or suspended until the marine mammal that caused the postponement/suspension of training operations has voluntarily left the area and the area is clear of marine mammals for at least 30 minutes.

(14) If a marine mammal is detected within or about to enter an established mitigation-monitoring zone and subsequently cannot be reacquired, the mission will be postponed or suspended until the last verified location is outside the mitigation-monitoring zone, the animals is moving away from the area, and the area is clear of marine mammals for at least 30 minutes.

(15) Any marine mammal observed after an underwater detonation either injured or exhibiting signs of distress will be reported to Eglin Air Force Base. Eglin Air Force Base will coordinate with other members of marine mammal stranding networks, as appropriate, and report these events to NMFS or U.S. Fish and Wildlife Service. The report will contain date and time of sighting, location, species description, and indications of the animal's status.

(16) Training operations shall be suspended if the conditions of § 217.83(a)–(d) regarding the injury, serious injury, or death of a marine mammal during NEODS training operations are met.

(17) Additional mitigation measures as contained in a Letter of Authorization.

(b) [Reserved]

§ 217.85 Requirements for monitoring and reporting.

(a) Holders of Letters of Authorization pursuant to § 216.106 of this chapter and § 217.87 for activities described in § 216.80(a) are required to cooperate with NMFS, and any other Federal, state, or local agency with authority to monitor the impacts of the activity on marine mammals. Unless specified otherwise in the Letter of Authorization, the Holder of the Letter of Authorization must notify the Administrator, Southeast Region, NMFS, by letter or telephone, prior to activities possibly involving the taking of marine mammals. If the authorized activity identified in § 217.80(a) is thought to have resulted in the mortality or injury of any marine mammals or in any take of marine mammals not identified in § 217.80(b), then the Holder of the Letter of Authorization must, in addition to complying with the requirements of

§ 217.82(a)–(d), notify the Director, Office of Protected Resources, NMFS, or designee, by telephone (301–427–8400), within 24 hours of the discovery of the injured or dead animal.

(b) Holders of Letters of Authorization must designate trained, qualified, on-site individuals approved in advance by NMFS, as specified in the Letter of Authorization, to perform the following monitoring requirements:

(1) For NEODS testing, areas to be used in missions shall be visually monitored for marine mammal presence from a surface support vessel prior to detonation of mine neutralization charges. Monitoring shall be conducted 30 minutes before missions to clear the mitigation-monitoring zone. Post-mission monitoring shall also be conducted for 30 minutes after the final detonation (concentrated on the area down current of the test site). If marine mammals are inside the mitigation-monitoring zone, detonations shall be postponed until they have left the area. The observer on the vessel must be equipped with the proper optical equipment and lines of communication in order to recommend the decision to move forward with the mission.

(2) Monitoring shall occur pre-mission (for 30 minutes), throughout the mission, and post-mission (for 30 minutes). Post-mission monitoring shall concentrate on the area down current of the test site.

(3) Survey clearance procedures shall be conducted using best operational methods possible. After the mitigation-monitoring zone is cleared, all dolphins and protected species indicators (e.g., *Sargassum* rafts) shall be avoided to the maximum extent possible.

(4) Clearance procedures shall be re-conducted if dolphins or protected species indicators (e.g., *Sargassum* rafts) are encountered.

(5) After conducting post-mission monitoring, NEODS training operations data as required by Eglin Air Force Base's Natural Resources Section, 96 CEG/CEVSN shall be reported. Post-mission monitoring shall commence immediately following each detonation and shall be concentrated on the area down current of the test site. If any injured or dead marine mammals are observed, that information will be reported and coordinated with marine animals stranding networks.

(6) An annual summary (coordinated through 96 CEG/CEVSN) of mission observations shall be submitted to: NMFS, Southeast Regional Office, Protected Resources Division, 9721 Executive Center Drive North, St. Petersburg, Florida 33702; and NMFS, Office of Protected Resources, 1315 East West Highway, Silver Spring, Maryland 20910.

(c) Holders of Letters of Authorization must conduct additional monitoring as required under an annual Letter of Authorization.

