

DEPARTMENT OF COMMERCE

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

NATIONAL MARINE FISHERIES SERVICE

Letter of Authorization

The Commander, U.S. Fleet Forces Command, 1562 Mitscher Ave., Ste 250, Norfolk, VA 23551-2457 and persons operating under his authority (i.e., Navy), are authorized to take marine mammals incidental to Navy activities conducted as part of the Atlantic Fleet Active Sonar Training (AFAST) in the Atlantic Ocean and Gulf of Mexico in accordance with 50 CFR Part 216, Subpart V-- Taking and Importing Marine Mammals; U.S. Navy's Atlantic Fleet Active Sonar Training (AFAST) subject to the provisions of the Marine Mammal Protection Act (16 U.S.C. 1361 *et seq.*; MMPA) and the following conditions:

1. This Authorization is valid for the period February 7, 2011, through January 21, 2012.
2. This Authorization is valid only for the unintentional taking of the species of marine mammals and methods of take identified in 50 CFR § 216.242(c) and Condition (5) of this Authorization incidental to the activities specified in 50 CFR § 216.240(c) and Condition (4)(a) of this Authorization and occurring within the AFAST Study Area, (as depicted in Figure 1-2 in the Navy's AFAST Final Environmental Impact Statement, which extends east from the Atlantic Coast of the U.S. to 45 degrees W. long. and south from the Atlantic and Gulf of Mexico Coasts to approximately 23 degrees N. lat., excluding the Bahamas).
3. This Authorization is valid only if the Holder of the Authorization or any person(s) operating under his authority implements the mitigation, monitoring, and reporting required pursuant to 50 CFR §§ 216.244 & 216.245 and implements the Terms and Conditions of this Authorization.
4. (a) The taking of marine mammals by the Navy is only authorized if it occurs incidental to the use of the following mid-frequency active sonar (MFAS) sources, high frequency active sonar (HFAS) sources, or explosive sonobuoys for U.S. Navy anti-submarine warfare (ASW), mine warfare (MIW) training, maintenance, or research, development, testing, and evaluation (RDT&E) in the amounts indicated below:

(i) AN/SQS-53 (hull-mounted sonar) – 3214 hours

(ii) AN/SQS-56 (hull-mounted sonar) – 1684 hours

(iii) AN/SQS-56 or 53 (hull-mounted sonar in object detection mode) – 216

hours

(iv) AN/BQQ-10 or 5 (submarine sonar) – 9976 pings

- (v) AN/AQS-22 or 13 (helicopter dipping sonar) – 2952 dips
- (vi) SSQ-62 (Directional Command Activated Sonobuoy System (DICASS) sonobuoys) – 5853 sonobuoys
- (vii) MK-48 (heavyweight torpedoes) – 32 torpedoes
- (viii) MK-46 or 54 (lightweight torpedoes) – 24 torpedoes
- (ix) AN/SSQ-110A (IEER explosive sonobuoy) – 1725 sonobuoys
- (x) AN/SSQ-125 (AEER) sonar sonobuoy) – 1550
- (xi) AN/SLQ-25 (NIXIE – towed countermeasure) – 2500 hours
- (xii) AN/BQS-15 (submarine navigation) – 450 hours
- (xiii) MK-1 or 2 or 3 or 4 (Submarine-fired Acoustic Device Countermeasure (ADC)) - 225 ADCs
- (xiv) Noise Acoustic Emitters (NAE – Sub-fired countermeasure) - 127 NAEs

(b) If the number of sonar hours, dips, torpedoes, and sonobuoys indicated in Condition 4(a) are exceeded by more than 10 percent, subsequent LOAs issued under the AFAST final rule will ensure that the total activities over five years do not result in exceeding the amount of authorized marine mammal takes indicated in 50 CFR 216.242(c).

5. This authorization is valid only for the incidental take of the following marine mammal species, and only by the indicated method and amount of take. The authorized take numbers include the total take occurring during the period from January 22, 2011 through January 21, 2012:

(a) Level B Harassment:

(i) Mysticetes:

- (A) North Atlantic right whale (*Eubalaena glacialis*) – 733
- (B) Humpback whale (*Megaptera novaeangliae*) – 4622
- (C) Minke whale (*Balaenoptera acutorostrata*) – 457
- (D) Sei whale (*Balaenoptera borealis*) – 1163
- (E) Fin whale (*Balaenoptera physalus*) – 970
- (F) Bryde’s whale (*Balaenoptera edeni*) – 40
- (G) Blue whale (*Balaenoptera musculus*) – 881

(ii) Odontocetes:

- (A) Sperm whales (Physeter macrocephalus) – 10734
- (B) Pygmy or dwarf sperm whales (Kogia breviceps or Kogia sima) – 4822
- (C) Beaked Whales (Cuvier’s, True’s, Gervais’, Sowerby’s, Blainville’s, Northern bottlenose whale) (Ziphius cavirostris, Mesoplodon mirus, M. europaeus, M. bidens, M. densirostris, Hyperoodon ampullatus) – 5398
- (D) Rough-toothed dolphin (Steno bredanensis) – 2979
- (E) Bottlenose dolphin (Tursiops truncatus) – 667482
- (F) Pan-tropical dolphin (Stenella attenuata) – 153237
- (G) Atlantic spotted dolphin (Stenella frontalis) – 413917
- (H) Spinner dolphin (Stenella longirostris) – 23271
- (I) Clymene dolphin (Stenella clymene) – 51082
- (J) Striped dolphin (Stenella coeruleoalba) – 192196
- (K) Common dolphin (Delphinus spp.) – 106106
- (L) Fraser’s dolphin (Lagenodelphis hosei) – 381
- (M) Risso’s dolphin (Grampus griseus) – 103483
- (N) Atlantic white-sided dolphin (Lagenorhynchus acutus) – 22716
- (O) White-beaked dophin (Lagenorhynchus albirostris) – 3795
- (P) Melon-headed whale (Peponocephala electra) – 1819
- (Q) Pygmy killer whale (Feresa attenuata) – 308
- (R) False killer whale (Pseudorca crassidens) – 592
- (S) Killer whale (Orcinus orca) – 553
- (T) Pilot whales (Short-finned pilot or long-finned) (Globicephala macrorhynchus or G. melas) – 140132
- (U) Harbor porpoise (Phocoena phocoena) – 168829

