



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Silver Spring, MD 20910

Letter of Authorization

The Commander, U.S. Fleet Forces Command Attn: Code N46 1562 Mitscher Ave, STE 250 Norfolk, VA 23551, and persons operating under his or her authority (*i.e.*, Navy), are authorized to take marine mammals incidental to Navy training activities conducted in the U.S. Navy's Atlantic Fleet Training and Testing (AFTT) Study Area, subject to the provisions of the Marine Mammal Protection Act (16 U.S.C. 1361 *et seq.*; MMPA); applicable regulations found at 50 CFR Part 218, Subpart I ("the regulations"); and the following conditions:

1. This Letter of Authorization (Authorization or LOA) is valid for the period December 23, 2019, through November 13, 2025.
2. This Authorization is valid only for the unintentional taking of the species and stocks of marine mammals and methods of take identified in Condition 5 of this Authorization incidental to the training activities specified in Condition 4 of this Authorization and occurring within the AFTT Study Area. The AFTT Study Area begins at the mean high tide line along the U.S. East Coast and extends east to the 45-degree west longitude line, north to the 65-degree north latitude line, and south to approximately the 20-degree north latitude line (see Figures 1 and 2 attached, from the 2018 AFTT FEIS/OEIS and available at www.aftteis.com). The AFTT Study Area also includes Navy pierside locations, bays, harbors, and inland waterways, and civilian ports where training and testing occurs. The AFTT Study is where active sonar and other transducers, explosives, air guns, pile driving/removal, and vessels used during training may occur.
3. This Authorization is valid only if the Holder of the Authorization or any person(s) operating under his or her authority implements the mitigation, monitoring, and reporting required pursuant to 50 CFR §§ 218.84 and 218.85 and implements the Terms and Conditions of this Authorization.
4. This Authorization is valid for the training activities identified below that include sonar and other transducers, explosives, air guns, pile driving/removal activities, and vessel use:
 - (a) Amphibious warfare.
 - (b) Anti-submarine warfare.
 - (c) Electronic warfare.
 - (d) Expeditionary warfare.
 - (e) Mine warfare.
 - (f) Surface warfare.



5. The incidental take of marine mammals under the activities identified in Condition 4 and § 218.80(c) of the regulations is limited to the species and stocks listed in this condition (see below) by the indicated method of take and the indicated number of takes (Tables 1 and 2).

- (a) Non-lethal incidental take from training activities is limited to the species and stocks and the indicated method and number of takes shown in Table 1.

Table 1. Species and Stock-Specific Non-lethal Take Authorized from All Training Activities from November 14, 2018 through November 13, 2025 (includes take authorized under the preceding AFTT Authorization dated November 13, 2018).

Species	Stock	7-Year Total	
		Level B	Level A
Suborder Mysticeti (baleen whales)			
Family Balaenidae (right whales)			
North Atlantic right whale	Western North Atlantic	1,644	0
Family Balaenopteridae (roquals)			
Blue whale	Western North Atlantic (Gulf of St. Lawrence)	171	0
Bryde's whale	Northern Gulf of Mexico	5	0
	No Stock Designation	1,351	0
Minke whale	Canadian East Coast	15,824	0
Fin whale	Western North Atlantic	10,225	19
Humpback whale	Gulf of Maine	1,564	4
Sei whale	Nova Scotia	1,964	0
Suborder Odontoceti (toothed whales)			
Family Physeteridae (sperm whale)			
Sperm whale	Gulf of Mexico Oceanic	167	0
	North Atlantic	96,479	0
Family Kogiidae (sperm whales)			
Dwarf sperm whale	Gulf of Mexico Oceanic	103	0
	Western North Atlantic	56,060	68
Pygmy sperm whale	Northern Gulf of Mexico	103	0
	Western North Atlantic	56,060	68
Family Ziphiidae (beaked whales)			
Blainville's beaked whale	Northern Gulf of Mexico	244	0
	Western North Atlantic	85,661	0
Cuvier's beaked whale	Northern Gulf of Mexico	242	0
	Western North Atlantic	317,180	0
Gervais' beaked whale	Northern Gulf of Mexico	244	0
	Western North Atlantic	85,661	0

Northern bottlenose whale	Western North Atlantic	7,504	0
Sowersby's beaked whale	Western North Atlantic	85,661	0
True's beaked whale	Western North Atlantic	85,661	0
<i>Family Delphinidae (dolphins)</i>			
Atlantic spotted dolphin	Northern Gulf of Mexico	6,584	0
	Western North Atlantic	804,058	64
Atlantic white-sided dolphin	Western North Atlantic	99,615	3
Bottlenose dolphin	Choctawhatchee Bay	46	0
	Gulf of Mexico Eastern Coastal	166	0
	Gulf of Mexico Northern Coastal	1,524	0
	Gulf of Mexico Western Coastal	16,778	0
	Indian River Lagoon Estuarine System	1,980	0
	Jacksonville Estuarine System	589	0
	Mississippi Sound, Lake Borgne, Bay Boudreau	0	0
	Northern Gulf of Mexico Continental Shelf	10,918	13
	Northern Gulf of Mexico Oceanic	1,356	0
	Northern North Carolina Estuarine System	16,089	0
	Southern North Carolina Estuarine System	0	0
	Western North Atlantic Northern Florida Coastal	6,060	0
	Western North Atlantic Central Florida Coastal	35,861	0
	Western North Atlantic Northern Migratory Coastal	175,237	30
	Western North Atlantic Offshore	2,062,942	269
	Western North Atlantic South Carolina/Georgia Coastal	28,814	0
	Western North Atlantic Southern Migratory Coastal	81,155	14
Clymene dolphin	Northern Gulf of Mexico	694	0
	Western North Atlantic	463,220	19
False killer whale	Northern Gulf of Mexico	291	0
	Western North Atlantic	54,818	0
Fraser's dolphin	Northern Gulf of Mexico	418	0
	Western North Atlantic	26,155	0

Killer whale	Northern Gulf of Mexico	5	0
	Western North Atlantic	522	0
Long-finned pilot whale	Western North Atlantic	116,412	0
Melon-headed whale	Northern Gulf of Mexico	493	0
	Western North Atlantic	246,178	4
Pantropical spotted dolphin	Northern Gulf of Mexico	3,959	0
	Western North Atlantic	964,072	16
Pygmy killer whale	Northern Gulf of Mexico	118	0
	Western North Atlantic	43,009	0
Risso's dolphin	Northern Gulf of Mexico	276	0
	Western North Atlantic	140,368	0
Rough-toothed dolphin	Northern Gulf of Mexico	606	0
	Western North Atlantic	129,594	0
Short-beaked common dolphin	Western North Atlantic	1,467,625	87
Short-finned pilot whale	Northern Gulf of Mexico	251	0
	Western North Atlantic	210,736	0
Spinner dolphin	Northern Gulf of Mexico	1,593	0
	Western North Atlantic	487,644	9
Striped dolphin	Northern Gulf of Mexico	471	0
	Western North Atlantic	631,680	22
White-beaked dolphin	Western North Atlantic	269	0
<i>Family Phocoenidae (porpoises)</i>			
Harbor porpoise	Gulf of Maine/Bay of Fundy	206,071	1,121
<i>Suborder Pinnipedia</i>			
<i>Family Phocidae (true seals)</i>			
Gray seal	Western North Atlantic	10,038	0
Harbor seal	Western North Atlantic	16,277	0
Harp seal	Western North Atlantic	59,063	6
Hooded seal	Western North Atlantic	882	0

- (b) Incidental take by serious injury or mortality from vessel strikes is limited to a total of four large whales during training and testing activities combined from the species listed in Table 2. Of the four total takes, no more than one or two whales can be taken by vessel strike from each species (as indicated) listed in Table 2.