(d) Holders of Letters of Authorization must submit an annual report summarizing the specified activity as well as monitoring and mitigation data to the Southeast Regional Administrator and Director of the Office of Protected Resources, NMFS, within 90 days after the conclusion of the NEODS training operations. This report must contain the following information:

(1) Date(s), time(s), and location(s) of explosive activities,

(2) Design of the monitoring program,

(3) Results of the monitoring program including, but not necessarily limited to:

(i) Species counts,

(ii) Numbers of observed disturbances,

(iii) Descriptions of the disturbance behaviors before, during, and after explosive activities,

(iv) Bearing and distances,

(v) Observations of unusual behaviors, numbers, or distributions of marine mammals in the activity area shall be reported to NMFS and the U.S. Fish and Wildlife Service so that any potential follow-up observations can be conducted by the appropriate personnel. In addition, observations of tag-bearing marine mammals, sea turtles, and fish carcasses as well as any rare or unusual species of marine mammals and fish shall be reported to NMFS and U.S. Fish and Wildlife Service.

(e) An annual report (referred to in § 217.85(d)) must be submitted at the time of notification of the renewal of the Letter of Authorization.

(f) A draft comprehensive final report must be submitted at least 180 days prior to expiration of these regulations. This comprehensive technical report shall provide full documentation of methods, results, and interpretation of all monitoring during the first four and a half years of the Letter of Authorization. A revised final comprehensive technical report, including all monitoring results during the entire period of the Letters of Authorization, must be submitted 90 days after the end of the period of effectiveness of the regulations. This report shall summarize the activities undertaken and the results reported in all previous reports.

(g)(1) In the unanticipated event that the specified activity clearly causes the take of a marine mammal in a manner prohibited by a Letter of Authorization, such as an injury, serious injury, or mortality, Eglin Air Force Base will immediately cease the specified activities and immediately report the incident to the Chief of the Permits and Conservation Division, Office of Protected Resources, NMFS at 301–427–8401 and/or by email to *Jolie.Harrison@noaa.gov* and *Howard.Goldstein@noaa.gov,* and the NMFS Southeast Regional Marine Mammal Stranding Network at 877–433–8299 (*Blair.Mase@noaa.gov* and *Erin.Fougeres@noaa.gov*) (Florida Marine Mammal Stranding Hotline at 888–404–3922). The report must include the following information:

(i) Time, date, and location (latitude/longitude) of the incident;

(ii) Description of the incident;

(iii) Status of all noise-generating source use in the 24 hours preceding the incident;

(iv) Water depth;

(v) Environmental conditions (e.g., wind speed and direction, Beaufort sea state, cloud cover, and visibility);

(vi) Description of all marine mammal observations in the 24 hours preceding the incident;

(vii) Species identification or description of the animal(s) involved;

(viii) Fate of the animal(s); and

(ix) Photographs or video footage of the animal(s) (if equipment is available).

Activities shall not resume until NMFS is able to review the circumstances of the prohibited take. NMFS shall work with Eglin Air Force Base to determine what is necessary to minimize the likelihood of further prohibited take and ensure MMPA compliance. Eglin Air Force Base may not resume their activities until notified by NMFS via letter or email, or telephone.

(2) In the event that Eglin Air Force Base discovers an injured or dead marine mammal, and the lead observer determines that the cause of injury or death is unknown and the death is relatively recent (i.e., less than a moderate state of decomposition as described in the next paragraph), Eglin Air Force Base will immediately report the incident to the Chief of the Permits and Conservation Division, Office of Protected Resources, NMFS, at 301–427–8401, and/or by email to *Jolie.Harrison@noaa.gov* and *Howard.Goldstein@noaa.gov* and the NMFS Southeast Region Marine Mammal Stranding Network (877–433–8299) and/or by email to the Southeast Regional Stranding Coordinator (*Blair.Mase@noaa.gov*) and Southeast Regional Stranding Program Administrator (*Erin.Fougeres@noaa.gov*). The report must include the same information

identified in the paragraph above. Activities may continue while NMFS reviews the circumstances of the incident, NMFS will work with Eglin Air Force Base to determine whether modifications in the activities are appropriate.