(ii) Pinnipeds:

- (A) Gray seal (Halichoerus grypus) – 8645
- (B) Harbor seal (Phoca vitulina) – 13925
- (C) Hooded seal (Cystophora cristata) – 17290
- (D) Harp seal (Pagophilus groenlandica) – 12102

(b) Level A Harassment and/or mortality of no more than 10 beaked whales (total), of any of the species listed in § 216.242(c)(1)(ii)(C) over the course of the 5-year regulations.

(c) If any of the take in Condition (5)(b) occurs, it will be deducted from the take to be authorized in subsequent LOAs under 50 CFR Subpart V so as to ensure that the total taking over 5 years does not exceed the amounts indicated in Condition 5(b) and 50 CFR § 216.242(c)(2).

6. Mitigation - The Holder of this Authorization, and any person(s) operating under his authority, must implement the following mitigation measures when conducting activities identified in 50 CFR § 216.240(c) and Condition 4(a) of this Authorization:

(a) Mitigation Measures for ASW and MIW training:

(i) All Lookouts onboard platforms involved in ASW training events shall review the NMFS-approved Marine Species Awareness Training (MSAT) material prior to use of mid-frequency active sonar.

(ii) All Commanding Officers, Executive Officers, and officers standing watch on the Bridge shall review the MSAT material prior to a training event employing the use of mid- or high-frequency active sonar.

(iii) Navy Lookouts shall undertake extensive training in order to qualify as a watchstander in accordance with the Lookout Training Handbook (NAVEDTRA, 12968-D).

(iv) Lookout training shall include on-the-job instruction under the supervision of a qualified, experienced watchstander. Following successful completion of this supervised training period, Lookouts shall complete the Personal Qualification Standard program, certifying that they have demonstrated the necessary skills (such as detection and reporting of partially submerged objects).

(v) Lookouts shall be trained in the most effective means to ensure quick and effective communication within the command structure in order to facilitate implementation of mitigation measures if marine mammals are spotted.

(vi) On the bridge of surface ships, there shall always be at least three people on watch whose duties include observing the water surface around the vessel.

(vii) All surface ships participating in ASW exercises shall, in addition to the three personnel on watch noted previously, have at all times during the exercise at least two additional personnel on watch as lookouts.

(viii) Personnel on lookout and officers on watch on the bridge shall have at least one set of binoculars available for each person to aid in the detection of marine mammals.

(ix) On surface vessels equipped with MFAS, pedestal-mounted "Big Eye" (20x110) binoculars shall be present and in good working order.

(x) Personnel on lookout shall employ visual search procedures employing a scanning methodology in accordance with the Lookout Training Handbook (NAVEDTRA 12968-D). Surface lookouts should scan the water from the ship to the horizon and be responsible for all contacts in their sector. In searching the assigned sector, the lookout should always start at the forward part of the sector and search aft (toward the back). To search and scan, the lookout should hold the binoculars steady so the horizon is in the top third of the field of vision and direct the eyes just below the horizon. The lookout should scan for approximately five seconds in as many small steps as possible across the field seen through the binoculars. They

should search the entire sector in approximately five-degree steps, pausing between steps for approximately five seconds to scan the field of view. At the end of the sector search, the glasses should be lowered to allow the eyes to rest for a few seconds, and then the lookout should search back across the sector with the naked eye.

(xi) After sunset and prior to sunrise, lookouts shall employ Night Lookout Techniques in accordance with the Lookout Training Handbook. At night, lookouts should not sweep the horizon with their eyes because this method is not effective when the vessel is moving. Lookouts should scan the horizon in a series of movements that should allow their eyes to come to periodic rests as they scan the sector. When visually searching at night, they should look a little to one side and out of the corners of their eyes, paying attention to the things on the outer edges of their field of vision.

(xii) Personnel on lookout shall be responsible for informing the Officer of the Deck of all objects or anomalies sighted in the water (regardless of the distance from the vessel), since any object or disturbance (e.g., trash, periscope, surface disturbance, discoloration) in the water may be indicative of a threat to the vessel and its crew or indicative of a marine species that may need to be avoided as warranted.

(xiii) Commanding Officers shall make use of marine mammal detection cues and information to limit interaction with marine mammals to the maximum extent possible consistent with safety of the ship.

(xiv) All personnel engaged in passive acoustic sonar operation (including aircraft, surface ships, or submarines) shall monitor for marine mammal vocalizations and report the detection of any marine mammal to the appropriate watch station for dissemination and appropriate action.

(xv) Units shall use training lookouts to survey for marine mammals prior to commencement and during the use of active sonar.

(xvi) During operations involving sonar, personnel shall utilize all available sensor and optical systems (such as Night Vision Goggles) to aid in the detection of marine mammals.

(xvii) Navy aircraft participating in exercises at sea shall conduct and maintain, when operationally feasible and safe, surveillance for marine mammals as long as it does not violate safety constraints or interfere with the accomplishment of primary operational duties.

(xviii) Aircraft with deployed sonobuoys shall use only the passive capability of sonobuoys when marine mammals are detected within 200 yards (183 m) of the sonobuoy.