Table 2. Species and Stock-Specific Serious Injury or Mortality Authorized Take by Vessel Strike for Training and Testing Activities Combined from November 14, 2018 through

November 13, 2025 (includes take authorized under the preceding AFTT Authorization dated November 13, 2018).

<i>Species (Stock)</i>	<i>Seven-Year Take by Serious Injury or Mortality (no more than 4 whales over seven years and no more than 1 or 2 (as indicated) from any species/stock below).</i>
Fin whale (Western North Atlantic)	1
Sei whale (Nova Scotia)	1
Minke Whale (Canadian East Coast)	1
Humpback whale (Gulf of Maine)	2
Sperm whale (North Atlantic)	1

6. Mitigation. The Holder of this Authorization, and any persons operating under his or her authority, must implement the following mitigation measures when conducting the activities identified in Condition 4 of this Authorization.

(a) *Procedural mitigation.* Procedural mitigation is mitigation that the Navy must implement whenever and wherever an applicable training or testing activity takes place within the AFTT Study Area for each applicable activity category or stressor category and includes acoustic stressors (*i.e.*, active sonar, air guns, pile driving, weapons firing noise), explosive stressors (*i.e.*, sonobuoys, torpedoes, medium-caliber and large-caliber projectiles, missiles and rockets, bombs, sinking exercises, mines, anti-swimmer grenades, line charge testing and ship shock trials), and physical disturbance and strike stressors (*i.e.*, vessel movement; towed in-water devices; small-, medium-, and large-caliber non-explosive practice munitions; non-explosive missiles and rockets; non-explosive bombs and mine shapes).

(1) *Environmental awareness and education.* Appropriate personnel (including civilian personnel) involved in mitigation and training or testing activity reporting under the specified activities will complete one or more modules of the U.S. Navy Afloat Environmental Compliance Training Series, as identified in their career path training plan. Modules include: Introduction to the U.S. Navy Afloat Environmental Compliance Training Series, Marine Species Awareness Training, U.S. Navy Protective Measures Assessment Protocol, and U.S. Navy Sonar Positional Reporting System and Marine Mammal Incident Reporting.

(2) *Active sonar.* Active sonar includes low-frequency active sonar, mid-frequency active sonar, and high-frequency active sonar. For vessel-based active sonar activities, mitigation applies only to sources that are positively controlled and deployed from manned surface vessels (*e.g.*, sonar sources towed from manned surface platforms). For aircraft-based active sonar activities, mitigation applies only to sources that are positively controlled and deployed from manned aircraft that do not operate at high altitudes (*e.g.*, rotary-wing aircraft).

Mitigation does not apply to active sonar sources deployed from unmanned aircraft or aircraft operating at high altitudes (e.g., maritime patrol aircraft).

(i) *Number of Lookouts and observation platform.* (A) *Hull-mounted sources.* One Lookout for platforms with space or manning restrictions while underway (at the forward part of a small boat or ship) and platforms using active sonar while moored or at anchor (including pierside); two Lookouts for platforms without space or manning restrictions while underway (at the forward part of the ship); and four Lookouts for pierside sonar testing activities at Port Canaveral, Florida and Kings Bay, Georgia.

(B) *Sources that are not hull-mounted sources.* One Lookout on the ship or aircraft conducting the activity.

(ii) *Mitigation zones and requirements.* During the activity, at 1,000 yards (yd) the Navy must power down 6 decibels (dB), at 500 yd the Navy must power down an additional 4 dB (for a total of 10 dB), and at 200 yd the Navy must shut down for low-frequency active sonar ≥ 200 dB and hull-mounted mid-frequency active sonar; or at 200 yd the Navy must shut down for low-frequency active sonar < 200 dB, mid-frequency active sonar sources that are not hull-mounted, and high-frequency active sonar.

(A) Prior to the initial start of the activity (e.g., when maneuvering on station), Navy personnel must observe the mitigation zone for floating vegetation; if floating vegetation is observed, Navy personnel must relocate or delay the start until the mitigation zone is clear. Navy personnel also must observe the mitigation zone for marine mammals; if marine mammals are observed, Navy personnel must relocate or delay the start of active sonar transmission.

(B) During low-frequency active sonar at or above 200 dB and hull-mounted mid-frequency active sonar, Navy personnel must observe the mitigation zone for marine mammals and power down active sonar transmission by 6 dB if observed within 1,000 yd of the sonar source; power down by an additional 4 dB (10 dB total) if marine mammals are observed within 500 yd of the sonar source; and cease transmission if observed within 200 yd of the sonar source.

(C) During low-frequency active sonar below 200 dB, mid-frequency active sonar sources that are not hull mounted, and high-frequency active sonar, Navy personnel must observe the mitigation zone for marine mammals and cease active sonar transmission if marine mammals are observed within 200 yd of the sonar source.

(D) Commencement/recommencement conditions after a marine mammal sighting before or during the activity: Navy personnel must allow a sighted marine mammal to leave the mitigation zone prior to the initial start of the activity (by delaying the start) or during the activity (by not recommencing or powering up active sonar transmission) until one of the following conditions has been met: the animal is observed exiting the mitigation zone; the animal is thought to have exited the mitigation zone based on a determination of its course, speed, and movement relative to the sonar source; the mitigation zone has been clear from any additional sightings for 10 minutes (min) for aircraft-deployed sonar sources or 30 min for vessel-deployed sonar sources; for mobile activities, the active sonar source has transited a distance equal to

double that of the mitigation zone size beyond the location of the last sighting; or for activities using hull-mounted sonar where a dolphin(s) is observed in the mitigation zone, the Lookout concludes that the dolphin(s) is deliberately closing in on the ship to ride the ship's bow wave, and is therefore out of the main transmission axis of the sonar (and there are no other marine mammal sightings within the mitigation zone).

(3) *Air guns.* (i) *Number of Lookouts and observation platform.* One Lookout must be positioned on a ship or pierside.

(ii) *Mitigation zone and requirements.* 150 yd around the air gun.

(A) Prior to the initial start of the activity (e.g., when maneuvering on station), Navy personnel must observe the mitigation zone for floating vegetation; if floating vegetation is observed, Navy personnel must relocate or delay the start until the mitigation zone is clear. Navy personnel also must observe the mitigation zone for marine mammals; if marine mammals are observed, Navy personnel must relocate or delay the start of air gun use.

(B) During the activity, Navy personnel must observe the mitigation zone for marine mammals; if marine mammals are observed, Navy personnel must cease use of air guns.

(C) Commencement/recommencement conditions after a marine mammal sighting before or during the activity: Navy personnel must allow a sighted marine mammal to leave the mitigation zone prior to the initial start of the activity (by delaying the start) or during the activity (by not recommencing air gun use) until one of the following conditions has been met: the animal is observed exiting the mitigation zone; the animal is thought to have exited the mitigation zone based on a determination of its course, speed, and movement relative to the air gun; the mitigation zone has been clear from any additional sightings for 30 min; or for mobile activities, the air gun has transited a distance equal to double that of the mitigation zone size beyond the location of the last sighting.