(3) In the event that Eglin Air Force Base discovers an injured or dead marine mammal, and the lead observer determines that the injury or death is not associated with or related to the activities authorized in the Letter of Authorization (e.g., previously wounded animal, carcass with moderate to advanced decomposition, or scavenger damage), Eglin Air Force Base will report the incident to the Chief of the Permits and Conservation Division, Office of Protected Resources, NMFS, at 301–427–8401, and/or by email to *Jolie.Harrison@noaa.gov* and *Howard.Goldstein@noaa.gov,* and the NMFS Southeast Regional Marine Mammal Stranding Network (877–433–8299), and/or by email to the Southeast Regional Stranding Coordinator (*Blair.Mase@noaa.gov*) and Southeast Regional Stranding Program Administrator (*Erin.Fougeres@noaa.gov*), within 24 hours of discovery. Eglin Air Force Base will provide photographs or video footage (if available) or other documentation of the stranded animals sighting to NMFS and the Marine Mammal Stranding Network.

§ 217.86 Applications for Letters of Authorization.

(a) To incidentally take marine mammals pursuant to these regulations, the U.S. citizen (as defined by § 216.103) conducting the activity identified in § 217.80(a) must apply for and obtain either an initial Letter of Authorization in accordance with § 217.87 or a renewal under § 217.88.

(b) The application must be submitted to NMFS at least 30 days before the activity is scheduled to begin.

(c) Application for a Letter of Authorization and for renewals of Letters of Authorization must include the following:

(1) Name of the U.S. citizen requesting the authorization;

(2) A description of the activity, the dates of the activity, and the specific location of the activity; and

(3) Plans to monitor the behavior and effects of the activity on marine mammals.

(d) A copy of the Letter of Authorization must be in the possession of the persons conducting activities that may involve incidental takings of marine mammals.

(e) [Reserved]

§ 217.87 Letters of Authorization.

(a) A Letter of Authorization, unless suspended or revoked, shall be valid for a period of time not to exceed the period of validity of this subpart.

(b) The Letter of Authorization shall set forth:

(1) Permissible methods of incidental taking;

(2) Means of effecting the least practicable adverse impact on the species, its habitat, and on the availability of the species for subsistence uses (i.e., mitigation); and

(3) Requirements for mitigation, monitoring, and reporting.

(c) Issuance and renewal of the Letter of Authorization shall be based on a determination that the total number of marine mammals taken by the activity as a whole shall have no more than a negligible impact on the affected species or stock of marine mammal(s).

§ 217.88 Renewal of Letters of Authorization and adaptive management.

(a) A Letter of Authorization issued under § 216.106 of this chapter and § 217.87 for the activity identified in § 217.80(a) shall be renewed upon a request by the applicant or determination by NMFS and the applicant that modifications are appropriate pursuant to the adaptive management component of these regulations, provided that:

(1) NMFS is notified that the activity described in the application submitted under § 217.86 shall be undertaken and there shall not be a substantial modification to the described work, mitigation or monitoring undertaken during the upcoming 12 months;

(2) NMFS has received, reviewed, and accepted the monitoring reports required under § 217.85(d) and (e) and the Letter of Authorization issued under § 217.87;

(3) NMFS determines that the mitigation, monitoring, and reporting measures required under §§ 217.84 and 217.85 and the Letter of Authorization issued under §§ 216.106 and 217.87 of this chapter, were undertaken and shall be undertaken during the upcoming annual period of validity of a renewed Letter of Authorization; and

(4) NMFS makes the determination required by § 217.87(c).

(b) If either a request for a renewal of a Letter of Authorization issued under § 216.106 of this chapter and § 217.88, or a determination by NMFS and the applicant that modifications are appropriate pursuant to the adaptive management component of these regulations indicates that a substantial modification, as determined by NMFS, to the described work, mitigation or monitoring undertaken during the upcoming season shall occur, NMFS shall publish a proposed modification to the Letter of Authorization in the **Federal Register** and provide the public a period of 30 days for review and comment. Review and comment on renewals or modifications of Letters of Authorization are restricted to:

(1) New cited information and data indicating that the determinations made in this document are in need of reconsideration, and

(2) Proposed substantive changes to the mitigation and monitoring requirements contained in these regulations or in the current Letter of Authorization.

