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DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

50 CFR Part 218

[Docket No. 140909771-4771-01]

RIN 0648-BE51

Takes of Marine Mammals Incidental to Specified Activities; U.S. Navy Joint Logistics Over-the-Shore Training Activities in Virginia and North Carolina

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

ACTION: Notice of proposed rule; request for comments and information.

SUMMARY: NMFS has received a request from the U.S. Navy (Navy) for authorization to take marine mammals incidental to the Joint Logistics Over-the-Shore (JLOTS) training activities conducted in Virginia and North Carolina, from June 2015 through June 2020. Pursuant to the Marine Mammal Protection Act (MMPA), NMFS is requesting comments on its proposal to issue regulations and a five-year Letter of Authorization (LOA) to the Navy to incidentally harass marine mammals.

DATES: Comments and information must be received no later than [insert date 30 days after date of filing for public inspection with the OFFICE OF THE FEDERAL REGISTER].

ADDRESSES: You may submit comments, identified by NOAA-NMFS-2015-0004, by either of the following methods:

- Electronic submissions: submit all electronic public comments via the Federal eRulemaking Portal http://www.regulations.gov

- Hand delivery of mailing of paper, disk, or CD-ROM comments should be addressed to Jolie Harrison, Chief, Permits and Conservation Division, Office of Protected Resources, National Marine Fisheries Service, 1315 East-West Highway, Silver Spring, MD 20910.

Instructions: All comments received are a part of the public record and will generally be posted to http://www.regulations.gov without change. All Personal Identifying Information (for example, name, address, etc.) voluntarily submitted by the commenter may be publicly accessible. Do not submit Confidential Business Information or otherwise sensitive or protected information.

NMFS will accept anonymous comments (enter N/A in the required fields if you wish to remain anonymous). Attachments to electronic comments will be accepted in Microsoft Work, Excel, WordPerfect, or Adobe PDF file formats only.

FOR FURTHER INFORMATION CONTACT: Shane Guan, Office of Protected Resources, NMFS, (301) 427-8401.

SUPPLEMENTARY INFORMATION:

Availability

A copy of the Navy's application may be obtained by visiting the internet at: http://www.nmfs.noaa.gov/pr/permits/incidental.htm. The Navy's Draft Environmental Assessment for Joint Logistics Over-the-Shore Training (EA) will be made available to the public on January 6, 2015, during the comment period for this proposed rule. Documents cited in this notice may also be viewed, by appointment, during regular business hours, at the aforementioned address.

Background

Sections 101(a)(5)(A) and (D) of the MMPA (16 U.S.C. 1361 et seq.) direct the Secretary of Commerce to allow, upon request, the incidental, but not intentional, taking of small numbers 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 either regulations are issued or, if the taking is limited to harassment, a notice of a proposed authorization is provided to the public for review.

Authorization for incidental takings shall be granted if NMFS finds that the taking 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. NMFS has defined "negligible impact" in 50 CFR 216.103 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)(Public Law 108-136) removed the "small numbers" and "specified geographic region" limitations indicated above and amended the definition of "harassment" as applied to "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 sheltering, to a point where such behavioral patterns are abandoned or significantly altered [Level B Harassment]."

Summary of Request

On August 20, 2014, NMFS received an application from the Navy requesting a letter of authorization (LOA) for the take of bottlenose and Atlantic spotted dolphins incidental to the Navy's JLOTS training activities in nearshore waters at the Joint Expeditionary Base (JEB) Little Creek-Fort Story in Virginia and at Camp Lejeune in North Carolina. The Navy is requesting regulations that would establish a process for authorizing take, via a 5-year LOA, of marine mammals incidental to training activities. These activities are classified as military readiness activities. The Navy states that these activities may result in take of marine mammals from noise from temporary pier construction associated with the JLOTS training activities. The Navy requests to take bottlenose and Atlantic spotted dolphins by Level B harassment.

Description of the Specified Activity

JLOTS training is the movement of cargo and personnel from ships to shore in areas that do not have existing fixed port facilities. Among the several coordinated exercises of the JLOTS training, the only activity that has the potential to harass marine mammals is the construction of the Elevated Causeway System, Modular [ELCAS (M)] by introducing noise into the water.

The ELCAS (M) is a temporary pier constructed from the beach into the water past the surf zone. It provides a means of delivering containers, vehicles, and bulk cargo ashore without lighterage craft having to enter the surf zone. The ELCAS (M) consists of a series of 24- by 40-ft. (7.3- by 12.2-m) pontoon sections joined together and supported by piles driven into the sea floor.

To build the pier, piles are driven into the sand with a diesel-powered impact hammer. The piles used typically are hollow, half-inch steel uncapped piles, 24 inches (0.5 m) in diameter, and can be of various lengths (38 ft. [11.6 m], 57 ft. [17.4 m], or 76 ft. [23.2 m]) depending on

local bathymetry. The depth to which the piles are driven is between 30 and 40 ft. (9.1 to 12.2 m) and installation takes approximately 15 minutes per pile. Typically, 6 piles would be installed in a day. Two pile drivers are generally used, but not simultaneously: while one is driving a pile, the other is being re-positioned for the next pile. Construction may take up to 20 days. A pier length of 1,500 ft (457 m) is typical for training, with approximately 119 supporting piles.

Once the ELCAS (M) is constructed, offloading operations are similar to those of a conventional pier. Container-handling operations consist primarily of transferring containers from lighterage vessels (e.g., Landing Craft Utility or Landing Craft Mechanized) to the pier. Empty trucks or trailers are driven onto a turntable at the seaward end of the ELCAS (M) and are loaded with containers using the same cranes from construction. The ELCAS (M) is wide enough to accommodate two-way traffic. Rolling stock may be lifted by crane to the pier and driven to the beach as well. Operations typically involve the use of two forklifts and an average of six cargo trucks a day during the exercise. Power for the operation of the turntable and the lighting of the ELCAS (M) is provided by up to two 30-kilowatt (kW) and two 100-kW generators.

The ELCAS (M) is dismantled by removing the pontoon sections and extracting the piles with a vibratory hammer, which takes approximately 6 minutes per pile, over the course of 10 days. Typically, 12 piles are removed in a day. On the beach, the modified area is re-graded to its original elevation.

Duration and Location

The JLOTS training areas are in nearshore waters at the JEB Little Creek-Fort Story in Virginia and at Camp Lejeune in North Carolina. The primary activity area consists of nearshore waters where the ELCAS (M) training exercises would take place.

Description of Marine Mammals in the Area of the Specified Activities

There are six marine mammal species under NMFS jurisdiction with possible or known occurrence in the Navy's JLOTS training area at the JEB Little Creek-Fort Story in Virginia and at Camp Lejeune in North Carolina, as indicated in Table 1. Four marine mammal species are listed under the Endangered Species Act: North Atlantic right whale, humpback whale, sei whale, and fin whale.

Table 1. Marine mammal occurrence within the JLOTS training areas off the Atlantic coast.

Common Name	Scientific Name	Status		Stock(s)	Stock Abundance Best (CV) / Min	Density in Activity Area[2] (per km^2)	
		ESA	MMPA			JEB Little Creek - Fort Story	Camp Lejeune
Mysticetes							
fin whale	*Balaenoptera physalus*	E	strategic; depleted	Western North Atlantic	3,522 (0.27) / 2,817	0.00	
humpback whale	*Megaptera novaeangliae*	E	depleted	Gulf of Maine	823 (0) / 823	0.000034	0.00009
North Atlantic right whale	*Eubalaena glacialis*	E	strategic; depleted	Western North Atlantic	444 (0) / (444)	0.000033	
sei whale	*Balaenoptera borealis*	E	strategic; depleted	Nova Scotia	357 (0.52) / 236	0.000101	
Odontocetes							
Atlantic spotted dolphin	*Stenella frontalis*	--	--	Western North Atlantic	26,798 (0.66) / 16,151	0.0007728	0.153
bottlenose dolphin[3]	*Tursiops truncatus*	--	strategic	Northern North Carolina Estuarine System	950 (0.23) / 785	0.159	0.169871
			strategic	Southern North Carolina Estuarine System	2,454 (0.53) / 1,614		
			strategic; depleted	Western North Atlantic Southern Migratory Coastal	12,482 (0.32) / 9,591		

*E = endangered under the ESA

NMFS has reviewed the information complied by the Navy on the abundance, status, and distribution of marine mammal species in the waters of the JLOTS training areas of the North Atlantic coast, which was derived from peer reviewed literature, the Navy Marine Resource Assessments, and NMFS Stock Assessment Reports. NMFS considers this information to be the best available science with which we can conduct the analyses necessary to propose these regulations and a five-year LOA. This information may be viewed in the Navy's LOA application and the Navy's Draft EA (see Availability). Additional information is available in the NMFS Stock Assessment Reports, which may be viewed at: http://www.nmfs.noaa.gov/pr/sars/species.htm.