(4) *Pile driving.* Pile driving and pile extraction sound during Elevated Causeway System training.

(i) *Number of Lookouts and observation platform.* One Lookout must be positioned on the shore, the elevated causeway, or a small boat.

(ii) *Mitigation zone and requirements.* 100 yd around the pile driver.

(A) Prior to the initial start of the activity (for 30 min), Navy personnel must observe the mitigation zone for floating vegetation; if floating vegetation is observed, Navy personnel must delay the start until the mitigation zone is clear. Navy personnel also must observe the mitigation zone for marine mammals; if marine mammals observed, Navy personnel must delay the start of pile driving or vibratory pile extraction.

(B) During the activity, Navy personnel must observe the mitigation zone for marine mammals; if marine mammals are observed, Navy personnel must cease impact pile driving or vibratory pile extraction.

(C) Commencement/recommencement conditions after a marine mammal sighting before or during the activity: Navy personnel must allow a sighted marine mammal to leave the mitigation zone prior to the initial start of the activity (by delaying the start) or during the activity (by not recommencing pile driving or pile extraction) until one of the following conditions has been met: the animal is observed exiting the mitigation zone; the animal is thought to have exited the mitigation zone based on a determination of its course, speed, and movement relative to the pile driving location; or the mitigation zone has been clear from any additional sightings for 30 min.

(5) *Weapons firing noise.* Weapons firing noise associated with large-caliber gunnery activities.

(i) *Number of Lookouts and observation platform.* One Lookout must be positioned on the ship conducting the firing. Depending on the activity, the Lookout could be the same as the one provided for under Explosive medium-caliber and large-caliber projectiles or under Small-, medium-, and large-caliber non-explosive practice munitions in paragraph (a)(8)(i) and (a)(19)(i) of this Condition.

(ii) *Mitigation zone and requirements.* Thirty degrees on either side of the firing line out to 70 yd from the muzzle of the weapon being fired.

(A) Prior to the initial start of the activity, Navy personnel must observe the mitigation zone for floating vegetation; if floating vegetation is observed, Navy personnel must relocate or delay the start until the mitigation zone is clear. Navy personnel also must observe the mitigation zone for marine mammals; if marine mammals are observed, Navy personnel must relocate or delay the start of weapons firing.

(B) During the activity, Navy personnel must observe the mitigation zone for marine mammals; if marine mammals are observed, Navy personnel must cease weapons firing.

(C) Commencement/recommencement conditions after a marine mammal sighting before or during the activity: Navy personnel must allow a sighted marine mammal to leave the mitigation zone prior to the initial start of the activity (by delaying the start) or during the activity (by not recommencing weapons firing) until one of the following conditions has been met: the animal is observed exiting the mitigation zone; the animal is thought to have exited the mitigation zone based on a determination of its course, speed, and movement relative to the firing ship; the mitigation zone has been clear from any additional sightings for 30 min; or for mobile activities, the firing ship has transited a distance equal to double that of the mitigation zone size beyond the location of the last sighting.

(6) *Explosive Sonobuoys.* (i) *Number of Lookouts and observation platform.* One Lookout must be positioned in an aircraft or on small boat. If additional platforms are

participating in the activity, personnel positioned in those assets (*e.g.*, safety observers, evaluators) must support observing the mitigation zone for marine mammals and other applicable biological resources while performing their regular duties.

(ii) *Mitigation zone and requirements.* 600 yd around an explosive sonobuoy.

(A) Prior to the initial start of the activity (*e.g.*, during deployment of a sonobuoy field, which typically lasts 20–30 min), Navy personnel must observe the mitigation zone for floating vegetation; if floating vegetation is observed, Navy personnel must relocate or delay the start until the mitigation zone is clear. Navy personnel must conduct passive acoustic monitoring for marine mammals and use information from detections to assist visual observations. Navy personnel also must visually observe the mitigation zone for marine mammals; if marine mammals are observed, Navy personnel must relocate or delay the start of sonobuoy or source/receiver pair detonations.

(B) During the activity, Navy personnel must observe the mitigation zone for marine mammals; if marine mammals are observed, Navy personnel must cease sonobuoy or source/receiver pair detonations.

(C) Commencement/recommencement conditions after a marine mammal sighting before or during the activity: Navy personnel must allow a sighted marine mammal to leave the mitigation zone prior to the initial start of the activity (by delaying the start) or during the activity (by not recommencing detonations) until one of the following conditions has been met: the animal is observed exiting the mitigation zone; the animal is thought to have exited the mitigation zone based on a determination of its course, speed, and movement relative to the sonobuoy; or the mitigation zone has been clear from any additional sightings for 10 min when the activity involves aircraft that have fuel constraints (*e.g.*, helicopter), or 30 min when the activity involves aircraft that are not typically fuel constrained.

(D) After completion of the activity (*e.g.*, prior to maneuvering off station) - when practical (*e.g.*, when platforms are not constrained by fuel restrictions or mission-essential follow-on commitments), Navy personnel must observe for marine mammals in the vicinity of where detonations occurred; if any injured or dead marine mammals are observed, Navy personnel must follow established incident reporting procedures. If additional platforms are supporting this activity (*e.g.*, providing range clearance), these Navy assets must assist in the visual observation of the area where detonations occurred.

(7) *Explosive torpedoes.* (i) *Number of Lookouts and observation platform.* One Lookout positioned in an aircraft. If additional platforms are participating in the activity, Navy personnel positioned in those assets (*e.g.*, safety observers, evaluators) must support observing the mitigation zone for marine mammals and other applicable biological resources while performing their regular duties.

(ii) *Mitigation zone and requirements.* 2,100 yd around the intended impact location.

(A) Prior to the initial start of the activity (*e.g.*, during deployment of the target), Navy personnel must observe the mitigation zone for floating vegetation; if floating vegetation is observed, relocate or delay the start until the mitigation zone is clear. Navy personnel also must conduct passive acoustic monitoring for marine mammals and use the information from detections to assist visual observations. Navy personnel must visually observe the mitigation zone for marine mammals and jellyfish aggregations; if marine mammals or jellyfish aggregations are observed, Navy personnel must relocate or delay the start of firing.

(B) During the activity, Navy personnel must observe for marine mammals and jellyfish aggregations; if marine mammals or jellyfish are observed, Navy personnel must cease firing.

(C) Commencement/recommencement conditions after a marine mammal sighting before or during the activity: Navy personnel must allow a sighted marine mammal to leave the mitigation zone prior to the initial start of the activity (by delaying the start) or during the activity (by not recommencing firing) until one of the following conditions has been met: the animal is observed exiting the mitigation zone; the animal is thought to have exited the mitigation zone based on a determination of its course, speed, and movement relative to the intended impact location; or the mitigation zone has been clear from any additional sightings for 10 min when the activity involves aircraft that have fuel constraints, or 30 min when the activity involves aircraft that are not typically fuel constrained.

(D) After completion of the activity (*e.g.*, prior to maneuvering off station) - when practical (*e.g.*, when platforms are not constrained by fuel restrictions or mission-essential follow-on commitments), Navy personnel must observe for marine mammals in the vicinity of where detonations occurred; if any injured or dead marine mammals are observed, Navy personnel must follow established incident reporting procedures. If additional platforms are supporting this activity (*e.g.*, providing range clearance), these Navy assets must assist in the visual observation of the area where detonations occurred.