(xix) Marine mammal detections shall be reported immediately to assigned Aircraft Control Unit (if participating) for further dissemination to ships in the vicinity of the

marine mammals. This action shall occur when it is reasonable to conclude that the course of the ship will likely close the distance between the ship and the detected marine mammal.

(xx) Safety Zones - When marine mammals are detected by any means (aircraft, shipboard lookout, or acoustically) the Navy shall ensure that sonar transmission levels are limited to at least 6 dB below normal operating levels if any detected marine mammals are within 1,000 yards (914 m) of the sonar dome (the bow).

(A) Ships and submarines shall continue to limit maximum transmission levels by this 6-dB factor until the marine mammal has been seen to leave the 1,000-yd safety zone, has not been detected for 30 minutes, or the vessel has transited more than 2,000 yards (1829 m) beyond the location of the last detection.

(B) When marine mammals are detected by any means (aircraft, shipboard lookout, or acoustically) the Navy shall ensure that sonar transmission levels are limited to at least 10 dB below normal operating levels if any detected marine mammals are within 500 yards (457 m) of the sonar dome (the bow). Ships and submarines shall continue to limit maximum ping levels by this 10-dB factor until the marine mammal has been seen to leave the 500-yd safety zone, has not been detected for 30 minutes, or the vessel has transited more than 2,000 yards (1829 m) beyond the location of the last detection.

(C) When marine mammals are detected by any means (aircraft, shipboard lookout, or acoustically) the Navy shall ensure that sonar transmissions cease if any detected marine mammals are within 200 yards (183 m) of the sonar dome (the bow). Sonar shall not resume until the marine mammal has been seen to leave the 200-yd safety zone, has not been detected for 30 minutes, or the vessel has transited more than 2,000 yards (1829 m) beyond the location of the last detection.

(D) If the need for power-down should arise as detailed in this section, Navy shall follow the requirements as though they were operating at 235 dB – the normal operating level (i.e., the first power-down shall be to 229 dB, regardless of at what level above 235 sonar was being operated).

(xxi) Prior to start up or restart of active sonar, operators shall check that the Safety Zone radius around the sound source is clear of marine mammals.

(xxii) Sonar levels (generally) – The Navy shall operate sonar at the lowest practicable level, not to exceed 235 dB, except as required to meet tactical training objectives.

(xxiii) Helicopters shall observe/survey the vicinity of an ASW Operation for 10 minutes before the first deployment of active (dipping) sonar in the water.

(xxiv) Helicopters shall not dip their sonar within 200 yards (183 m) of a marine mammal and shall cease pinging if a marine mammal closes within 200 yards (183 m) of the helicopter after pinging has begun.

(xxv) Submarine sonar operators shall review detection indicators of close-aboard marine mammals prior to the commencement of ASW training activities involving active sonar.

(xxvi) Night vision devices shall be available to all ships and air crews, for use as appropriate.

(xxvii) Dolphin bowriding - if, after conducting an initial maneuver to avoid close quarters with dolphins, the ship concludes that dolphins are deliberately closing in on the ship to ride the vessel's bow wave, no further mitigation actions would be necessary because dolphins are out of the main transmission axis of the active sonar while in the shallow-wave area of the vessel bow.

(xxviii) TORPEXs conducted in the North Atlantic right whale (NARW) Great South Channel or Cape Cod Bay critical habitats (previously referred to as northeastern NARW feeding habitat) shall implement the following measures. The Great South Channel NARW critical habitat is defined as follows: The area bounded by 41 deg.40' N/69 deg.45' W; 41 deg.00' N/69 deg.05' W; 41 deg.38' N/68 deg.13' W; and 42 deg.10' N/68 deg.31' W. The Cape Cod Bay NARW critical habitat is defined as follows: the area bounded by 42 deg. 04.8' N/70 deg.10' W; 42 deg 12' N/70 deg.15' W; 42 deg.12' N/70 deg.30' W; 41 deg.46.8' N/70 deg.30' W and on the south and east by the interior shore line of Cape Cod, Massachusetts.

(A) All torpedo-firing operations shall take place during daylight hours.

(B) During the conduct of each test, visual surveys of the test area shall be conducted by all vessels and aircraft involved in the exercise to detect the presence of marine mammals. Additionally, trained observers shall be placed on the submarine, spotter aircraft, and the surface support vessel. All participants shall report sightings of any marine mammals, including negative reports, prior to torpedo firings. Reporting requirements shall be outlined in the test plans and procedures written for each individual exercise, and shall be emphasized as part of pre-exercise briefings conducted with all participants.

(C) Observers shall receive NMFS-approved training in field identification, distribution, and relevant behaviors of marine mammals of the western north Atlantic. Observers shall fill out Standard Sighting Forms and the data shall be housed at the Naval Undersea Warfare Center Division Newport (NUWCDIVNPT). Any sightings of North Atlantic right whales shall be immediately communicated to the Sighting Advisory System (SAS). All platforms shall have onboard a copy of:

(1) The Guide to Marine Mammals and Turtles of the US Atlantic and Gulf of Mexico (Wynne and Schwartz 1999)

(2) The NMFS Critical Sightings Program placard

(3) Right Whales, Guidelines to Mariners placard

(D) In addition to the visual surveillance discussed above, dedicated aerial surveys shall be conducted utilizing a fixed-wing aircraft. An aircraft with an overhead wing (i.e., Cessna Skymaster or similar) shall be used to facilitate a clear view of the test area. Two trained observers, in addition to the pilot, shall be embarked on the aircraft. Surveys shall be conducted at an approximate altitude of 1000 ft (305 m) flying parallel track lines at a separation of 1 nmi (1.85 km), or as necessary to facilitate good visual coverage of the sea surface. While conducting surveillance, the aircraft shall maintain an approximate speed of 100 knots (185 km/hr). Since factors that affect visibility are highly dependent on the specific time of day of the survey, the flight operator will have the flexibility to adjust the flight pattern to reduce glare and improve visibility. The entire test site shall be surveyed initially, but once preparations are being made for an actual test launch, survey effort shall be concentrated over the vicinity of the individual test location. Further, for approximately ten minutes immediately prior to launch, the aircraft shall racetrack back and forth between the launch vessel and the target vessel.