Fin whales, North Atlantic right whale, humpback whale, and sei whale are considered rare in the JLOTS training areas. These mysticete whales tend to be distributed in relatively deeper waters outwards to the offshore environment. Occurrences of these species in the shallow nearshore waters off JEB Little Creek-Fort Story or Camp Lejeune are expected to be rare. Due to their extremely rare occurrence within the training areas, the Navy and NMFS do not anticipate any take of fin, North Atlantic right, humpback, or sei whales. Therefore, these species are not addressed further in this proposed rule.

Bottlenose Dolphin

Along the U.S. east coast, the bottlenose dolphin stock structure is well studied. Of the management stocks identified by NMFS, three may occur in the JLOTS activity area: the Northern North Carolina Estuarine System stock, the Southern North Carolina Estuarine System stock, and the Western North Atlantic Southern Migratory Coastal stock. The bottlenose dolphin occurs in tropical to temperate waters of the Atlantic Ocean as well as inshore, nearshore, and

offshore waters of the Gulf of Mexico and U.S. east coast. They occur in most enclosed or semi-enclosed seas in habitats ranging from shallow, murky, estuarine waters to deep, clear offshore waters in oceanic regions (Jefferson et al. 2008; Wells et al. 2009). Bottlenose dolphins are also often found in bays, lagoons, channels, and river mouths and are known to occur in very deep waters of some ocean regions. Open ocean populations occur far from land; however, population density appears to be highest in nearshore areas (Scott and Chivers 1990). They are common in the lower Chesapeake Bay and in Onslow Bay (Chesapeake Bay Program 2012; McAlarney et al. 2011).

Bottlenose dolphins typically occur in groups of 2 – 15 individuals, but significantly larger groups have also been reported (Shane et al. 1986; Kerr et al. 2005). Coastal bottlenose dolphins typically exhibit smaller group sizes than the larger offshore form, as water depth appears to be a significant influence on group size (Shane et al. 1986). Shallow, confined areas typically support smaller group sizes, some degree of regional site fidelity, and limited movement patterns (Shane et al. 1986; Wells et al. 1987). Bottlenose dolphins have a varied diet, feeding on small fish, crustaceans, and squid (Wells and Scott 2002).

An Unusual Mortality Event (UME) was declared for bottlenose dolphins along the Atlantic coast in June 2013 and is ongoing to date. An increased number of strandings have occurred from New York to Florida, with 345 taking place in Virginia and 181 in North Carolina. Off JEB Little Creek-Fort Story and Camp Lejeune, 32 and 10 bottlenose dolphin strandings have occurred, respectively, since the declaration of the UME. The UME is being tentatively attributed to cetacean morbilivirus, but further research is ongoing (National Marine Fisheries Service 2014).

Atlantic Spotted Dolphin

This species is found in nearshore tropical to warm-temperate waters, predominantly over the continental shelf and upper slope. In the western Atlantic, this species is distributed from New England to Brazil and is found in the Gulf of Mexico as well as the Caribbean Sea (Perrin 2008). Atlantic spotted dolphin sightings have been concentrated in the slope waters north of Cape Hatteras, but in the shelf waters south of Cape Hatteras sightings extend into the deeper slope and offshore waters of the mid-Atlantic.

Atlantic spotted dolphins are highly gregarious, and are frequently observed in mixed-aged groups numbering up to several hundred individuals. Smaller subgroups, this species can be age and sex segregated to a small degree. Tightly bonded mother and calf pairs are typical to the age of 3 (Herzing n.d.).

The Atlantic spotted dolphin regularly occurs in the nearshore waters south of Chesapeake Bay and near the continental shelf edge and continental slope waters north of this region, usually at least 4.9 to 12.4 miles (8 to 20 km) offshore (Payne et al. 1984; Mullin and Fulling 2003; Davis et al. 1998; Perrin 2002; Perrin et al. 1994). Therefore, while it is unlikely to occur in the shallow waters where the JLOTS exercises would take place, it is more probable at Camp Lejeune than at JEB Little Creek-Fort Story. Navy density data suggest this species may be more likely to occur during summer months (U.S. Department of the Navy 2012).

Potential Effects of the Specified Activity on Marine Mammals

When considering the influence of various kinds of sound on the marine environment, it is necessary to understand that different kinds of marine life are sensitive to different frequencies of sound. Based on available behavioral data, audiograms have been derived using auditory evoked potentials, anatomical modeling, and other data. From this, Southall et al. (2007) designated "functional hearing groups" for marine mammals and estimate the lower and upper

frequencies of functional hearing of the groups. The functional groups and the associated frequencies are indicated below. It should be noted, however, that animals are less sensitive to sounds at the outer edge of their functional range and most sensitive to sounds of frequencies towards the middle of their functional hearing range:

- Low frequency cetaceans (13 species of mysticetes): functional hearing is estimated to occur between approximately 7 Hz and 30 kHz;
- Mid-frequency cetaceans (32 species of dolphins, six species of larger toothed whales, and 19 species of beaked and bottlenose whales): functional hearing is estimated to occur between approximately 150 Hz and 160 kHz;
- High frequency cetaceans (eight species of true porpoises, six species of river dolphins, Kogia, the franciscana, and four species of cephalorhynchids): functional hearing is estimated to occur between approximately 200 Hz and 180 kHz;
- Phocid pinnipeds in Water: functional hearing is estimated to occur between approximately 75 Hz and 100 kHz; and
- Otariid pinnipeds in Water: functional hearing is estimated to occur between approximately 100 Hz and 40 kHz.

As mentioned previously in this document, only bottlenose dolphin and Atlantic spotted dolphin are likely to occur in the proposed JLOTS training areas. Both of these two species are classified as mid-frequency cetaceans (Southall et al. 2007). Because their hearing frequency range overlaps with the frequencies associated with pile driving, the Navy and NMFS determined that in-water pile removal and pile driving during the JLOTS training activities have the potential to result in behavioral harassment of the marine mammal species and stocks in the vicinity of the proposed activity.

Marine mammals exposed to high-intensity sound repeatedly or for prolonged periods can experience hearing threshold shift (TS), which is the reduction of hearing sensitivity in the frequency ranges of the sound source (Kastak et al. 1999; Schlundt et al. 2000; Finneran et al. 2002; 2005). TS can be permanent (PTS), in which case the reduction of hearing sensitivity is unrecoverable, or temporary (TTS), in which case the animal's reduction of hearing sensitivity will recover over time (Southall *et al*. 2007). Since marine mammals depend on acoustic cues

for vital biological functions, such as orientation, communication, finding prey, and avoiding predators, hearing impairment could result in the reduced ability of marine mammals to detect or interpret important sounds. Repeated noise exposure that causes TTS could lead to PTS.

Experiments on a bottlenose dolphin (Tursiops truncatus) and beluga whale (Delphinapterus leucas) showed that exposure to a single watergun impulse at a received level of 207 kPa (or 30 psi) peak-to-peak (p-p), which is equivalent to 228 dB (p-p) re 1 μPa, resulted in a 7 and 6 dB TTS in the beluga whale at 0.4 and 30 kHz, respectively. Thresholds returned to within 2 dB of the pre-exposure level within 4 minutes of the exposure (Finneran et al. 2002). No TTS was observed in the bottlenose dolphin. Although the source level of one hammer strike for pile driving is expected to be much lower than the single watergun impulse cited here, animals being exposed for a prolonged period to repeated hammer strikes could receive more noise exposure in terms of sound exposure level (SEL) than from the single watergun impulse (estimated at 188 dB re 1 μPa2-s) in the aforementioned experiment (Finneran et al. 2002).