(8) *Explosive medium-caliber and large-caliber projectiles.* Gunnery activities using explosive medium-caliber and large-caliber projectiles. Mitigation applies to activities using a surface target.

(i) *Number of Lookouts and observation platform.* One Lookout must be on the vessel or aircraft conducting the activity. For activities using explosive large-caliber projectiles, depending on the activity, the Lookout could be the same as the one described in Weapons Firing Noise in paragraph (a)(5)(i) of this Condition. If additional platforms are participating in the activity, Navy personnel positioned in those assets (*e.g.*, safety observers, evaluators) must support observing the mitigation zone for marine mammals and other applicable biological resources while performing their regular duties.

(ii) *Mitigation zone and requirements.* (A) 200 yd around the intended impact location for air-to-surface activities using explosive medium-caliber projectiles.

(B) 600 yd around the intended impact location for surface-to-surface activities using explosive medium-caliber projectiles.

(C) 1,000 yd around the intended impact location for surface-to-surface activities using explosive large-caliber projectiles.

(D) Prior to the initial start of the activity (*e.g.*, when maneuvering on station), Navy personnel must observe the mitigation zone for floating vegetation; if floating vegetation is observed, Navy personnel must relocate or delay the start until the mitigation zone is clear. Navy personnel also must observe the mitigation zone for marine mammals; if marine mammals are observed, Navy personnel must relocate or delay the start of firing.

(E) During the activity, Navy personnel must observe for marine mammals; if marine mammals are observed, Navy personnel must cease firing.

(F) Commencement/recommencement conditions after a marine mammal sighting before or during the activity: Navy personnel must allow a sighted marine mammal to leave the mitigation zone prior to the initial start of the activity (by delaying the start) or during the activity (by not recommencing firing) until one of the following conditions has been met: the animal is observed exiting the mitigation zone; the animal is thought to have exited the mitigation zone based on a determination of its course, speed, and movement relative to the intended impact location; the mitigation zone has been clear from any additional sightings for 10 min for aircraft-based firing or 30 min for vessel-based firing; or for activities using mobile targets, the intended impact location has transited a distance equal to double that of the mitigation zone size beyond the location of the last sighting.

(G) After completion of the activity (*e.g.*, prior to maneuvering off station) - when practical (*e.g.*, when platforms are not constrained by fuel restrictions or mission-essential follow-on commitments), Navy personnel must observe for marine mammals in the vicinity of where detonations occurred; if any injured or dead marine mammals are observed, Navy personnel must follow established incident reporting procedures. If additional platforms are supporting this activity (*e.g.*, providing range clearance), these Navy assets must assist in the visual observation of the area where detonations occurred.

(9) *Explosive missiles and rockets.* Aircraft-deployed explosive missiles and rockets. Mitigation applies to activities using a surface target.

(i) *Number of Lookouts and observation platform.* One Lookout must be positioned in an aircraft. If additional platforms are participating in the activity, Navy personnel positioned in those assets (*e.g.*, safety observers, evaluators) must support observing the mitigation zone for marine mammals and other applicable biological resources while performing their regular duties.

(ii) *Mitigation zone and requirements.* (A) 900 yd around the intended impact location for missiles or rockets with 0.6–20 lb net explosive weight.

(B) 2,000 yd around the intended impact location for missiles with 21–500 lb net explosive weight.

(C) Prior to the initial start of the activity (e.g., during a fly-over of the mitigation zone), Navy personnel must observe the mitigation zone for floating vegetation; if floating vegetation is observed, Navy personnel must relocate or delay the start until the mitigation zone is clear. Navy personnel also must observe the mitigation zone for marine mammals; if marine mammals are observed, Navy personnel must relocate or delay the start of firing.

(D) During the activity, Navy personnel must observe for marine mammals; if marine mammals are observed, Navy personnel must cease firing.

(E) Commencement/recommencement conditions after a marine mammal sighting before or during the activity: Navy personnel must allow a sighted marine mammal to leave the mitigation zone prior to the initial start of the activity (by delaying the start) or during the activity (by not recommencing firing) until one of the following conditions has been met: the animal is observed exiting the mitigation zone; the animal is thought to have exited the mitigation zone based on a determination of its course, speed, and movement relative to the intended impact location; or the mitigation zone has been clear from any additional sightings for 10 min when the activity involves aircraft that have fuel constraints, or 30 min when the activity involves aircraft that are not typically fuel constrained.

(F) After completion of the activity (e.g., prior to maneuvering off station) - when practical (e.g., when platforms are not constrained by fuel restrictions or mission-essential follow-on commitments), Navy personnel must observe for marine mammals in the vicinity of where detonations occurred; if any injured or dead marine mammals are observed, Navy personnel must follow established incident reporting procedures. If additional platforms are supporting this activity (e.g., providing range clearance), these Navy assets must assist in the visual observation of the area where detonations occurred.

(10) *Explosive bombs.* (i) *Number of Lookouts and observation platform.* One Lookout must be positioned in an aircraft conducting the activity. If additional platforms are participating in the activity, Navy personnel positioned in those assets (e.g., safety observers, evaluators) must support observing the mitigation zone for marine mammals and other applicable biological resources while performing their regular duties.

(ii) *Mitigation zone and requirements.* 2,500 yd around the intended target.

(A) Prior to the initial start of the activity (e.g., when arriving on station), Navy personnel must observe the mitigation zone for floating vegetation; if floating vegetation is observed, Navy personnel must relocate or delay the start until the mitigation zone is clear. Navy personnel also must observe the mitigation zone for marine mammals; if marine mammals are observed, Navy personnel must relocate or delay the start of bomb deployment.

(B) During the activity (e.g., during target approach), Navy personnel must observe for marine mammals; if marine mammals are observed, Navy personnel must cease bomb deployment.

(C) Commencement/recommencement conditions after a marine mammal sighting before or during the activity: Navy personnel must allow a sighted marine mammal to leave the mitigation zone prior to the initial start of the activity (by delaying the start) or during the activity (by not recommencing bomb deployment) until one of the following conditions has been met: the animal is observed exiting the mitigation zone; the animal is thought to have exited the mitigation zone based on a determination of its course, speed, and movement relative to the intended target; the mitigation zone has been clear from any additional sightings for 10 min; or for activities using mobile targets, the intended target has transited a distance equal to double that of the mitigation zone size beyond the location of the last sighting.

(D) After completion of the activity (*e.g.*, prior to maneuvering off station) - when practical (*e.g.*, when platforms are not constrained by fuel restrictions or mission-essential follow-on commitments), Navy personnel must observe for marine mammals in the vicinity of where detonations occurred; if any injured or dead marine mammals are observed, Navy personnel must follow established incident reporting procedures. If additional platforms are supporting this activity (*e.g.*, providing range clearance), these Navy assets must assist in the visual observation of the area where detonations occurred.

(11) *Sinking exercises.* (i) *Number of Lookouts and observation platform.* Two Lookouts (one must be positioned in an aircraft and one must be positioned on a vessel). If additional platforms are participating in the activity, Navy personnel positioned in those assets (*e.g.*, safety observers, evaluators) must support observing the mitigation zone for marine mammals and other applicable biological resources while performing their regular duties.

(ii) *Mitigation zone and requirements.* 2.5 nautical miles (nmi) around the target ship hulk.