(E) Commencement of an individual torpedo test scenario shall not occur until observers from all vessels and aircraft involved in the exercise have reported to the Officer in Tactical Command (OTC) and the OTC has declared that the range is clear of marine mammals. Should marine mammals be present within or seen moving toward the test area, the test shall be either delayed or moved as required to avoid interference with the animals.

(F) The TORPEX shall be suspended if the Beaufort Sea State exceeds 3 or if visibility precludes safe operations.

(G) Vessel speeds:

(1) During transit through the NARW Great South Channel or Cape Cod Bay critical habitats, surface vessels and submarines shall maintain a speed of no more than 10 knots (19 km/hr) while not actively engaged in the exercise procedures.

(2) During TORPEX operations, a firing vessel should, where feasible, not exceed 10 knots. When a submarine is used as a target, vessel speeds should, where feasible, not exceed 18 knots. However, on occasion, when surface vessels are used as targets, the vessel may exceed 18 kts in order to fully test the functionality of the torpedoes. This increased speed would occur for a short period of time (e.g., 10-15 minutes) to evade the torpedo when fired upon.



(H) In the event of an animal strike, or if an animal is discovered that appears to be in distress, the Navy shall immediately report the discovery through the appropriate Navy Chain of Command.

(xxix) The Navy shall abide by the following additional measures:

(A) The Navy shall avoid planning major exercises in the specified planning awareness areas (PAAs - see Figure 2 in 50 CFR 216 Subpart V) where feasible. Should national security require the conduct of more than four major exercises (C2X, JTFEX, SEASWITI, or similar scale event) in these areas (meaning all or a portion of the exercise) per year the Navy shall provide NMFS with prior notification and include the information in any associated after-action or monitoring reports.

(B) The Navy shall conduct no more than one of the four above-mentioned major exercises (COMPTUEX, JTFEX, SEASWITI or similar scale event) per year in the Gulf of Mexico to the extent operationally feasible. If national security needs require more than one major exercise to be conducted in the Gulf of Mexico PAAs, the Navy shall provide NMFS with prior notification and include the information in any associated after-action or monitoring reports.

(C) The Navy shall include the PAAs in the Navy's Protective Measures Assessment Protocol (PMAP) (implemented by the Navy for use in the protection of the marine environment) for unit level situational awareness (i.e., exercises other than COMPTUEX, JTFEX, SEASWITI) and planning purposes.

(D) Helicopter Dipping Sonar - Unless otherwise dictated by national security needs, the Navy shall minimize helicopter dipping sonar activities within the NARW critical habitat (previously referred to as southeastern NARW calving habitat) from November 15 – April 15. NARW critical habitat is defined as follows: The coastal waters between 31 deg.15' N and 30 deg.15' N from the coast out 15 nautical miles; and the coastal waters between 30 deg.15' N and 28 deg.00' N from the coast out 5 nautical miles. All mitigation measures described in this LOA that apply to the critical habitat are in effect from November 15 – April 15 and also apply to an associated area of concern which extends 9 km (5 nm) seaward of the designated critical habitat boundaries.

(E) Object Detection Exercises – The Navy shall implement the following measures regarding object detection activities in the North Atlantic right whale critical habitat:

(1) The Navy shall reduce the time spent conducting object detection exercises in the NARW critical habitat;

(2) Prior to conducting surface ship object detection exercises in the NARW critical habitat during the time of November 15 – April 15, ships shall contact

FACSFACJAX to obtain the latest North Atlantic right whale sighting information. FACSFACJAX shall advise ships of all reported whale sightings in the vicinity of the NARW critical habitat and associated areas of concern (which extend 9 km (5 nm) seaward of the critical habitat boundaries). To the extent operationally feasible, ships shall avoid conducting training in the vicinity of recently sighted North Atlantic right whales. Ships shall maneuver to maintain at least 500 yards (457 m) separation from any observed whale, consistent with the safety of the ship.

(xxx) The Navy shall abide by the letter of the “Stranding Response Plan for Major Navy Training Exercises in the AFAST Study Area” (attached), to include the following measures:

(A) Shutdown Procedures – When an Uncommon Stranding Event (USE – defined in 50 CFR § 216.241) occurs during a Major Training Exercise (MTE, including SEASWITI, IAC, Group Sails, JTFEX, or COMPTUEX) in the AFAST Study Area, the Navy shall implement the procedures described below.

(1) The Navy shall implement a Shutdown (as defined 50 CFR § 216.241) when advised by a NMFS Office of Protected Resources Headquarters Senior Official designated in the AFAST Stranding Communication Protocol that a USE involving live animals has been identified and that at least one live animal is located in the water. NMFS and Navy shall communicate, as needed, regarding the identification of the USE and the potential need to implement shutdown procedures.

(2) Any shutdown in a given area shall remain in effect in that area until NMFS advises the Navy that the subject(s) of the USE at that area die or are euthanized, or that all live animals involved in the USE at that area have left the area (either of their own volition or herded).

(3) If the Navy finds an injured or dead animal of any species other than a North Atlantic right whale floating at sea during an MTE, the Navy shall notify NMFS immediately or as soon as operational security considerations allow. The Navy shall provide NMFS with species or description of the animal(s), the condition of the animal(s), (including carcass condition if the animal(s) is/are dead), location, time of first discovery, observed behaviors (if alive), and photo or video (if available). Based on the information provided, NMFS shall determine if, and advise the Navy whether a modified shutdown is appropriate on a case-by-case basis.