Chronic exposure to excessive, though not high-intensity, noise could cause masking at particular frequencies for marine mammals that utilize sound for vital biological functions (Clark et al. 2009). Masking is the obscuring of sounds of interest by other sounds, often at similar frequencies. Masking generally occurs when sounds in the environment are louder than, and of a similar frequency as, auditory signals an animal is trying to receive. Masking can interfere with detection of acoustic signals, such as communication calls, echolocation sounds, and environmental sounds important to marine mammals. Therefore, under certain circumstances, marine mammals whose acoustical sensors or environment are being severely masked could also be impaired.

Masking occurs at the frequency band which the animals utilize. Since noise generated from in-water pile removal and driving is mostly concentrated at low frequency ranges, it may have little effect on high-frequency echolocation sounds by odontocetes (toothed whales). However, the lower frequency man-made noises are more likely to affect the detection of communication calls and other potentially important natural sounds, such as surf and prey noise. The noises may also affect communication signals when those signals occur near the noise band, and thus reduce the communication space of animals (e.g., Clark et al. 2009), cause modification in vocalization patterns (e.g., Foote et al. 2004; Holt et al. 2009), and cause increased stress levels (Rolland *et al*. 2012).

Unlike TS, masking can potentially impact the species at community, population, or even ecosystem levels, as well as individual levels. Masking affects both senders and receivers of the signals and could have long-term chronic effects on marine mammal species and populations. Recent science suggests that low frequency ambient sound levels in the world's oceans have increased by as much as 20 dB (more than 3 times, in terms of SPL) from pre-industrial periods, and most of these increases are from distant shipping (Hildebrand 2009). All anthropogenic noise sources, such as those from vessel traffic and pile removal and driving, contribute to the elevated ambient noise levels, thus intensifying masking.

Nevertheless, the sum of noise from the Navy's proposed JLOTS training activities is confined to a limited area and is temporary and intermittent; therefore, the noise generated is not expected to contribute to increased ocean ambient noise. In addition, due to shallow water depths in the training area, underwater sound propagation of low-frequency sound (which is the major noise source from pile driving) is expected to be poor.

Finally, in addition to TS and masking, exposure of marine mammals to certain sounds could lead to behavioral disturbance (Richardson et al. 1995), such as: changing durations of surfacing and dives, number of blows per surfacing, or moving direction and/or speed; reduced/increased vocal activities; changing/cessation of certain behavioral activities, such as socializing or feeding; visible startle response or aggressive behavior, such as tail/fluke slapping or jaw clapping; and avoidance of areas where noise sources are located.

The biological significance of many of these behavioral disturbances is difficult to predict, especially if the detected disturbances appear minor. However, the consequences of behavioral modification could be expected to be biologically significant if the change affects growth, survival, or reproduction. Some of these types of significant behavioral modifications include:

- Drastic change in diving/surfacing patterns (such as those thought to be causing beaked whale strandings due to exposure to military mid-frequency tactical sonar);
- Extended habitat abandonment due to loss of desirable acoustic environment; and
- Extended cessation of feeding or social interaction.

The onset of behavioral disturbance from anthropogenic noise depends on both external factors (characteristics of noise sources and their paths) and the receiving animals (hearing, motivation, experience, demography), and is therefore difficult to predict (Southall et al. 2007).

The proposed training areas are not a prime habitat for marine mammals, nor are they considered areas frequented by marine mammals. Therefore, behavioral disturbances that could result from anthropogenic noise associated with the Navy's JLOTS training activities are expected to affect only a small number of marine mammals on an infrequent and limited basis.

Anticipated Effects on Marine Mammal Habitat.

No permanent impacts to marine mammal habitat are anticipated to occur as a result of the proposed training activities. The Navy's proposed JLOTS training activities would not

modify the existing habitat. Therefore, no restoration of the habitat would be necessary. A temporary, small-scale loss of foraging habitat may occur for marine mammals, if the marine mammals leave the area during pile extraction and driving activities.

Acoustic energy created during pile driving and removal work would have the potential to disturb fish within the vicinity of the training areas. As a result, the affected areas could temporarily lose foraging value to marine mammals. During pile driving, high noise levels may exclude fish from the vicinity of the pile driving. Hastings and Popper (2005) identified several studies that suggest fish will relocate to avoid areas of damaging noise energy. If fish leave the area of disturbance, the affected area may have a temporarily decreased foraging value during impact hammering and vibratory removal of piles.

The duration of fish avoidance of this area after pile driving stops is unknown. However, the affected area represents an extremely small portion of the total foraging range of marine mammals that may be present in and around the project area.

Because of the short duration of the activities and the relatively small area of the habitat that may be affected, the impacts to marine mammals and the food sources that they utilize are not expected to cause significant or long-term consequences for individual marine mammals or marine mammal populations.

Proposed Mitigation

In order to issue an incidental take authorization (ITA) under section 101(a)(5)(A) 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." The NDAA of 2004 amended the MMPA as it relates to military-readiness

activities and the incidental take authorization process such that "least practicable adverse impact" shall include consideration of personnel safety, practicality of implementation, and impact on the effectiveness of the "military readiness activity." The training activities described in the JLOTS LOA application are considered military readiness activities.

NMFS reviewed the proposed activities and the proposed mitigation measures as described in the Navy's LOA application to determine if they would result in the least practicable adverse effect on marine mammals, which includes a careful balancing of the likely benefit of any particular measure to the marine mammals with the likely effect of that measure on personnel safety, practicality of implementation, and impact on the effectiveness of the "military readiness activity." Included below are standard operating procedures and the mitigation measures the Navy proposed in its LOA application.

Standard Operating Procedures

Soft starts are performed during impact installation each day. During a soft start, an initial set of strikes from the impact hammer at reduced energy are performed before it is able to be operated at full power and speed. The energy reduction of an individual hammer cannot be quantified because they vary by individual drivers. Also, the number of strikes will vary at reduced energy because raising the hammer at less than full power and then releasing it results in the hammer "bouncing" as it strikes the pile resulting in multiple "strikes". A benefit of a soft start is that marine species in the vicinity are provided a "warning", giving them an opportunity to leave the area at the first occurrence of the noise, prior to full capacity operation. This may result in reducing exposures to underwater noise levels that could cause behavioral disturbance or injury.

Mitigation Zone and Shutdown Measure

The Navy will establish a mitigation zone of 60 yards (55 m) around the pile being driven. Visual observation will be conducted starting 30 minutes prior to, during, and 30 minutes after the exercise within the mitigation zone. The exercise will not commence if concentrations of floating vegetation (Sargassum or kelp patties) are observed in the mitigation zone.

Pile driving will cease if a marine mammal is visually detected within the mitigation zone. Pile driving will re-commence if any one of the following conditions is met: (1) the animal is observed exiting the mitigation zone, (2) the animal is thought to have exited the mitigation zone based on its course and speed, or (3) the mitigation zone has been clear from any additional sightings for a period of 30 minutes.

Marine Species Awareness Training

Consistent with current requirements, all personnel standing watch on the bridge, Commanding Officers, Executive Officers, and Lookouts will successfully complete the Marine Species Awareness Training prior to standing watch or serving as a Lookout. The Marine Species Awareness Training is designed to improve the effectiveness of visual observations for marine resources, including marine mammals. The training provides information on sighting cues, visual observation tools and techniques, and sighting notification procedures.

Vessels

Vessels will avoid approaching marine mammals head on and will maneuver to maintain a mitigation zone of 500 yards (457 m) around observed whales and 200 yards (183 m) around all other marine mammals (except bow riding dolphins), providing it is safe to do so.

North Atlantic Right Whale Mid-Atlantic Migration Corridor

A North Atlantic right whale migratory route is located off the mid-Atlantic coast of the United States. This mitigation area applies from November 1 through April 30 and is defined as follows:

- Block Island Sound: The area bounded by 40˚51'53.7" N / 070˚36'44.9" W; 41˚20'14.1" N / 070˚49'44.1" W; 41˚4'16.7" N / 071˚51'21" W; 41˚35'56.5" N / 071˚38'26.1" W; then back to first set of coordinates.
- New York and New Jersey: Within a 20 nm radius of the following (as measured seaward from the COLREGS lines): 40˚29'42.2" N / 073˚55'57.6" W.
- Delaware Bay: Within a 20 nm radius of the following (as measured seaward from the COLREGS lines): 38˚52'27.4" North / 075˚01'32.1" West.
- Chesapeake Bay: Within a 20 nm radius of the following (as measured seaward from the COLREGS lines): 37˚00'36.9" North / 075˚57'50.5" West.
- Morehead City, North Carolina: Within a 20 nm radius of the following (as measured seaward from the COLREGS lines): 34˚41'32.0" North / 076˚40'08.3" West.
- Wilmington, North Carolina, through South Carolina, and to Brunswick, Georgia: Within a continuous area 20 nautical miles from shore and west back to shore bounded by 34˚10'30" North / 077˚49'12" West; 33˚56'42" North / 077˚31'30" West; 33˚36'30" North / 077˚47'06" West; 33˚28'24" North / 078˚32'30" West; 32˚59'06" North / 078˚50'18" West; 31˚50'00"North / 080˚33'12" West; 31˚27'00" North / 080˚51'36" West.