(A) Prior to the initial start of the activity (90 min prior to the first firing), Navy personnel must conduct aerial observations of the mitigation zone for floating vegetation; if floating vegetation is observed Navy personnel must delay the start until the mitigation zone is clear. Navy personnel also must conduct aerial observations of the mitigation zone for marine mammals and jellyfish aggregations; if marine mammals or jellyfish aggregations are observed, Navy personnel must delay the start of firing.

(B) During the activity, Navy personnel must conduct passive acoustic monitoring for marine mammals and use information from detections to assist visual observations. Navy personnel must visually observe the mitigation zone for marine mammals from the vessel; if marine mammals are observed, Navy personnel must cease firing. Immediately after any planned or unplanned breaks in weapons firing of longer than two hours, Navy personnel must observe the mitigation zone for marine mammals from the aircraft and vessel; if marine mammals are observed, Navy personnel must delay recommencement of firing.

(C) Commencement/recommencement conditions after a marine mammal sighting before or during the activity: Navy personnel must allow a sighted marine mammal to leave the mitigation zone prior to the initial start of the activity (by delaying the start) or during the activity (by not recommencing firing) until one of the following conditions has been met: the

animal is observed exiting the mitigation zone; the animal is thought to have exited the mitigation zone based on a determination of its course, speed, and movement relative to the target ship hull; or the mitigation zone has been clear from any additional sightings for 30 min.

(D) After completion of the activity (for two hours after sinking the vessel or until sunset, whichever comes first), Navy personnel must observe for marine mammals in the vicinity of where detonations occurred; if any injured or dead marine mammals are observed, Navy personnel must follow established incident reporting procedures. If additional platforms are supporting this activity (e.g., providing range clearance), these Navy assets must assist in the visual observation of the area where detonations occurred.

(12) *Explosive mine countermeasure and neutralization activities.* (i) *Number of Lookouts and observation platform.* (A) One Lookout must be positioned on a vessel or in an aircraft when implementing the smaller mitigation zone defined in paragraph (a)(12)(ii)(A) of this Condition (using 0.1-5 lb net explosive weight charges).

(B) Two Lookouts (one must be in an aircraft and one must be on a small boat) when implementing the larger mitigation zone defined in paragraph (a)(12)(ii)(B) of this Condition (using 6-650 lb net explosive weight charges).

(C) If additional platforms are participating in the activity, Navy personnel positioned in those assets (e.g., safety observers, evaluators) must support observing the mitigation zone for marine mammals and other applicable biological resources while performing their regular duties.

(ii) *Mitigation zone and requirements.* (A) 600 yd around the detonation site for activities using 0.1–5 lb net explosive weight.

(B) 2,100 yd around the detonation site for activities using 6–650 lb net explosive weight (including high explosive target mines).

(C) Prior to the initial start of the activity (e.g., when maneuvering on station; typically, 10 min when the activity involves aircraft that have fuel constraints, or 30 min when the activity involves aircraft that are not typically fuel constrained), Navy personnel must observe the mitigation zone for floating vegetation; if floating vegetation is observed, Navy personnel must relocate or delay the start until the mitigation zone is clear. Navy personnel also must observe the mitigation zone for marine mammals; if marine mammals are observed, Navy personnel must relocate or delay the start of detonations.

(D) During the activity, Navy personnel must observe the mitigation zone for marine mammals; if marine mammals are observed, the Navy must cease detonations.

(E) Commencement/recommencement conditions after a marine mammal sighting before or during the activity: Navy personnel must allow a sighted marine mammal to leave the mitigation zone prior to the initial start of the activity (by delaying the start) or during the activity (by not recommencing detonations) until one of the following conditions has been met: the animal is observed exiting the mitigation zone; the animal is thought to have exited the

mitigation zone based on a determination of its course, speed, and movement relative to detonation site; or the mitigation zone has been clear from any additional sightings for 10 min when the activity involves aircraft that have fuel constraints, or 30 min when the activity involves aircraft that are not typically fuel constrained.

(F) After completion of the activity (typically 10 min when the activity involves aircraft that have fuel constraints, or 30 min when the activity involves aircraft that are not typically fuel constrained), Navy personnel must observe for marine mammals in the vicinity of where detonations occurred; if any injured or dead marine mammals are observed, Navy personnel must follow established incident reporting procedures. If additional platforms are supporting this activity (e.g., providing range clearance), these Navy assets must assist in the visual observation of the area where detonations occurred.

(13) *Explosive mine neutralization activities involving Navy divers.* (i) *Number of Lookouts and observation platform.* (A) Two Lookouts must be positioned (two small boats with one Lookout each, or one Lookout must be on a small boat and one must be in a rotary-wing aircraft) when implementing the smaller mitigation zone defined in paragraph (a)(13)(ii)(A) of this Condition.

(B) Four Lookouts must be positioned (two small boats with two Lookouts each), and a pilot or member of an aircrew must serve as an additional Lookout if aircraft are used during the activity, when implementing the larger mitigation zone defined in paragraph (a)(13)(ii)(B) of this Condition.

(C) All divers placing the charges on mines must support the Lookouts while performing their regular duties and must report applicable sightings to their supporting small boat or Range Safety Officer.

(D) If additional platforms are participating in the activity, Navy personnel positioned in those assets (e.g., safety observers, evaluators) must support observing the mitigation zone for marine mammals and other applicable biological resources while performing their regular duties.

(ii) *Mitigation zone and requirements.* (A) 500 yd around the detonation site during activities under positive control using 0.1–20 lb net explosive weight

(B) 1,000 yd around the detonation site during all activities using time-delay fuses (0.1–20 lb net explosive weight) and during activities under positive control using 21–60 lb net explosive weight charges.

(C) Prior to the initial start of the activity (e.g., when maneuvering on station for activities under positive control; 30 min for activities using time-delay firing devices), Navy personnel must observe the mitigation zone for floating vegetation; if floating vegetation is observed, Navy personnel must relocate or delay the start until the mitigation zone is clear. Navy personnel also must observe the mitigation zone for marine mammals; if marine mammals are observed, Navy personnel must relocate or delay the start of detonation or fuse initiation.

(D) During the activity, Navy personnel must observe for marine mammals; if marine mammals are observed, Navy personnel must cease detonation or fuse initiation. To the maximum extent practicable depending on mission requirements, safety, and environmental conditions, boats must position themselves near the mid-point of the mitigation zone radius (but outside of the detonation plume and human safety zone), must position themselves on opposite sides of the detonation location (when two boats are used), and must travel in a circular pattern around the detonation location with one Lookout observing inward toward the detonation site and the other observing outward toward the perimeter of the mitigation zone. If used, aircraft must travel in a circular pattern around the detonation location to the maximum extent practicable. Navy personnel must not set time-delay firing devices (0.1–20 lb. net explosive weight) to exceed 10 min.

(E) Commencement/recommencement conditions after a marine mammal sighting before or during the activity: Navy personnel must allow a sighted marine mammal to leave the mitigation zone prior to the initial start of the activity (by delaying the start) or during the activity (by not recommencing detonations) until one of the following conditions has been met: the animal is observed exiting the mitigation zone; the animal is thought to have exited the mitigation zone based on a determination of its course, speed, and movement relative to the detonation site; or the mitigation zone has been clear from any additional sightings for 10 min during activities under positive control with aircraft that have fuel constraints, or 30 min during activities under positive control with aircraft that are not typically fuel constrained and during activities using time-delay firing devices.