(4) If the Navy finds an injured (or entangled) North Atlantic right whale floating at sea during an MTE, the Navy shall implement shutdown procedures (14 nm off Atlantic coast or 17 nm in Gulf of Mexico, as defined below) around the animal immediately (without waiting for notification from NMFS). The Navy shall then notify NMFS (pursuant to the AFAST Communication Protocol) immediately or as soon as operational security considerations allow. The Navy shall provide NMFS with species or description of the animal(s), the condition of the animal(s) including location, time of

first discovery, observed behaviors (if alive), and photo or video (if available). Subsequent to the discovery of the injured whale, any Navy platforms in the area shall report any North Atlantic right whale sightings to NMFS (or to a contact that can alert NMFS as soon as possible). Based on the information provided, NMFS may initiate/organize an aerial survey (which may include Navy's assistance in accordance with the Memorandum of Understanding (MOU) or by other available means) to see if other North Atlantic right whales are in the vicinity. Based on the information provided by the Navy and, if necessary, the outcome of the aerial surveys, NMFS shall determine whether a continued shutdown is appropriate on a case-by-case basis. Though it will be determined on a case-by-case basis after Navy/NMFS discussion of the situation, NMFS anticipates that the shutdown will continue within 14 or 17 nm of a live, injured/entangled North Atlantic right whale until the animal dies or has not been seen for at least 3 hours (either by NMFS staff attending the injured animal or Navy personnel monitoring the area around where the animal was last sighted).

(5) If the Navy finds a dead North Atlantic right whale floating at sea during an MTE, the Navy shall notify NMFS (pursuant to AFAST Stranding Communication Protocol) immediately or as soon as operational security considerations allow. The Navy shall provide NMFS with species or description of the animal(s), the condition of the animal(s), (including carcass condition if the animal(s) is/are dead), location, time of first discovery, observed behaviors (if alive), and photo or video (if available). Subsequent to the discovery of the dead whale, if the Navy is operating sonar in the area they shall use increased vigilance (in looking for North Atlantic right whales) and all platforms in the area shall report sightings of North Atlantic right whales to NMFS as soon as possible. Based on the information provided, NMFS may initiate/organize an aerial survey (which may include Navy's assistance in accordance with the Memorandum of Understanding (MOU) or by other available means) to see if other North Atlantic right whales are in the vicinity. Based on the information provided by the Navy and, if necessary, the outcome of the aerial surveys, NMFS will determine whether any additional mitigation measures are necessary on a case-by-case basis.

(6) In the event, following a USE, that: a) qualified individuals are attempting to herd animals back out to the open ocean and animals are not willing to leave, or b) animals are seen repeatedly heading for the open ocean but turning back to shore, NMFS and the Navy should coordinate (including an investigation of other potential anthropogenic stressors in the area) to determine if the proximity of MFAS/HFAS training activities or explosive detonations, though farther than 14 nm (off Atlantic coast) or 17 nm (in Gulf of Mexico) from the distressed animal(s), is likely decreasing the likelihood that the animals return to the open water. If so, NMFS and the Navy shall further coordinate to determine what measures are necessary to further minimize that likelihood and implement those measures as appropriate.

(B) Within 72 hours of NMFS notifying the Navy of the presence of a USE, the Navy shall provide available information to NMFS (per the AFAST Communication Protocol) regarding the location, number and types of acoustic/explosive sources,

direction and speed of units using MFAS/HFAS, and marine mammal sightings information associated with training activities occurring within 80 nm (148 km) and 72 hours prior to the USE event. Information not initially available regarding the 80 nm (148 km), 72 hours period prior to the event shall be provided as soon as it becomes available. The Navy shall provide NMFS investigative teams with additional relevant unclassified information as requested, if available.

(b) Mitigation for IEER/AEER - The following mitigation measures shall be used with the employment of Improved Extended Echo Ranging/Advanced Extended Echo Ranging (IEER/AEER) sonobuoys.

(i) Navy crews shall conduct visual reconnaissance of the drop area prior to laying their intended sonobuoy pattern. This search should be conducted below 500 yards (457 m) at a slow speed, if operationally feasible and weather conditions permit. In dual aircraft training activities, crews are allowed to conduct coordinated area clearances.

(ii) For IEER (AN/SSQ-110A), Navy crews shall conduct a minimum of 30 minutes of visual and acoustic monitoring of the search area prior to commanding the first post (source/receiver sonobuoy pair) detonation. This 30-minute observation period may include pattern deployment time.

(iii) For any part of the intended sonobuoy pattern where a post (source/receiver sonobuoy pair) will be deployed within 1,000 yards (914 m) of observed marine mammal activity, deploy the receiver ONLY (i.e., not the source) and monitor while conducting a visual search. When marine mammals are no longer detected within 1,000 yards (914 m) of the intended post position, the source sonobuoy (AN/SSQ-110A/SSQ-125) will be co-located with the receiver.

(iv) When operationally feasible, Navy crews shall conduct continuous visual and aural monitoring of marine mammal activity. This shall include monitoring of aircraft sensors from the time of the first sensor placement until the aircraft have left the area and are out of RF range of these sensors.

(v) Aural Detection: If the presence of marine mammals is detected aurally, then that should cue the aircrew to increase the diligence of their visual surveillance. Subsequently, if no marine mammals are visually detected, then the Navy crew may continue multi-static active search.

(vi) Visual Detection:

(A) If marine mammals are visually detected within 1,000 yards (914 m) of the explosive source sonobuoy (AN/SSQ-110A/SSQ-125) intended for use, then that payload shall not be activated.

(B) Navy Aircrews may utilize this post once the marine mammals have not been re-sighted for 30 minutes, or are observed to have moved outside the 1,000 yards (914 m) safety buffer.