When transiting within the migration corridor, the Navy will practice increased vigilance, exercise extreme caution, and proceed at the slowest speed that is consistent with safety, mission, and training objectives.

Mitigation Conclusions

NMFS has carefully evaluated the Navy's proposed mitigation measures and considered a range of other measures in the context of ensuring that NMFS prescribes the means of effecting the least practicable impact on the affected marine mammal species and stocks and their habitat. Our evaluation of potential measures included consideration of the following factors in relation to one another:

- The manner in which, and the degree to which, the successful implementation of the measure is expected to minimize adverse impacts to marine mammals.
- The proven or likely efficacy of the specific measure to minimize adverse impacts as planned.

- The practicability of the measure for applicant implementation, including consideration of personnel safety, practicality of implementation, and impact on the effectiveness of the military readiness activity.

Any mitigation measure(s) prescribed by NMFS should be able to accomplish, have a reasonable likelihood of accomplishing (based on current science), or contribute to the accomplishment of one or more of the general goals listed below:

1. Avoidance or minimization of injury or death of marine mammals wherever possible (goals 2, 3, and 4 may contribute to this goal).
2. A reduction in the numbers of marine mammals (total number or number at biologically important time or location) exposed to received levels of in-water pile driving and pile removal, or other activities expected to result in the take of marine mammals (this goal may contribute to 1, above, or to reducing harassment takes only).
3. A reduction in the number of times (total number or number at biologically important time or location) individuals would be exposed to received levels of in-water pile driving and pile removal, or other activities expected to result in the take of marine mammals (this goal may contribute to 1, above, or to reducing harassment takes only).
4. A reduction in the intensity of exposures (either total number or number at biologically important time or location) to received levels of in-water pile driving and pile removal, or other activities expected to result in the take of marine mammals (this goal may contribute to 1, above, or to reducing the severity of harassment takes only).
5. Avoidance or minimization of adverse effects to marine mammal habitat, paying special attention to the food base, activities that block or limit passage to or from biologically important areas, permanent destruction of habitat, or temporary destruction/disturbance of habitat during a biologically important time.
6. For monitoring directly related to mitigation – an increase in the probability of detecting marine mammals, thus allowing for more effective implementation of the mitigation.

Based on our evaluation of the Navy's proposed measures, as well as other measures considered by NMFS, NMFS has preliminarily determined that the proposed mitigation measures provide the means of effecting the least practicable impact on marine mammals species or stocks and their habitat, paying particular attention to rookeries, mating grounds, and areas of similar significance, while also considering personnel safety, practicality of implementation, and impact on the effectiveness of the military readiness activity.

Proposed Monitoring

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 LOAs 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.

Monitoring measures prescribed by NMFS should accomplish one or more of the following general goals:

1. An increase in the probability of detecting marine mammals, both within the mitigation zone (thus allowing for more effective implementation of the mitigation) and in general to generate more data to contribute to the analyses mentioned below;
2. An increase in our understanding of how many marine mammals are likely to be exposed to levels of in-water pile driving and pile removal that we associate with specific adverse effects, such as behavioral harassment, TTS, or PTS;
3. An increase in our understanding of how marine mammals respond to stimuli expected to result in take and how anticipated adverse effects on individuals (in different ways and to varying degrees) may impact the population, species, or stock (specifically through effects on annual rates of recruitment or survival) through any of the following methods:

- Behavioral observations in the presence of stimuli compared to observations in the absence of stimuli (need to be able to accurately predict received level, distance from source, and other pertinent information);
- Physiological measurements in the presence of stimuli compared to observations in the absence of stimuli (need to be able to accurately predict received level, distance from source, and other pertinent information);
- Distribution and/or abundance comparisons in times or areas with concentrated stimuli versus times or areas without stimuli;

4. An increased knowledge of the affected species; and
5. An increase in our understanding of the effectiveness of certain mitigation and monitoring measures.

Operational Monitoring Measures

(1) Standard Watch Personnel

Ships operated by or for the Navy shall have personnel assigned to stand watch at all times, day and night, when moving through the water (underway). Watch personnel shall undertake extensive training in accordance with the U.S. Navy Lookout Training Handbook or civilian equivalent, including on-the-job instruction and a formal Personal Qualification Standard program (or equivalent program for supporting contractors or civilians), to certify that they have demonstrated all necessary skills (such as detection and reporting of floating or partially submerged objects). Watch personnel are composed of officers, enlisted men and women, and civilian equivalents. Their duties may be performed in conjunction with other job responsibilities, such as navigating the ship or supervising other personnel. While on watch, personnel employ visual search techniques, including the use of binoculars, using a scanning method in accordance with the U.S. Navy Lookout Training Handbook or civilian equivalent. After sunset and prior to sunrise, watch personnel employ night visual search techniques, which could include the use of night vision devices.

A primary duty of watch personnel is to detect and report all objects and disturbances sighted in the water that may be indicative of a threat to the ship and its crew, such as debris, a periscope, surfaced submarine, or surface disturbance. Per safety requirements, watch personnel also report any marine mammals sighted that have the potential to be in the direct path of the ship as a standard collision avoidance procedure. Because watch personnel are primarily posted for safety of navigation, range clearance, and man-overboard precautions, they are not normally posted while ships are moored to a pier. When anchored or moored to a buoy, a watch team is

still maintained but with fewer personnel than when underway. When moored or at anchor, watch personnel may maintain security and safety of the ship by scanning the water for any indications of a threat (as described above).

While underway, Navy ships (with the exception of submarines) greater than 65 ft. (20 m) in length have at least two watch personnel; Navy ships less than 65 ft. (20 m) in length, surfaced submarines, and contractor ships have at least one watch person. While underway, watch personnel are alert at all times and have access to binoculars. Due to limited manning and space limitations, small boats and some craft transferring cargo from ship to shore do not have dedicated watch personnel, and the boat crew is responsible for maintaining the safety of the boat and surrounding environment.

All vessels use extreme caution and proceed at a "safe speed" so they can take proper and effective action to avoid a collision with any sighted object or disturbance and can be stopped within a distance appropriate to the prevailing circumstances and conditions.

(2) Lookouts

Lookouts perform similar duties to standard watch personnel, and are also responsible for satisfying mitigation requirements. The Navy will have one Lookout positioned on the platform (which could include a small boat, the elevated causeway, or the shore) that will maximize the potential for sightings during pile driving and pile removal.

The Lookout positioned on the elevated causeway or the shore will be dedicated solely to diligent observation of the air and surface of the water. They will have multiple observation objectives, which include but are not limited to detecting the presence of biological resources and recreational or fishing boats, observing the mitigation zone, and monitoring for equipment and personnel safety concerns. Due to small boat manning and space restrictions, a Lookout

positioned on a small boat may include a member of the boat crew, and may be responsible for tasks in addition to observing the air or surface of the water (e.g., navigation of a rigid hull inflatable boat). However, a boat Lookout will, to the maximum extent practicable and consistent with safety and training requirements, comply with the observation objectives described above for a Lookout positioned on the elevated causeway or the shore.

Lookouts will also perform visual observation starting 30 minutes prior to, during, and 30 minutes after the exercise within a mitigation zone of 60 yards (55 m) around the pile being driven.

Integrated Comprehensive Monitoring Program

The Navy will use the existing Integrated Comprehensive Monitoring Program (ICMP) and its new "study-based" approach to satisfy monitoring requirements for the JLOTS MMPA authorization. To ensure efficient implementation of the program and maintain consistency with how the program is currently being implemented for the Atlantic Fleet Training and Testing (AFTT) MMPA authorization, Navy recommends the same AFTT adaptive management process and reporting deadlines be used for the JLOTS authorization.