(F) After completion of an activity (for 30 min), Navy personnel must observe for marine mammals in the vicinity of where any detonations have occurred; if any injured or dead marine mammals are observed, Navy personnel must follow established incident reporting procedures. If additional platforms are supporting this activity (*e.g.*, providing range clearance), these Navy assets must assist in the visual observation of the area where detonations occurred.

(14) *Maritime security operations – anti-swimmer grenades.* (i) *Number of Lookouts and observation platform.* One Lookout must be positioned on the small boat conducting the activity. If additional platforms are participating in the activity, Navy personnel positioned in those assets (*e.g.*, safety observers, evaluators) must support observing the mitigation zone for marine mammals and other applicable biological resources while performing their regular duties.

(ii) *Mitigation zone and requirements.* 200 yd around the intended detonation location.

(A) Prior to the initial start of the activity (*e.g.*, when maneuvering on station), Navy personnel must observe the mitigation zone for floating vegetation; if floating vegetation is observed, Navy personnel must relocate or delay the start until the mitigation zone is clear. Navy personnel also must observe the mitigation zone for marine mammals; if marine mammals are observed, Navy personnel must relocate or delay the start of detonation.

(B) During the activity, Navy personnel must observe for marine mammals; if marine mammal are observed, Navy personnel must cease detonations.

(C) Commencement/recommencement conditions after a marine mammal sighting before or during the activity: Navy personnel must allow a sighted marine mammal to leave the mitigation zone prior to the initial start of the activity (by delaying the start) or during the activity (by not recommencing detonations) until one of the following conditions has been met: the animal is observed exiting the mitigation zone; the animal is thought to have exited the mitigation zone based on a determination of its course, speed, and movement relative to the intended detonation location; the mitigation zone has been clear from any additional sightings for 30 min; or the intended detonation location has transited a distance equal to double that of the mitigation zone size beyond the location of the last sighting.

(D) After completion of the activity (*e.g.*, prior to maneuvering off station), when practical (*e.g.*, when platforms are not constrained by fuel restrictions or mission-essential follow-on commitments), Navy personnel must observe for marine mammals in the vicinity of where detonations occurred; if any injured or dead marine mammals are observed, Navy personnel must follow established incident reporting procedures. If additional platforms are supporting this activity (*e.g.*, providing range clearance), these Navy assets must assist in the visual observation of the area where detonations occurred.

(15) *Line charge testing.* (i) *Number of Lookouts and observation platform.* One Lookout must be positioned on a vessel. If additional platforms are participating in the activity, Navy personnel positioned in those assets (*e.g.*, safety observers, evaluators) must support observing the mitigation zone for marine mammals and other applicable biological resources while performing their regular duties.

(ii) *Mitigation zone and requirements.* 900 yd around the intended detonation location.

(A) Prior to the initial start of the activity (*e.g.*, when maneuvering on station), Navy personnel must observe the mitigation zone for floating vegetation; if floating vegetation is observed, Navy personnel must delay the start until the mitigation zone is clear. Navy personnel also must observe the mitigation zone for marine mammals; if marine mammals are observed, Navy personnel must delay the start of detonations.

(B) During the activity, Navy personnel must observe for marine mammals; if marine mammals are observed, Navy personnel must cease detonations.

(C) Commencement/recommencement conditions after a marine mammal sighting before or during the activity: Navy personnel must allow a sighted marine mammal to leave the mitigation zone prior to the initial start of the activity (by delaying the start) or during the activity (by not recommencing detonations) until one of the following conditions has been met: the animal is observed exiting the mitigation zone; the animal is thought to have exited the mitigation zone based on a determination of its course, speed, and movement relative to the intended detonation location; or the mitigation zone has been clear from any additional sightings for 30 min.

(D) After completion of the activity (*e.g.*, prior to maneuvering off station), when practical (*e.g.*, when platforms are not constrained by fuel restrictions or mission-essential

follow-on commitments), Navy personnel must observe for marine mammals in the vicinity of where detonations occurred; if any injured or dead marine mammals are observed, Navy personnel must follow established incident reporting procedures. If additional platforms are supporting this activity (e.g., providing range clearance), these Navy assets must assist in the visual observation of the area where detonations occurred.

(16) *Ship shock trials.* (i) *Number of Lookouts and observation platform.* (A) A minimum of ten Lookouts or trained marine species observers (or a combination thereof) must be positioned either in an aircraft or on multiple vessels (i.e., a Marine Animal Response Team boat and the test ship).

(1) If aircraft are used, Lookouts or trained marine species observers must be in an aircraft and on multiple vessels.

(2) If aircraft are not used, a sufficient number of additional Lookouts or trained marine species observers must be used to provide vessel-based visual observation comparable to that achieved by aerial surveys.

(B) If additional platforms are participating in the activity, Navy personnel positioned in those assets (e.g., safety observers, evaluators) must support observing the mitigation zone for applicable biological resources while performing their regular duties.

(ii) *Mitigation zone and requirements.* 3.5 nmi around the ship hull.

(A) The Navy must not conduct ship shock trials in the Jacksonville Operating Area during North Atlantic right whale calving season from November 15 through April 15.

(B) The Navy must develop detailed ship shock trial monitoring and mitigation plans approximately one-year prior to an event and must continue to provide these to NMFS for review and approval.

(C) Pre-activity planning must include selection of one primary and two secondary areas where marine mammal populations are expected to be the lowest during the event, with the primary and secondary locations located more than 2 nmi from the western boundary of the Gulf Stream for events in the Virginia Capes Range Complex or Jacksonville Range Complex.

(D) If it is determined during pre-activity surveys that the primary area is environmentally unsuitable (e.g., observations of marine mammals or presence of concentrations of floating vegetation), the shock trial can be moved to a secondary site in accordance with the detailed mitigation and monitoring plan provided to NMFS.

(E) Prior to the initial start of the activity at the shock trial location (in intervals of 5 hrs, 3 hrs, 40 min, and immediately before the detonation), Navy personnel must observe the mitigation zone for floating vegetation; if floating vegetation is observed, Navy personnel must delay the start until the mitigation zone is clear. Navy personnel also must observe the mitigation

zone for marine mammals; if marine mammals are observed, Navy personnel must delay triggering the detonation.

(F) During the activity, Navy personnel must observe for marine mammals, large schools of fish, jellyfish aggregations, and flocks of seabirds; if marine mammals, large schools of fish, jellyfish aggregations, and flocks of seabirds are observed, Navy personnel must cease triggering the detonation. After completion of each detonation, Navy personnel must observe the mitigation zone for marine mammals; if any injured or dead marine mammals are observed, Navy personnel must follow established incident reporting procedures and halt any remaining detonations until Navy personnel can consult with NMFS and review or adapt the mitigation, if necessary.

(G) Commencement/recommencement conditions after a marine mammal sighting before or during the activity: Navy personnel must allow a sighted marine mammal to leave the mitigation zone prior to the initial start of the activity (by delaying the start) or during the activity (by not recommencing detonations) until one of the following conditions has been met: the animal is observed exiting the mitigation zone; the animal is thought to have exited the mitigation zone based on a determination of its course, speed, and movement relative to the ship hull; or the mitigation zone has been clear from any additional sightings for 30 min.