(C) Navy Aircrews may shift their multi-static active search to another post, where marine mammals are outside the 1,000 yards (914 m) safety buffer.

(vii) For IEER (AN/SSQ-110A), Navy Aircrews shall make every attempt to manually detonate the unexploded charges at each post in the pattern prior to departing the operations area by using the “Payload 1 Release” command followed by the “Payload 2 Release” command. Aircrews shall refrain from using the “Scuttle” command when two payloads remain at a given post. Aircrews shall ensure that a 1,000 yard (914 m) safety buffer, visually clear of marine mammals, is maintained around each post as is done during active search operations.

(viii) Navy Aircrews shall only leave posts with unexploded charges in the event of a sonobuoy malfunction, an aircraft system malfunction, or when an aircraft must immediately depart the area due to issues such as fuel constraints, inclement weather, and in-flight emergencies. In these cases, the sonobuoy will self-scuttle using the secondary or tertiary method.

(ix) The Navy shall ensure all payloads are accounted for. Explosive source sonobuoys (AN/SSQ-110A) that cannot be scuttled shall be reported as unexploded ordnance via voice communications while airborne, then upon landing via naval message.

(x) Marine mammal monitoring shall continue until out of own-aircraft sensor range.

(c) Mitigation Measures related to Vessel Transit and North Atlantic Right Whales

(i) Mid-Atlantic, Offshore of the Eastern United States

(A) All Navy vessels are required to use extreme caution and operate at a slow, safe speed consistent with mission and safety during the months indicated below and within a 37 km (20 nm) arc (except as noted) of the specified associated reference points:

(1) South and East of Block Island (37 km (20 nm) seaward of line between 41-4.49 deg. N. lat. 071-51.15 deg.W. long. and 41-18.58 deg.N. lat. 070-50.23 deg.W. long): Sept-Oct and Mar-Apr.

(2) New York / New Jersey (40-30.64 deg.N. lat. 073-57.76 deg.W. long.): Sep–Oct and Feb-Apr.

(3) Delaware Bay (Philadelphia) (38-52.13 deg.N. lat. 075-1.93 deg.W. long.): Oct–Dec and Feb–Mar.

(4) Chesapeake Bay (Hampton Roads and Baltimore) (37-1.11 deg. N.lat. 075-57.56° W. long.): Nov-Dec and Feb-Apr.

(5) North Carolina (34-41.54 deg.N. lat. 076-40.20 deg.W. long.): Dec-Apr.

(6) South Carolina (33-11.84 deg.N. lat. 079-8.99 deg.W. long. and 32-43.39 deg.N. lat. 079-48.72 deg.W. long.): Oct-Apr.

(B) During the months indicated in paragraph (c)(i)(A), above, Navy vessels shall practice increased vigilance with respect to avoidance of vessel-whale interactions along the mid-Atlantic coast, including transits to and from any mid-Atlantic ports not specifically identified in paragraph (c)(i)(A), above.

(C) All surface units transiting within 56 km (30 nm) of the coast in the mid-Atlantic shall ensure at least two watchstanders are posted, including at least one lookout who has completed required MSAT training.

(D) Navy vessels shall not knowingly approach any whale head on and shall maneuver to keep at least 1,500 ft (457 m) away from any observed whale, consistent with vessel safety.

(ii) Southeast Atlantic, Offshore of the Eastern United States – for the purposes of the measures below (within (ii)), the “southeast” encompasses sea space from Charleston, South Carolina, southward to Sebastian Inlet, Florida, and from the coast seaward to 148 km (80 nm) from shore.

(A) Prior to transiting or training in the NARW critical habitat or associated area of concern, ships shall contact Fleet Area Control and Surveillance Facility, Jacksonville, to obtain latest whale sighting and other information needed to make informed decisions regarding safe speed and path of intended movement. Subs shall contact Commander, Submarine Group Ten for similar information.

(B) The following specific mitigation measures apply to activities occurring within the NARW critical habitat and an associated area of concern which extends 9 km (5 nm) seaward of the NARW critical habitat boundaries:

(1) When transiting within the NARW critical habitat or associated area of concern, vessels shall exercise extreme caution and proceed at a slow safe speed. The speed shall be the slowest safe speed that is consistent with mission, training and operations.

(2) Speed reductions (adjustments) are required when a whale is sighted by a vessel or when the vessel is within 9 km (5 nm) of a reported new sighting less than 12 hours old. Circumstances could arise where, in order to avoid North

Atlantic right whale(s), speed reductions could mean a vessel must reduce speed to a minimum at which it can safely keep on course or vessels could come to an all stop.

(3) Vessels shall avoid head-on approaches to North Atlantic right whale(s) and shall maneuver to maintain at least 457 m (500 yd) of separation from any observed whale if deemed safe to do so. These requirements do not apply if a vessel's safety is threatened, such as when a change of course would create an imminent and serious threat to a person, vessel, or aircraft, and to the extent vessels are restricted in their ability to maneuver.

(4) Ships shall not transit through the NARW critical habitat or associated area of concern in a North-South direction.

(5) Ships, surfaced subs, and aircraft shall report any whale sightings to Fleet Area Control and Surveillance Facility, Jacksonville, by the quickest and most practicable means. The sighting report shall include the time, latitude/longitude, direction of movement and number and description of whales (i.e., adult/calf).

(iii) Northeast Atlantic, Offshore of the Eastern United States

(A) Prior to transiting the NARW Great South Channel or Cape Cod Bay critical habitat, ships shall obtain the latest North Atlantic right whale sightings and other information needed to make informed decisions regarding safe speed.

(B) Ships, surfaced subs, and aircraft shall report any North Atlantic right whale sightings (if the whale is identifiable as a right whale) off the northeastern U.S. to the Northeast right whale sighting advisory system at (978) 585-8473 or to the US Coast Guard via Channel 16. The report shall include the time of sighting, lat/long, direction of movement (if apparent) and number and description of the whale(s).