The ICMP is intended to coordinate monitoring efforts across all regions where the Navy trains and tests and to allocate the most appropriate level and type of effort for each range complex (U. S. Department of the Navy 2010). Originally, the Navy monitoring program was composed of a collection of “range-specific” monitoring plans, each developed individually as part of Marine Mammal Protection Act and Endangered Species Act compliance processes as environmental documentation was completed. These individual plans established specific monitoring requirements for each range complex and were collectively intended to address the ICMP top-level goals.

A 2010 Navy-sponsored monitoring meeting in Arlington, Virginia, initiated a process to critically evaluate the Navy monitoring plans and begin development of revisions and updates to both the region-specific plans as well as the ICMP. Discussions at that meeting as well as the following Navy and NMFS annual adaptive management meeting established a way ahead for continued refinement of the Navy's monitoring program. This process included establishing a Scientific Advisory Group of leading marine mammal scientists with the initial task of developing recommendations that would serve as the basis for a Strategic Planning Process for Navy monitoring. The Strategic Plan is intended to be a primary component of the Integrated Comprehensive Monitoring Program and provide a "vision" for Navy monitoring across geographic regions - serving as guidance for determining how to most efficiently and effectively invest the marine species monitoring resources to address ICMP top-level goals and satisfy MMPA regulatory requirements.

The objective of the Strategic Planning Process is to continue the evolution of Navy marine species monitoring towards a single integrated program, incorporating Scientific Advisory Group recommendations, and establishing a more transparent framework for soliciting, evaluation, and implementing monitoring work across the range complexes and testing ranges. The Strategic Planning Process must consider a range of factors in addition to the scientific recommendations including logistic, operational, and funding considerations and will be revised regularly as part of the annual adaptive management process.

Past and Current Monitoring in the Navy JLOTS Training Areas

NMFS has not issued regulations nor incidental take authorizations to the Navy concerning its JLOTS training on the Atlantic coast. Therefore, no past and current monitoring is available.

Proposed 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." Effective reporting is critical both to compliance as well as ensuring that the most value is obtained from the required monitoring. Some of the reporting requirements are still in development and the final rule may contain additional details not contained in the proposed rule. Additionally, proposed reporting requirements may be modified, eliminated, or added based on information or comments received during the public comment period. Reports from individual monitoring events, results of analyses, publications, and periodic progress reports for specific monitoring projects will be posted to the U.S. Navy Marine Species Monitoring web portal as they become available. Currently, there are several specific reporting requirements pursuant to these proposed regulations:

General Notification of Injured or Dead Marine Mammals

Navy personnel would ensure that NMFS (regional stranding coordinator) is notified immediately (or as soon as clearance procedures allow) if an injured or dead marine mammal is found during or shortly after, and in the vicinity of, any Navy training exercise. The Navy would provide NMFS with species identification or description of the animal(s), the condition of the animal(s) (including carcass condition if the animal is dead), location, time of first discovery, observed behaviors (if alive), and photographs or video (if available).

Annual Monitoring and Exercise Report

As noted above, reports from individual monitoring events, results of analyses, publications, and periodic progress reports for specific monitoring projects would be posted to the Navy's Marine Species Monitoring web portal as they become available. Progress and

results from all monitoring activity conducted within the JLOTS training area would be summarized in an annual report. This report shall detail the monitoring protocol, summarize the data recorded during monitoring, and estimate the number of marine mammals that may have been harassed.

Draft reports should be combined with the Navy's Atlantic Fleet Training and Testing exercise and monitoring reports and submitted to NMFS for review by February 13 (for exercises) and April 1 (for monitoring) each year. NMFS would review the report and provide comments for incorporation within 3 months.

Estimated Take of Marine Mammals

In the potential effects section, NMFS' analysis identified a variety of impacts that could potentially result from exposure to noise during the Navy's JLOTS training activities. In this section, we will relate the potential effects to marine mammals from these sound sources to the MMPA regulatory definitions of Level A and Level B Harassment and attempt to quantify the effects that might occur from the specific training activities that the Navy proposes in the JLOTS training areas.

Definition of Harassment

As mentioned previously, with respect to military readiness activities, section 3(18)(B) of the MMPA defines "harassment" as: (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 sheltering, to a point where such behavioral patterns are abandoned or significantly altered [Level B Harassment].

As discussed above, in-water pile removal and pile driving (vibratory and impact) generate loud noises that could potentially harass marine mammals in the vicinity of the Navy's proposed JLOTS training activities.

Currently, NMFS uses 120 dB re 1 μPa and 160 dB re 1 μPa at the received levels for the onset of Level B harassment from non-impulse (vibratory pile driving and removal) and impulse sources (impact pile driving) underwater, respectively. Table 2 summarizes the current NMFS marine mammal take criteria.

Table 2. Current Acoustic Exposure Criteria for Non-explosive Sound Underwater

Criterion	**Criterion Definition**	**Threshold**
Level A Harassment (Injury)	Permanent Threshold Shift (PTS) (Any level above that which is known to cause TTS)	180 dB re 1 μPa (cetaceans) 190 dB re 1 μPa (pinnipeds) root mean square (rms)
Level B Harassment	Behavioral Disruption (for impulse noises)	160 dB re 1 μPa (rms)
Level B Harassment	Behavioral Disruption (for non-impulse noise)	120 dB re 1 μPa (rms)

Methods for Estimating Takes

The methods for estimating the number and types of exposure are described in the sections below, followed by the method for quantifying exposures of marine mammals to sources of energy exceeding those threshold values. Exposure of each was determined by:

- The potential of each species to be impacted by the acoustic sources as determined by acoustic criteria for marine mammals.
- The potential presence of each species and their estimated density inside the range to effect.
- The range to effect for impact installation and vibratory extraction (estimated by taking into account the source levels, propagation loss, and thresholds at which each acoustic criterion is met).

Potential exposures were calculated by multiplying the density of each marine mammal species potentially present by the total impacted area for each threshold value, rounding the

result to the closest integer, and then multiplying that result by the potential number of days of pile driving.

Underwater Sound from Pile Driving

Sound levels produced by pile driving are greatly influenced by factors including pile type, driving method, and the physical environment in which the activity takes place. A number of studies have examined sound pressure levels recorded from underwater pile driving projects in California and Washington, creating a large body of data for impact driving of steel pipe piles.

To determine the most appropriate sound pressure levels for this project, data from studies which met the following parameters were considered:

- Pile size and type: 24-inch diameter steel pipe piles
- Installation and removal method: vibratory and/or impact hammer
- Physical environment : water depth, sediment type

Details of the physical characteristics of the waters and substrate off the proposed JLOTS locations were taken into consideration for determining the size of ensonified zones. Source levels were selected from NAVFAC Atlantic's comprehensive dataset based on similarity to site conditions at JEB Little Creek-Fort Story (sand with shell debris sediments, average depth 1 – 5 meters), and Camp Lejeune (lower sedimentation with hard-bottom in some areas, depth around 7 meters), equipment (i.e., diesel hammer), and lack of conditions that might introduce extra noise into the measurements (e.g., riverine environments). Calculated averages of selected source levels used as proxies for modeling are summarized in Table 3.

Table 3. Summary of Source Levels

Method	Location	dB re 1µPa rms
Impact Installation	JEB Little Creek-Fort Story	188

	Camp Lejeune	189
Vibratory Removal	JEB Little Creek-Fort Story	160
	Camp Lejeune	

Take Zone Size Calculation

Modeling sound propagation is useful in evaluating noise levels to determine distance from the pile driving activity that certain sound levels may travel. The decrease in acoustic intensity as a sound wave propagates outward from a source is known as transmission loss (TL). The formula for transmission loss is:

$TL = B * \log_{10}(R_1/R_2) + C * R_1$,

where

B = logarithmic (predominantly spreading) loss

C = linear (scattering and absorption) loss

R_1 = range from source in meters

R_2 = range from driven pile to original measurement location (generally 10 m for pile driving activities)

The amount of linear loss (C) is proportional to the frequency of a sound. Due to the low frequencies of sound generated by impact and vibratory pile driving, this factor was assumed to be zero for all calculations in this assessment and transmission loss was calculated using only logarithmic spreading. Therefore, using practical spreading (B = 15), the revised formula for transmission loss is $TL = 15 \log_{10} (R_1/10)$.