(H) After completion of the activity (during the following two days at a minimum, and up to seven days at a maximum), Navy personnel must observe for marine mammals in the vicinity of where detonations occurred; if any injured or dead marine mammals are observed, Navy personnel must follow established incident reporting procedures. If additional platforms are supporting this activity (*e.g.*, providing range clearance), these Navy assets must assist in the visual observation of the area where detonations occurred.

(17) *Vessel movement.* The mitigation must not be applied if: the vessel's safety is threatened; the vessel is restricted in its ability to maneuver (*e.g.*, during launching and recovery of aircraft or landing craft, during towing activities, when mooring, *etc.*); or the vessel is operated autonomously.

(i) *Number of Lookouts and observation platform.* One Lookout must be on the vessel that is underway.

(ii) *Mitigation zone and requirements.* (A) 500 yd around whales.

(B) 200 yd around all other marine mammals (except bow-riding dolphins and pinnipeds hauled out on man-made navigational structures, port structures, and vessels).

(C) During the activity, when underway, Navy personnel must observe the mitigation zone for marine mammals; if marine mammals are observed, Navy personnel must maneuver to maintain distance.

(D) Additionally, Navy personnel must broadcast awareness notification messages with North Atlantic right whale Dynamic Management Area information (*e.g.*, location and dates) to applicable Navy assets operating in the vicinity of the Dynamic Management Area. The

information will alert assets to the possible presence of a North Atlantic right whale to maintain safety of navigation and further reduce the potential for a vessel strike. Platforms must use the information to assist their visual observation of applicable mitigation zones during training and testing activities and to aid in the implementation of procedural mitigation, including but not limited to, mitigation for vessel movement. If a marine mammal vessel strike occurs, Navy personnel must follow the established incident reporting procedures.

(18) *Towed in-water devices.* Mitigation applies to devices that are towed from a manned surface platform or manned aircraft. The mitigation will not be applied if the safety of the towing platform or in-water device is threatened.

(i) *Number of Lookouts and observation platform.* One Lookout must be positioned on a manned towing platform.

(ii) *Mitigation zone and requirements.* 250 yd around marine mammals. During the activity, when towing an in-water device, Navy personnel must observe for marine mammals; if marine mammals are observed, Navy personnel must maneuver to maintain distance.

(19) *Small-, medium-, and large-caliber non-explosive practice munitions.* Mitigation applies to activities using a surface target.

(i) *Number of Lookouts and observation platform.* One Lookout must be positioned on the platform conducting the activity. Depending on the activity, the Lookout could be the same as the one described for weapons firing noise in paragraph (a)(5)(i) of this Condition.

(ii) *Mitigation zone and requirements.* 200 yd around the intended impact location.

(A) Prior to the initial start of the activity (e.g., when maneuvering on station), Navy personnel must observe the mitigation zone for floating vegetation; if floating vegetation is observed, Navy personnel must relocate or delay the start until the mitigation zone is clear. Navy personnel also must observe the mitigation zone for marine mammals; if marine mammals are observed, Navy personnel must relocate or delay the start of firing.

(B) During the activity, Navy personnel must observe for marine mammals; if marine mammals are observed, Navy personnel must cease firing.

(C) Commencement/recommencement conditions after a marine mammal sighting before or during the activity: Navy personnel must allow a sighted marine mammal to leave the mitigation zone prior to the initial start of the activity (by delaying the start) or during the activity (by not recommencing firing) until one of the following conditions has been met: the animal is observed exiting the mitigation zone; the animal is thought to have exited the mitigation zone based on a determination of its course, speed, and movement relative to the intended impact location; the mitigation zone has been clear from any additional sightings for 10 min for aircraft-based firing or 30 min for vessel-based firing; or for activities using a mobile target, the intended impact location has transited a distance equal to double that of the mitigation zone size beyond the location of the last sighting.

(20) *Non-explosive missiles and rockets.* Aircraft-deployed non-explosive missiles and rockets. Mitigation applies to activities using a surface target.

(i) *Number of Lookouts and observation platform.* One Lookout must be positioned in an aircraft.

(ii) *Mitigation zone and requirements.* 900 yd around the intended impact location.

(A) Prior to the initial start of the activity (e.g., during a fly-over of the mitigation zone), Navy personnel must observe the mitigation zone for floating vegetation; if floating vegetation is observed, Navy personnel must relocate or delay the start until the mitigation zone is clear. Navy personnel also must observe the mitigation zone for marine mammals; if marine mammals are observed, Navy personnel must relocate or delay the start of firing.

(B) During the activity, Navy personnel must observe for marine mammals; if marine mammals are observed, Navy personnel must cease firing.

(C) Commencement/recommencement conditions after a marine mammal sighting prior to or during the activity: Navy personnel must allow a sighted marine mammal to leave the mitigation zone prior to the initial start of the activity (by delaying the start) or during the activity (by not recommencing firing) until one of the following conditions has been met: the animal is observed exiting the mitigation zone; the animal is thought to have exited the mitigation zone based on a determination of its course, speed, and movement relative to the intended impact location; or the mitigation zone has been clear from any additional sightings for 10 min when the activity involves aircraft that have fuel constraints, or 30 min when the activity involves aircraft that are not typically fuel constrained.

(21) *Non-explosive bombs and mine shapes.* Non-explosive bombs and non-explosive mine shapes during mine laying activities.

(i) *Number of Lookouts and observation platform.* One Lookout must be positioned in an aircraft.

(ii) *Mitigation zone and requirements.* 1,000 yd around the intended target.

(A) Prior to the initial start of the activity (e.g., when arriving on station), Navy personnel must observe the mitigation zone for floating vegetation; if floating vegetation is observed, Navy personnel must relocate or delay the start until the mitigation zone is clear. Navy personnel also must observe the mitigation zone for marine mammals; if marine mammals are observed, Navy personnel must relocate or delay the start of bomb deployment or mine laying.

(B) During the activity (e.g., during approach of the target or intended minefield location), Navy personnel must observe the mitigation zone for marine mammals; if marine mammals are observed, Navy personnel must cease bomb deployment or mine laying.

(C) Commencement/recommencement conditions after a marine mammal sighting prior to or during the activity: Navy personnel must allow a sighted marine mammal to leave the mitigation zone prior to the initial start of the activity (by delaying the start) or during the activity (by not recommencing bomb deployment or mine laying) until one of the following conditions has been met: the animal is observed exiting the mitigation zone; the animal is thought to have exited the mitigation zone based on a determination of its course, speed, and movement relative to the intended target or minefield location; the mitigation zone has been clear from any additional sightings for 10 min; or for activities using mobile targets, the intended target has transited a distance equal to double that of the mitigation zone size beyond the location of the last sighting.

(b) *Mitigation areas.* In addition to procedural mitigation, the Navy must implement mitigation measures within mitigation areas to avoid potential impacts on marine mammals.

(1) *Mitigation areas off the Northeastern United States for sonar, explosives, and physical disturbance and strikes.* (i) *Mitigation area requirements.* (A) *Northeast North Atlantic Right Whale Mitigation Area (year-round):*

(1) Navy personnel must report the total hours and counts of active sonar and in-water explosives used in the mitigation area (which includes North Atlantic right whale ESA-designated critical habitat) in its annual training and testing activity reports submitted to NMFS.

(2) Navy personnel must minimize the use of low-frequency active sonar, mid-frequency active sonar, and high-frequency active sonar to the maximum extent practicable within the mitigation area.