(C) Vessels or aircraft that observe whale carcasses shall record the location and time of the sighting and report this information as soon as possible through Navy's special incident reporting procedures for marine mammals. All whale strikes must be reported. This report shall include: the date, time, and location of the strike; vessel course and speed; operations being conducted by the vessel; weather conditions, visibility, and sea state; description of the whale; narrative of incident; and indication of whether photos/videos were taken. Navy personnel are encouraged to take photos whenever possible.

(D) Specific mitigation measures related to activities occurring within the NARW Great South Channel or Cape Cod Bay critical habitat include the following:

(1) Vessels shall avoid head-on approaches to North Atlantic right whale(s) and shall maneuver to maintain at least 500 yd (457 m) of separation from any observed whale if deemed safe to do so. These requirements do not apply if a vessel's safety is threatened, such as when change of course would create an imminent and serious threat to person, vessel, or aircraft, and to the extent vessels are restricted in their ability to maneuver.

(2) When transiting within the NARW Great South Channel or Cape Cod Bay critical habitat or the NARW Southeast U.S. critical habitat or associated area of concern, vessels shall use extreme caution and operate at a safe speed so as to be able to avoid collisions with North Atlantic right whales and other marine mammals, and stop within a distance appropriate to the circumstances and conditions.

(3) Speed reductions (adjustments) are required when a whale is sighted by a vessel or when the vessel is within 9 km (5 nm) of a reported new sighting less than one week old.

(4) Ships transiting in the NARW Cape Cod Bay and Great South Channel critical habitats shall obtain information on recent whale sightings in the vicinity of the feeding habitat. Any vessel operating in the vicinity of a North Atlantic right whale shall consider additional speed reductions per Rule 6 of International Navigational Rules.

7. Monitoring and Reporting – When conducting operations identified in 50 CFR § 216.240(c) and Condition 4(a), the Holder of the Authorization and any person(s) operating under his authority must implement the following monitoring and reporting measures. All reports should be submitted to the Director, Office of Protected Resources, National Marine Fisheries Service, 1315 East-West Highway, Silver Spring MD 20910 and copies provided to the Assistant Regional Administrator for Protected Resources, Southeast Regional Office, National Marine Fisheries Service, 263 13<sup>th</sup> Avenue South, Saint Petersburg, Florida, 33701 and to the Assistant Regional Administrator for Protected Resources, Northeast Regional Office, 55 Great Republic Drive, Gloucester, Massachusetts, 09130-2298.

(a) As outlined in the AFAST Stranding Communication Plan, the Navy must notify NMFS immediately (or as soon as clearance procedures allow) if the specified activity identified in 50 CFR § 216.240(c) is thought to have resulted in the mortality or injury of any marine mammals, or in any take of marine mammals not identified in § 50 CFR 216.242(c).

(b) The Navy must implement the AFAST Monitoring Plan.

(c) The Navy shall continue to comply with the Integrated Comprehensive Monitoring Program (ICMP) Plan and continue to improve the program in consultation with NMFS.



(d) General Notification of Injured or Dead Marine Mammals - Navy personnel shall 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 utilizing MFAS, HFAS, or underwater explosive detonations. The Navy shall provide NMFS with species 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 photo or video (if available). The Navy shall consult the Stranding Response Plan to obtain more specific reporting requirements for specific circumstances.

(e) Annual AFAST Monitoring Plan Report - The Navy shall submit a report annually on October 1, 2010, describing the implementation and results (through August 1 of the same year) of the AFAST Monitoring Plan. The report will also include any analysis conducted or conclusions reached based on the previous year's data that were not completed in time for the previous year's monitoring report. Data collection methods will be standardized across range complexes to allow for comparison in different geographic locations. Although additional information will also be gathered, the marine mammal observers (MMOs) collecting marine mammal data pursuant to the AFAST Monitoring Plan shall, at a minimum, provide the same marine mammal observation data required in 50 CFR § 216.245(f)(1). The AFAST Monitoring Plan Report may be provided to NMFS within a larger report that includes the required Monitoring Plan Reports from AFAST and multiple Range Complexes.

(f) Annual AFAST Exercise Report - The Navy shall submit an Annual AFAST Exercise Report on October 1, 2011 (covering data gathered through August 1, 2011). This report shall contain information identified in 50 CFR §§ 216.245(f)(1) – (f)(3).

(1) MFAS/HFAS Major Training Exercises - This section shall contain the following information for the major training exercises for reporting (MTERs), which include the Southeastern ASW Integrated Training Initiative (SEASWITI), Integrated ASW Course (IAC), Composite Training Unit Exercises (COMPTUEX), and Joint Task Force Exercises (JTFEX) conducted in the AFAST Study Area:

(i) Exercise Information (for each MTER):

- (A) Exercise designator
- (B) Date that exercise began and ended
- (C) Location
- (D) Number and types of active sources used in the exercise
- (E) Number and types of passive acoustic sources used in exercise
- (F) Number and types of vessels, aircraft, etc., participating in exercise
- (G) Total hours of observation by watchstanders
- (H) Total hours of all active sonar source operation
- (I) Total hours of each active sonar source (along with explanation of how hours are calculated for sources typically quantified in alternate way (buoys, torpedoes, etc.)).

(J) Wave height (high, low, and average during exercise)

(ii) Individual marine mammal sighting info (for each sighting in each MTER)

(A) Location of sighting

(B) Species (if not possible – indication of whale/dolphin/pinniped)

(C) Number of individuals

(D) Calves observed (y/n)

(E) Initial Detection Sensor

(F) Indication of specific type of platform observation made from (including, for example, what type of surface vessel, i.e., FFG, DDG, or CG)

(G) Length of time observers maintained visual contact with marine mammal

(H) Wave height (in feet)

(I) Visibility

(J) Sonar source in use (y/n).