The practical spreading loss model ($TL = 15 \log_{10} (R_1/10)$) discussed above was used to calculate the underwater propagation of pile driving sound in and around the three proposed

locations. A total of 30 days of pile driving were modeled for JEB Little Creek-Fort Story and Camp Lejeune; 20 days of impact driving, and 10 days of vibratory extraction. No noise mitigation methods (bubble curtains, cofferdams, etc.) are proposed and therefore no attenuation was included in the acoustic model.

Impact driving of each pile is expected to last no more than 15 minutes. Typically, 6 piles would be installed each day, for up to 20 days. Generally, two pile drivers are used, but not simultaneously: while one is installing a pile, the other is being repositioned for the next pile. For vibratory extraction, the acoustic model assumed that 12 piles would be extracted each day, lasting 6 minutes each, over the course of 10 days.

The range to effects (Table 4) for underwater noise is assumed to take a circular shape around the notional pile bring driven at the furthest offshore point of the ELCAS (M) (approximately 1,500 ft. [457 m] from shore). Zones with radii larger than 1,500 ft. (457 m) will be truncated by the shoreline, and were modeled as semicircles extending to the west, north, and east in the case of JEB Little Creek-Fort Story; and north, east, and south at Camp Lejeune since the beaches at each of the locations would represent the boundary for underwater propagation. The calculated ranges assume no obstructions, and sounds will attenuate as they encounter land or other solid obstacles. As a result, the distances calculated may not actually be attained at the two installations.

Table 4. Calculated range to effects and zones of influence for marine mammals during pile driving

Driving Method	**Threshold**	**Range**		**Area**	
		JEB Little Creek-Fort Story	**Camp Lejeune**	**JEB Little Creek-Fort Story**	**Camp Lejeune**
Impact Pile Drive	Injury: 180 dB re 1 µPa rms	37 yds (34 m)	44 yds (40 m)	0.001 mi^2 (0.0037 km^2)	0.002 mi^2 (0.005 km^2)
	Behavioral: 160 dB re 1 µPa rms	805 yds (736 m)	938 yds (858 m)	0.328 mi^2 (0.85 km^2)	0.446 mi^2 (1.156 km^2)

Vibratory Pile Removal	Injury: 180 dB re 1 µPa rms	n/a	n/a
	Behavioral: 120 dB re 1 µPa rms	5,077 yds (4,642 m)	13.07 mi^2 (33.84 km^2)

Note: all sound levels expressed in dB re 1 µPA rms; dB = decibel; rms = root mean square; m = meter; mi^2 = square mile; km^2 = square kilometer; behavioral zones of influence are semi-circles based on notional distance from shore of the pile being driven; injury zones of influence are circular since they will not extend to and therefore be attenuated by land.

Take Number Requested

Based on the size of the areas in which pile driving and extraction may exceed established thresholds, the Navy applied estimated densities for the bottlenose dolphin and Atlantic spotted dolphin and the number of active pile driving days. The result shows that approximately 110 bottlenose dolphins and 50 Atlantic spotted dolphins could be taken by Level B behavioral harassment annually, with a total of 550 bottlenose dolphins and 250 Atlantic spotted dolphins taken by Level B behavioral harassment during the five-year period of the rule (Table 5). The annual percentage of takes of these species/stock is less than 6% of the population.

Table 5. Species-specific Level A and Level B Incidental Takes for JLOTS Training Activities

Species	Stock	Annual	Percent of Population	Total (5 years)
Bottlenose dolphin	Northern North Carolina Estuarine System	50	5.26%	250
	Southern North Carolina Estuarine System	60	2.44%	300
Atlantic spotted dolphin	Western North Atlantic	50	0.18%	250

Analysis and Preliminary Determinations

Negligible Impact

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" (50 CFR 216.103). A negligible

impact finding is based on the lack of likely adverse effects on annual rates of recruitment or survival (i.e., population-level effects). An estimate of the number of Level B harassment takes, alone, is not enough information on which to base an impact determination. In addition to considering estimates of the number of marine mammals that might be "taken" through behavioral harassment, NMFS must consider other factors, such as the likely nature of any responses (their intensity, duration, etc.), the context of any responses (critical reproductive time or location, migration, etc.), as well as the number and nature of estimated Level A harassment takes, the number of estimated mortalities, and effects on habitat.

The Navy's proposed JLOTS training activity would involve pile driving and removal activities during the training exercise. Elevated noise levels are expected to be generated as a result of these activities. However, the source levels generated by the pile driving and removal activities are expected be low due to the low-power hammer being used. In addition, given the standard operating procedure of soft starts and required mitigation and monitoring such as shutdown measures when marine mammals are sighted approaching the mitigation zone, no injuries or mortalities are anticipated to occur as a result of the Navy's proposed JLOTS training activities, and none are proposed to be authorized. In addition, as described above, marine mammals in the area would not be exposed to activities or sound levels which would result in hearing impairment (TTS or PTS) or non-auditory physiological effects.

In-water construction activities would occur in nearshore shallow waters at the JEB Little Creek-Fort Story in Virginia and at Camp Lejeune in North Carolina. The proposed training areas are not considered significant habitat for marine mammals. Marine mammals approaching the action area would likely be traveling or opportunistically foraging. There are no rookeries or major haul-out sites nearby, foraging hotspots, or other ocean bottom structure of significant

biological importance to marine mammals that may be present in the marine waters in the vicinity of the training areas. The proposed training areas are not prime habitats for marine mammals, nor are they considered areas frequented by marine mammals. Therefore, behavioral disturbances that could result from anthropogenic noise associated with the JLOTS training activities are expected to affect only a small number of marine mammals on an infrequent basis. Although it is possible that some individual marine mammals may be exposed to sounds from in-water pile driving activities more than once, the duration of these multi-exposures is expected to be low since animals would be constantly moving in and out of the area and in-water pile driving activities would not occur continuously throughout the day.

Marine mammals may be temporarily impacted by noise from pile driving and pile removal activities. These low intensity, localized, and short-term noise exposures may cause brief startle reactions or short-term behavioral modifications by the animals. These reactions and behavioral changes are expected to subside quickly when the exposures cease. Moreover, marine mammals are expected to avoid the area during in-water construction because animals generally move away from active sound sources, thereby reducing exposure and impacts. In addition, through soft starts, a standard operating procedure, marine mammals are expected to move away from a sound source that is annoying prior to its becoming potentially injurious, and detection of marine mammals by lookouts would enable the implementation of shutdowns to avoid injury, serious injury, or mortality. In-water pile driving and pile removal are expected to occur for about 20 days and 10 days total annually at each location, respectively. Repeated exposures of individuals to levels of sound that may cause Level B harassment are unlikely to result in hearing impairment or to significantly disrupt foraging behavior. Thus, even repeated Level B harassment of some small subset of an overall stock is unlikely to result in any

significant realized decrease in fitness to those individuals, and thus would not result in any adverse impact to the stock as a whole. Level B harassment will be reduced to the level of least practicable impact through use of mitigation measures described herein and, if sound produced by project activities is sufficiently disturbing, animals are likely to simply avoid the project area while the activity is occurring.

Based on the application and subsequent analysis, the impact of the described in-water pile driving activities may result in, at most, short-term modification of behavior by small numbers of marine mammals within the action area. No injury, serious injury, or mortality is expected to occur and 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.

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 proposed monitoring and mitigation measures, NMFS finds preliminarily that the total marine mammal take from the Navy's JLOTS training activity will have a negligible impact on the affected marine mammal species or stocks.

Endangered Species Act (ESA)

No species listed under the ESA are expected to be affected by these activities. Therefore, NMFS has determined that a section 7 consultation under the ESA is not required.

NEPA

NMFS has participated as a cooperating agency on the JLOTS draft EA, which is scheduled to be published on January 6, 2015. The JLOTS draft EA will be posted on NMFS' website: http://www.nmfs.noaa.gov/pr/permits/incidental.htm#applications. NMFS intends to adopt the Navy's EA, if adequate and appropriate. Currently, we believe that the adoption of the

Navy's EA will allow NMFS to meet its responsibilities under NEPA for the issuance of regulations and a five-year LOA for JLOTS training activities. If the Navy's JLOTS EA is deemed inadequate, NMFS would supplement the existing analysis to ensure that we comply with NEPA prior to the issuance of the final rule or LOA.