(c) A notice of issuance or denial of a renewal of a Letter of Authorization shall be published in the **Federal Register**.

(d) Adaptive Management—NMFS may modify or augment the existing mitigation or monitoring measures (after consulting with the U.S. Air Force regarding the practicability of the modifications) if doing so creates a reasonable likelihood of more effectively accomplishing the goals of mitigation and monitoring set forth in the preamble of these regulations. Below are some of the possible sources of new data that could contribute to the decision to modify the mitigation or monitoring measures:

(1) Results from the U.S. Air Force's monitoring from the previous year;

(2) Results from marine mammal and sound research; or

(3) Any information which reveals that marine mammals may have been taken in a manner, extent or number not authorized by these regulations or subsequent Letters of Authorization.

§ 217.89 Modifications of Letters of Authorization.

(a) Except as provided in paragraph (b) of this section, no substantive modification (including withdrawal or suspension) to the Letter of Authorization by NMFS issued pursuant to § 216.106 of this chapter and § 217.87 of this chapter and subject to the provisions of this subpart shall be made until after notification and an opportunity for public comment has been provided. For purposes of this paragraph, a renewal of a Letter of Authorization under § 217.88, without modification (except for the period of validity), is not considered a substantive modification.

(b) If the Assistant Administrator determines that an emergency exists that poses a significant risk to the well-being of the species or stocks of marine mammals specified in § 217.80(b), a

Letter of Authorization issued pursuant to § 216.106 of this chapter and § 217.87 of this chapter may be substantively modified without prior notification and an opportunity for public comment. Notification shall be published in the **Federal Register** within 30 days subsequent to the action.

[FR Doc. 2012–6824 Filed 3–21–12; 8:45 am]

BILLING CODE 3510–22–P

DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

50 CFR Part 300

[Docket No. 120106033–2163–02]

RIN 0648–BB68

Pacific Halibut Fisheries; Catch Sharing Plan

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

ACTION: Final rule.

SUMMARY: The Assistant Administrator (AA) for Fisheries, National Oceanic and Atmospheric Administration (NOAA), on behalf of the International Pacific Halibut Commission (IPHC), publishes annual management measures promulgated as regulations by the IPHC and approved by the Secretary of State governing the Pacific halibut fishery. The AA also announces modifications to the Catch Sharing Plan (CSP) for Area 2A (waters off the U.S. West Coast) and implementing regulations for 2012, announces approval of the Area 2A CSP, and provides notice of the guideline harvest levels (GHLs) for Areas 2C and 3A. These actions are intended to enhance the conservation of Pacific halibut and further the goals and objectives of the Pacific Fishery Management Council (PFMC) and the North Pacific Fishery Management Council (NPFMC) (Councils).

DATES: This rule is effective April 23, 2012. The IPHC's 2012 annual management measures are effective March 22, 2012, except for the measures in section 26, which are effective April 23, 2012. The 2012 management measures are effective until superseded.

ADDRESSES: Additional requests for information regarding this action may be obtained by contacting: the International Pacific Halibut Commission, 2320 W. Commodore Way Suite 300, Seattle, WA 98199–1287; or Sustainable Fisheries Division, NMFS Alaska Region, P.O. Box 21668, Juneau, AK 99802, Attn: Ellen Sebastian, Records Officer; or Sustainable Fisheries Division, NMFS Northwest Region, 7600 Sand Point Way, NE., Seattle, WA 98115. This final rule also is accessible via the Internet at the Federal eRulemaking portal at *http://www.regulations.gov.*