(K) Indication of whether animal is < 200 yd, 200-500 yd, 500-1000 yd, 1000-2000 yd, or > 2000 yd from sonar source in paragraph (f)(1)(ii)(J) of this section.

(L) Mitigation Implementation – Whether operation of sonar sensor was delayed, or sonar was powered or shut down, and how long the delay was.

(M) If source in use (i.e., in paragraph (f)(1)(ii)(J) of this section) is hull-mounted, true bearing of animal from ship, true direction of ship's travel, and estimation of animal's motion relative to ship (opening, closing, parallel)

(N) Observed behavior – Watchstanders shall report, in plain language and without trying to categorize in any way, the observed behavior of the animals (such as animal closing to bow ride, paralleling course/speed, floating on surface and not swimming, etc.)

(iii) An evaluation (based on data gathered during all of the MTERs) of the effectiveness of mitigation measures designed to avoid exposing marine mammals to MFAS. This evaluation shall identify the specific observations that support any conclusions the Navy reaches about the effectiveness of the mitigation.

(2) ASW Summary - This section shall include the following information as summarized from both MTERs and non-major training exercises:

(i) Total annual hours of each type of sonar source (along with explanation of how hours are calculated for sources typically quantified in alternate way (buoys, torpedoes, etc.))

(ii) Cumulative Impact Report - To the extent practicable, the Navy, in coordination with NMFS, shall develop and implement a method of annually reporting

non-major (i.e., other than MTERs) training exercises utilizing hull-mounted sonar. The report shall present an annual (and seasonal, where practicable) depiction of non-major training exercises geographically across the AFAST Study Area. To the extent practicable, this report will also include the total number of sonar hours (from helicopter dipping sonar and object detection exercises) conducted within the NARW Southeast U.S. critical habitat plus 5 nm buffer area). The Navy shall include (in the AFAST annual report) a brief annual progress update on the status of the development of an effective and unclassified method to report this information until an agreed-upon (with NMFS) method has been developed and implemented.

(3) IEER/AEER Summary - This section shall include an annual summary of the following IEER and AEER information:

(i) Total number of IEER and AEER events conducted in the AFAST Study Area

(ii) Total expended/detonated rounds (buoys)

(iii) Total number of self-scuttled IEER rounds

(g) Sonar Exercise Notification - The Navy shall submit to the NMFS HQ Office of Protected Resources (Chiefs, Endangered Species Division and Division of Permits, Conservation and Education) either an electronic (preferably) or verbal report within fifteen calendar days after the completion of any MTER indicating:

(1) Location of the exercise

(2) Beginning and end dates of the exercise

(3) Type of exercise (e.g. COMPTUEX or SEASWITI)

(h) AFAST 5-yr Comprehensive Report - The Navy shall submit to NMFS a draft report that analyzes and summarizes all of the multi-year marine mammal information gathered during ASW, MIW and IEER/AEER exercises for which annual reports are required (Annual AFAST Exercise Reports and AFAST Monitoring Plan Reports). This report will be submitted at the end of the fourth year of the rule (November 2012), covering activities that have occurred through June 1, 2012.

(i) Comprehensive National ASW Report - By June, 2014, the Navy shall submit a draft National Report that analyzes, compares, and summarizes the active sonar data gathered (through January 1, 2014) from the watchstanders and pursuant to the implementation of the Monitoring Plans for AFAST, SOCAL, the HRC, the Marianas Range Complex, the Northwest Training Range, and the Gulf of Alaska.

(j) The Navy shall respond to NMFS comments and requests for additional information or clarification on the AFAST Comprehensive Report, the Comprehensive National ASW report, the Annual AFAST Exercise Report, or the Annual AFAST Monitoring Plan Report (or the

multi-Range Complex Annual Monitoring Plan Report, if that is how the Navy chooses to submit the information) if submitted within 3 months of receipt. These reports will be considered final after the Navy has addressed NMFS' comments or provided the requested information, or three months after the submittal of the draft if NMFS does not comment by then.


(k) In 2011, the Navy shall convene a Monitoring Workshop in which the Monitoring Workshop participants will be asked to review the Navy's Monitoring Plans and monitoring results and make individual recommendations (to the Navy and NMFS) of ways of improving the Monitoring Plans. The recommendations shall be reviewed by the Navy, in consultation with NMFS, and modifications to the Monitoring Plan shall be made, as appropriate.

8. Prohibitions - Notwithstanding takings identified in 50 CFR § 216.242 and authorized in Condition 5 of this Letter of Authorization, no person in connection with the activities described in 50 CFR § 216.240 and Condition 4(a) may violate, or fail to comply with, the terms, conditions, and requirements of 50 CFR Subpart V or this Letter of Authorization.

9. This Authorization may be modified, suspended or withdrawn (pursuant to 50 CFR § 216.106(e)(1 or 2)) if the Holder or any person operating under his authority fails to abide by the conditions prescribed herein or if the authorized taking is having more than a negligible impact on the species or stock of affected marine mammals.

10. A copy of this Authorization (including Attachment A) and the attached Subpart V of the regulations, or a document containing the equivalent requirements specified in this Authorization or 50 CFR Subpart V, must be in the possession of the on-site Commanding Officer in order to take marine mammals under the authority of this Letter of Authorization while conducting the specified activity(ies).

11. The Holder of this Authorization and any person operating under his authority is required to comply with the Terms and Conditions of the Incidental Take Statement corresponding to NMFS' Biological Opinion as they pertain to listed marine mammals.

  
James H. Lecky, Director  
Office of Protected Resources  
National Marine Fisheries Service

**FEB 07 2011**

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Date