Classification

The Office of Management and Budget has determined that this proposed rule is not significant for purposes of Executive Order 12866.

Pursuant to the Regulatory Flexibility Act (RFA), the Chief Counsel for Regulation of the Department of Commerce has certified to the Chief Counsel for Advocacy of the Small Business Administration that this proposed rule, if adopted, would not have a significant economic impact on a substantial number of small entities. The RFA requires federal agencies to prepare an analysis of a rule's impact on small entities whenever the agency is required to publish a notice of proposed rulemaking. However, a federal agency may certify, pursuant to 5 U.S.C. 605(b), that the action will not have a significant economic impact on a substantial number of small entities. The Navy, a federal agency, is the sole entity that will be affected by this rulemaking. It is not a small governmental jurisdiction, small organization, or small business, as defined by the RFA. Any requirements imposed by an LOA issued pursuant to these regulations, and any monitoring or reporting requirements imposed by these regulations, would be applicable only to the Navy. NMFS does not expect the issuance of these regulations or the associated five-year LOA to result in any impacts to small entities pursuant to the RFA. Because this action, if adopted, would only directly affect the Navy, NMFS concludes the action would not result in a significant economic impact on a substantial number of small entities.

List of Subjects in 50 CFR Part 218

Exports, Fish, Imports, Incidental take, Indians, Labeling, Marine mammals, Navy, Penalties, Reporting and recordkeeping requirements, Seafood, Sonar, Transportation

Dated: December 23, 2014.

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Eileen Sobeck,
Assistant Administrator for Fisheries.

For reasons set forth in the preamble, 50 CFR part 218 is proposed to be amended as follows:

PART 218--REGULATIONS GOVERNING THE TAKING AND IMPORTING OF MARINE MAMMALS

1. The authority citation for part 218 continues to read as follows:

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

2. Subpart B is added to part 218 to read as follows:

Subpart B -- Takes of Marine Mammals Incidental to Specified Activities; U.S. Navy Joint Logistics Over-the-Shore (JLOTS) Training Activities in Virginia and North Carolina

Sec.

218.17 Letters of Authorization.

218.18 Renewal of Letters of Authorization and Adaptive Management.

218.19 Modifications to Letters of Authorization.

Subpart B -- Takes of Marine Mammals Incidental to Specified Activities; U.S. Navy Joint Logistics Over-the-Shore (JLOTS) Training Activities in Virginia and North Carolina

§ 218.10 Specified activity and specified geographical region.

(a) Regulations in this subpart apply only to the U.S. Navy for the taking of marine mammals that occurs in the area outlined in paragraph (b) of this section and that occurs incidental to the activities described in paragraph (c) of this section.

(b) The taking of marine mammals by the Navy is only authorized if it occurs within the JLOTS training areas, which is in nearshore shallow waters at the Joint Expeditionary Base (JEB) Little Creek-Fort Story in Virginia and at Camp Lejeune in North Carolina.

(c) The taking of marine mammals by the Navy is only authorized if it occurs incidental to the JLOTS training activities in the activity areas any time of year, but no more than once annually at JEB Little Creek-Fort Story, and once annually at Camp Lejeune.

§ 218.11 Effective dates and definitions.

(a) Regulations are effective [DATE OF FILING for public inspection of the final rule with the Office of the Federal Register], through [DATE FIVE YEARS AFTER DATE OF FILING for public inspection of the final rule with the Office of the Federal Register].

§ 218.12 Permissible methods of taking.

(a) Under Letters of Authorization (LOAs) issued pursuant to § 218.17, the Holder of the Letter of Authorization may incidentally, but not intentionally, take marine mammals within the

area described in § 218.10, provided the activity is in compliance with all terms, conditions, and requirements of these regulations and the appropriate LOA.

(b) The activities identified in § 218.10(c) must be conducted in a manner that minimizes, to the greatest extent practicable, any adverse impacts on marine mammals and their habitat.

(c) The incidental take of marine mammals under the activities identified in § 218.10(c) is limited to JLOTS training activities, by Level B behavioral harassment:

(1) Bottlenose dolphin (Tursiops truncatus) / Northern North Carolina Estuarine System: 250 (50 per year);

(2) Bottlenose dolphin (Tursiops truncatus) / Southern North Carolina Estuarine System: 300 (60 per year); and

(3) Atlantic spotted dolphin (Stenella frontalis) / Western North Atlantic: 250 (50 per year).

§ 218.13 Prohibitions.

Notwithstanding takings contemplated in § 218.12 and authorized by an LOA issued under §§ 216.106 of this chapter and §218.17, no person in connection with the activities described in § 218.10 may:

(a) Take any marine mammal not specified in § 218.12(c);

(b) Take any marine mammal specified in § 218.12(c) other than by incidental take as specified in § 218.12(c);

(c) Take a marine mammal specified in § 218.12(c) 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 these regulations or an LOA issued under §§ 216.106 of this chapter and 218.17.

§ 218.14 Standard operating procedure and mitigation measures.

(a) When conducting training and testing activities, as identified in § 218.10, the mitigation measures contained in the LOA issued under §§ 216.106 of this chapter and 218.17 must be implemented. These mitigation measures include, but are not limited to:

(1) *Establishing mitigation zone*. (i) A mitigation zone of 60 yards (55 m) around the pile being driven shall be established.

(ii) Visual observation will be conducted starting 30 minutes prior to, during, and 30 minutes after the ELCAS (M) exercise within the mitigation zone. The exercise will not commence if concentrations of floating vegetation (Sargassum or kelp patties) are observed in the mitigation zone.

(2) *Soft starts*. (i) Soft starts, or gradually ramping up the power of pile driving hammer, shall be performed during impact installation each day.

(ii) During a soft start, an initial set of strikes from the impact hammer at reduced energy are performed before it is able to be operated at full power and speed.

(3) *Shutdown measures*. (i) Pile driving shall cease if a marine mammal is visually detected within or approaching the mitigation zone.

(ii) Pile driving may re-commence if any one of the following conditions is met:

(A) The animal is observed exiting the mitigation zone,

(B) The animal is thought to have exited the mitigation zone based on its course and speed, or

(C) The mitigation zone has been clear from any additional sightings for a period of 30 minutes.

(b) *Marine species awareness training*. (1) All personnel standing watch on the bridge, Commanding Officers, Executive Officers, and Lookouts shall successfully complete the Marine Species Awareness Training prior to standing watch or serving as a Lookout.

(2) The Marine Species Awareness Training shall be designed to improve the effectiveness of visual observations for marine resources, including marine mammals.

(3) The training shall provide information on sighting cues, visual observation tools and techniques, and sighting notification procedures.

(c) *Vessels*. Vessels shall avoid approaching marine mammals head on and shall maneuver to maintain a mitigation zone of 500 yards (457 m) around observed whales and 200 yards (183 m) around all other marine mammals (except bow riding dolphins), providing it is safe to do so.

(d) *North Atlantic Right Whale Mid-Atlantic Migration Corridor*. When transiting within the following North Atlantic right whale Mid-Atlantic migration corridor defined below between November 1 and April 30, the Navy shall practice increased vigilance, exercise extreme caution, and proceed at the slowest speed that is consistent with safety, mission, and training objectives:

(1) Block Island Sound: The area bounded by 40˚51'53.7" N / 070˚36'44.9" W; 41˚20'14.1" N / 070˚49'44.1" W; 41˚4'16.7" N / 071˚51'21" W; 41˚35'56.5" N / 071˚38'26.1" W; then back to first set of coordinates.

(2) New York and New Jersey: Within a 20 nm radius of the following (as measured seaward from the COLREGS lines): 40˚29'42.2" N / 073˚55'57.6" W.

(3) Delaware Bay: Within a 20 nm radius of the following (as measured seaward from the COLREGS lines): 38˚52'27.4" North / 075˚01'32.1" West.

(4) Chesapeake Bay: Within a 20 nm radius of the following (as measured seaward from the COLREGS lines): 37˚00'36.9" North / 075˚57'50.5" West.

(5) Morehead City, North Carolina: Within a 20 nm radius of the following (as measured seaward from the COLREGS lines): 34˚41'32.0" North / 076˚40'08.3" West.