FOR FURTHER INFORMATION CONTACT: For waters off Alaska, Glenn Merrill, 907–586–7228, email at *glenn.merrill@noaa.gov;* or Rachel Baker, 907–586–7228, email at *rachel.baker@noaa.gov;* or, for waters off the U.S. West Coast, Sarah Williams, 206–526–4646, email at *sarah.williams@noaa.gov.*

SUPPLEMENTARY INFORMATION:

Background

The IPHC has promulgated regulations governing the Pacific halibut fishery in 2012 under the Convention between Canada and the United States for the Preservation of the Halibut Fishery of the North Pacific Ocean and Bering Sea (Convention), signed at Ottawa, Ontario, on March 2, 1953, as amended by a Protocol Amending the Convention (signed at Washington, DC, on March 29, 1979).

As provided by the Northern Pacific Halibut Act of 1982 (Halibut Act) at 16 U.S.C. 773b, the Secretary of State, with the concurrence of the Secretary of Commerce (Secretary), may accept or reject, on behalf of the United States, recommendations made by the IPHC in accordance with the Convention (Halibut Act, Sections 773–773k.). On March 5, 2012, the Secretary of State of the United States, with the concurrence of the Secretary, accepted the 2012 IPHC regulations as provided by the Northern Pacific Halibut Act of 1982 (Halibut Act) at 16 U.S.C. 773–773k.

The Halibut Act provides the Secretary with the authority and general responsibility to carry out the requirements of the Convention and the Halibut Act. The Regional Fishery Management Councils may develop and the Secretary may implement regulations governing harvesting privileges among U.S. fishermen in U.S. waters that are in addition to, and not in conflict with approved IPHC regulations. The NPFMC has exercised this authority most notably in developing a suite of halibut management programs that correspond to the three fisheries that harvest halibut in Alaska: the subsistence, sport, and commercial fisheries.

Subsistence and sport halibut fishery regulations are codified at 50 CFR part 300. Commercial halibut fisheries in Alaska operate within the Individual Fishing Quota (IFQ) Program and Community Development Quota (CDQ) Program (50 CFR part 679), and through area-specific catch sharing plans. Regulations for a commercial and sport fishery Halibut CSP in Areas 2C and 3A are being developed pursuant to the NPFMC authority under the Halibut Act. NMFS published a proposed rule for the Area 2C and Area 3A CSP on July 16, 2011, and accepted comments on the proposed rule and on the Environmental Assessment (EA), Regulatory Impact Review, and Initial Regulatory Flexibility Analysis (IRFA) prepared for the CSP through September 21, 2011. In October 2011, NMFS informed the NPFMC that public comments received on the proposed CSP raised issues that may require additional input from the NPFMC before NMFS can proceed to a final rule. NMFS is continuing to work with the NPFMC to address these issues of concern and is seeking NPFMC advice on how to proceed with agency review of the Area 2C and Area 3A CSP.

The PFMC also exercises authority in a CSP allocating halibut among groups of fishermen in Area 2A, off the coasts of Washington, Oregon, and California. The CSP allocates the Area 2A catch limit among treaty Indian and non-Indian harvesters, and non-Indian commercial and sport harvesters. The treaty Indian group includes tribal commercial, and tribal ceremonial and subsistence fisheries. The Secretary implemented the Area 2A CSP recommended by the PFMC in 1995. Each year between 1995 and the present, the PFMC has adopted minor revisions to the plan to account for needs of the fisheries. These revisions are implemented in regulations for Area 2A through annual rule making and annual IPHC review and recommendation of management measures for Secretarial review. The Area 2A regulations are part of the IPHC annual management measures and are superseded each year by new implementing regulations.

The NPFMC implemented a CSP among commercial IFQ and CDQ halibut fisheries in IPHC Areas 4C, 4D and 4E (Area 4) through rulemaking, and the Secretary approved the plan on March 20, 1996 (61 FR 11337). The Area 4 CSP regulations were codified (50 CFR 300.65) and amended through rule making on March 17, 1998 (63 FR 13000). New annual regulations pertaining to the Area 4 CSP also may be implemented through IPHC review and recommendation for Secretarial review.

Publication of this final rule announces that the U.S. Secretary of