(6) Wilmington, North Carolina, through South Carolina, and to Brunswick, Georgia: Within a continuous area 20 nautical miles from shore and west back to shore bounded by 34˚10'30" North / 077˚49'12" West; 33˚56'42" North / 077˚31'30" West; 33˚36'30" North / 077˚47'06" West; 33˚28'24" North / 078˚32'30" West; 32˚59'06" North / 078˚50'18" West; 31˚50'00"North / 080˚33'12" West; 31˚27'00" North / 080˚51'36" West.

§ 218.15 Requirements for monitoring and reporting.

(a) *Monitoring measures*--(1) *Standard watch personnel*. (i) Ships operated by or for the Navy shall have personnel assigned to stand watch at all times, day and night, when moving through the water (underway).

(ii) Watch personnel shall undertake extensive training in accordance with the U.S. Navy Lookout Training Handbook or civilian equivalent, including on-the-job instruction and a formal Personal Qualification Standard program (or equivalent program for supporting contractors or civilians), to certify that they have demonstrated all necessary skills (such as detection and reporting of floating or partially submerged objects).

(iii) While on watch, watch personnel shall employ visual search techniques, including the use of binoculars, using a scanning method in accordance with the U.S. Navy Lookout Training Handbook or civilian equivalent.

(iv) After sunset and prior to sunrise, watch personnel shall employ night visual search techniques, which could include the use of night vision devices.

(v) A primary duty of watch personnel is to detect and report all objects and disturbances sighted in the water that may be indicative of a threat to the ship and its crew, such as debris, a periscope, surfaced submarine, or surface disturbance.

(vi) Per safety requirements, watch personnel also report any marine mammals sighted that have the potential to be in the direct path of the ship as a standard collision avoidance procedure. Because watch personnel are primarily posted for safety of navigation, range clearance, and man-overboard precautions, they are not normally posted while ships are moored to a pier.

(vii) When anchored or moored to a buoy, a watch team is still maintained but with fewer personnel than when underway.

(viii) When moored or at anchor, watch personnel may maintain security and safety of the ship by scanning the water for any indications of a threat.

(ix) While underway, Navy ships (with the exception of submarines) greater than 65 ft. (20 m) in length have at least two watch personnel; Navy ships less than 65 ft. (20 m) in length, surfaced submarines, and contractor ships have at least one watch person. While underway, watch personnel are alert at all times and have access to binoculars. Due to limited manning and space limitations, small boats and some craft transferring cargo from ship to shore do not have

dedicated watch personnel, and the boat crew is responsible for maintaining the safety of the boat and surrounding environment.

(x) All vessels use extreme caution and proceed at a "safe speed" so they can take proper and effective action to avoid a collision with any sighted object or disturbance and can be stopped within a distance appropriate to the prevailing circumstances and conditions.

(2) *Lookouts*. (i) Lookouts shall perform similar duties to standard watch personnel, and are also responsible for satisfying mitigation requirements.

(ii) The Navy will have one Lookout positioned on the platform (which could include a small boat, the elevated causeway, or the shore) that will maximize the potential for sightings during pile driving and pile removal.

(iii) The Lookout positioned on the elevated causeway or the shore shall be dedicated solely to diligent observation of the air and surface of the water. They shall have multiple observation objectives, which include but are not limited to detecting the presence of biological resources and recreational or fishing boats, observing the mitigation zone, and monitoring for equipment and personnel safety concerns.

(iv) A Lookout positioned on a small boat may include a member of the boat crew, and may be responsible for tasks in addition to observing the air or surface of the water (e.g., navigation of a rigid hull inflatable boat). However, a boat Lookout shall, to the maximum extent practicable and consistent with safety and training requirements, comply with the observation objectives described above for a Lookout positioned on the elevated causeway or the shore.

(v) Lookouts shall also perform visual observation starting 30 minutes prior to, during, and 30 minutes after the exercise within a mitigation zone of 60 yards (55 m) around the pile being driven.

(3) *Integrated comprehensive monitoring program*. (i) The Navy shall use the existing Integrated Comprehensive Monitoring Program (ICMP) and its new "study-based" approach to satisfy monitoring requirements for the JLOTS MMPA authorization.

(b) *Reporting measures*--(1) *General notification of injured or dead marine mammals*. (i) Navy personnel would ensure that NMFS (regional stranding coordinator) is notified immediately (or as soon as clearance procedures allow) if an injured or dead marine mammal is found during or shortly after, and in the vicinity of, any Navy training exercise.

(ii) The Navy shall provide NMFS with species identification or description of the animal(s), the condition of the animal(s) (including carcass condition if the animal is dead), location, time of first discovery, observed behaviors (if alive), and photographs or video (if available).

(2) *Annual monitoring and exercise report.* (i) Reports from individual monitoring events, results of analyses, publications, and periodic progress reports for specific monitoring projects would be posted to the Navy's Marine Species Monitoring web portal as they become available.

(ii) Progress and results from all monitoring activity conducted within the JLOTS training area shall be summarized in an annual report. This report shall detail the monitoring protocol, summarize the data recorded during monitoring, and estimate the number of marine mammals that may have been harassed.

(iii) Draft reports should be combined with the Navy's Atlantic Fleet Training and Testing exercise and monitoring reports and submitted to NMFS for review by February 13 (for exercises) and April 1 (for monitoring) each year. NMFS would review the report and provide comments for incorporation within 3 months.

§ 218.16 Applications for Letters of Authorization.

To incidentally take marine mammals pursuant to the regulations in this subpart, the U.S. citizen (as defined by § 216.106 of this chapter) conducting the activity identified in § 218.10(c) (the U.S. Navy) must apply for and obtain either an initial LOA in accordance with § 218.17 or a renewal under § 218.18.

§ 218.17 Letters of Authorization.

(a) An LOA, unless suspended or revoked, will be valid for a period of time not to exceed the period of validity of this subpart.

(b) Each LOA will 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 LOA will be based on a determination that the total number of marine mammals taken by the activity as a whole will have no more than a negligible impact on the affected species or stock of marine mammal(s).

§ 218.18 Renewal of Letters of Authorization.

(a) A Letter of Authorization issued under §§ 216.106 of this chapter and 218.17 for the activity identified in § 218.10(c) will be renewed based upon:

(1) Notification to NMFS that the activity described in the application submitted under § 218.18 will be undertaken and that there will not be a substantial modification to the described work, mitigation, or monitoring undertaken during the upcoming period of validity;

(2) Timely receipt (by the dates indicated in these regulations) of the monitoring reports required under § 218.15(b); and

(3) A determination by the NMFS that the mitigation, monitoring, and reporting measures required under § 218.14 and the LOA issued under §§ 216.106 of this chapter and 218.17, were undertaken and will be undertaken during the upcoming period of validity of a renewed Letter of Authorization.

(b) If a request for a renewal of an LOA issued under this § 216.106 of this chapter and § 218.17 indicates that a substantial modification, as determined by NMFS, to the described work, mitigation or monitoring undertaken during the upcoming season will occur, NMFS will provide the public a period of 30 days for review and comment on the request. Review and comment on renewals of LOAs 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 changes to the mitigation and monitoring requirements contained in these regulations or in the current LOA.

(c) A notice of issuance or denial of an LOA renewal will be published in the Federal Register.

(d) NMFS, in response to new information and in consultation with the Navy, may modify the mitigation or monitoring measures in subsequent LOAs if doing so creates a reasonable likelihood of more effectively accomplishing the goals of mitigation and monitoring. 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 Navy's monitoring from the previous year (either from the JLOTS training areas or other locations).

(2) Compiled results of Navy-funded research and development (R&D) studies (presented pursuant to the ICMP (§ 218.15(d)).

(3) Results from specific stranding investigations (either from the JLOTS training areas or other locations, and involving coincident mid- or high-frequency active sonar or explosives training or not involving coincident use).

(4) Results from the Long Term Prospective Study.

(5) Results from general marine mammal and sound research (funded by the Navy (or otherwise).

§ 218.19 Modifications to Letters of Authorization.

(a) Except as provided in paragraph (b) of this section, no substantive modification (including withdrawal or suspension) to the LOA by NMFS, issued pursuant to §§ 216.106 of this chapter and 218.17 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 an LOA under § 218.18, 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 § 218.12(c), an LOA issued pursuant to §§ 216.106 of this chapter and 218.17 may be substantively modified without prior notification and an opportunity for public comment. Notification will be published in the Federal Register within 30 days subsequent to the action.

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