(3) Navy personnel must not use Improved Extended Echo Ranging sonobuoys in or within 3 nmi of the mitigation area or use explosive and non-explosive bombs, in-water detonations, and explosive torpedoes within the mitigation area.

(4) For activities using non-explosive torpedoes within the mitigation area, Navy personnel must conduct activities during daylight hours in Beaufort sea state 3 or less. The Navy must use three Lookouts (one positioned on a vessel and two positioned in an aircraft during dedicated aerial surveys) to observe the vicinity of the activity. An additional Lookout must be positioned on the submarine, when surfaced. Immediately prior to the start of the activity, Navy personnel must observe for floating vegetation and marine mammals; if floating vegetation or marine mammals are observed, Navy personnel must not commence the activity until the vicinity is clear or the activity is relocated to an area where the vicinity is clear. During the activity, Navy personnel must observe for marine mammals; if observed, Navy personnel must cease the activity. To allow a sighted marine mammal to leave the area, Navy personnel must not recommence the activity until one of the following conditions has been met: the animal is observed exiting the vicinity of the activity; the animal is thought to have exited the vicinity of the activity based on a determination of its course, speed, and movement relative to the activity location; or the area has been clear from any additional sightings for 30 min. During transits and normal firing, ships must maintain a speed of no more than 10 knots (kn). During submarine

target firing, ships must maintain speeds of no more than 18 kn. During vessel target firing, vessel speeds may exceed 18 kn for brief periods of time (e.g., 10–15 min).

(5) For all activities, before a vessel transits within the mitigation area, Navy personnel must conduct a web query or email inquiry to the National Oceanographic and Atmospheric Administration Northeast Fisheries Science Center's North Atlantic Right Whale Sighting Advisory System to obtain the latest North Atlantic right whale sightings information. Navy personnel on vessels must use the sightings information to reduce potential interactions with North Atlantic right whales during transits. Navy personnel on vessels must implement speed reductions within the mitigation area after observing a North Atlantic right whale, if transiting within 5 nmi of a sighting reported to the North Atlantic Right Whale Sighting Advisory System within the past week, and if transiting at night or during periods of reduced visibility.

(B) Gulf of Maine Planning Awareness Mitigation Area (year-round):

(1) Navy personnel must report the total hours and counts of active sonar and in-water explosives used in the mitigation area in its annual training and testing activity reports submitted to NMFS.

(2) Navy personnel must not conduct greater than 200 hrs of hull-mounted mid-frequency active sonar per year within the mitigation area.

(3) Navy personnel must not conduct major training exercises (Composite Training Unit Exercises or Fleet Exercises/Sustainment Exercises) within the mitigation area. If the Navy needs to conduct a major training exercise within the mitigation area in support of training requirements driven by national security concerns, Navy personnel must confer with NMFS to verify that potential impacts are adequately addressed.

(C) Northeast Planning Awareness Mitigation Areas (year-round):

(1) Navy personnel will avoid planning major training exercises (Composite Training Unit Exercises or Fleet Exercises/Sustainment Exercises) within the mitigation area to the maximum extent practicable.

(2) Navy personnel must not conduct more than four major training exercises per year (all or a portion of the exercise) within the mitigation area.

(3) If the Navy needs to conduct additional major training exercises in the mitigation area in support of training requirements driven by national security concerns, Navy personnel must provide NMFS with advance notification and include the information in its annual training and testing activity reports submitted to NMFS.

(2) Mitigation areas off the Mid-Atlantic and Southeastern United States for sonar, explosives, and physical disturbance and strikes. (i) Mitigation area requirements.

(A) Southeast North Atlantic Right Whale Mitigation Area (November 15 through April 15):

(1) Navy personnel must report the total hours and counts of active sonar and in-water explosives used in the mitigation area in its annual training and testing activity reports submitted to NMFS.

(2) The Navy must not conduct: low-frequency active sonar (except as noted in paragraph (b)(2)(i)(A)(3) of this Condition), mid-frequency active sonar (except as noted in paragraph (b)(2)(i)(A)(3) of this Condition), high-frequency active sonar, missile and rocket activities (explosive and non-explosive), small-, medium-, and large-caliber gunnery activities, Improved Extended Echo Ranging sonobuoy activities, explosive and non-explosive bombing activities, in-water detonations, and explosive torpedo activities within the mitigation area.

(3) To the maximum extent practicable, Navy personnel must minimize the use of: helicopter dipping sonar, low-frequency active sonar and hull-mounted mid-frequency active sonar used for navigation training, and low-frequency active sonar and hull-mounted mid-frequency active sonar used for object detection exercises within the mitigation area.

(4) Before transiting or conducting training or testing activities within the mitigation area, Navy personnel must initiate communication with the Fleet Area Control and Surveillance Facility, Jacksonville to obtain Early Warning System North Atlantic right whale sightings data. The Fleet Area Control and Surveillance Facility, Jacksonville must advise Navy personnel on vessels of all reported whale sightings in the vicinity to help Navy personnel on vessels and aircraft reduce potential interactions with North Atlantic right whales. Commander Submarine Force U.S. Atlantic Fleet must coordinate any submarine activities that may require approval from the Fleet Area Control and Surveillance Facility, Jacksonville. Navy personnel on vessels must use the sightings information to reduce potential interactions with North Atlantic right whales during transits.

(5) Navy personnel on vessels must implement speed reductions after they observe a North Atlantic right whale, if they are within 5 nmi of a sighting reported within the past 12 hrs, or when operating in the mitigation area at night or during periods of poor visibility.

(6) To the maximum extent practicable, Navy personnel on vessels must minimize north-south transits in the mitigation area.

*(B) Southeast North Atlantic Right Whale Critical Habitat Special Reporting Area
(November 15 through April 15):*

(1) Navy personnel must report the total hours and counts of active sonar and in-water explosives used in the Special Reporting Area (which includes southeast North Atlantic right whale ESA-designated critical habitat) in its annual training and testing activity reports submitted to NMFS.

(C) Jacksonville Operating Area (November 15 through April 15):

(I) Navy units conducting training or testing activities in the Jacksonville Operating Area must initiate communication with the Fleet Area Control and Surveillance Facility, Jacksonville to obtain Early Warning System North Atlantic right whale sightings data. The Fleet Area Control and Surveillance Facility, Jacksonville must advise Navy personnel on vessels of all reported whale sightings in the vicinity to help Navy personnel on vessels and aircraft reduce potential interactions with North Atlantic right whales. Commander Submarine Force U.S. Atlantic Fleet must coordinate any submarine activities that may require approval from the Fleet Area Control and Surveillance Facility, Jacksonville. Navy personnel must use the reported sightings information as they plan specific details of events (e.g., timing, location, duration) to minimize potential interactions with North Atlantic right whales to the maximum extent practicable. Navy personnel must use the reported sightings information to assist visual observations of applicable mitigation zones and to aid in the implementation of procedural mitigation.

(D) *Navy Cherry Point Range Complex Nearshore Mitigation Area (March through September):*

(I) Navy personnel must not conduct explosive mine neutralization activities involving Navy divers in the mitigation area.

(2) To the maximum extent practicable, Navy personnel must not use explosive sonobuoys, explosive torpedoes, explosive medium-caliber and large-caliber projectiles, explosive missiles and rockets, explosive bombs, explosive mines during mine countermeasure and neutralization activities, and anti-swimmer grenades in the mitigation area.

(E) *Mid-Atlantic Planning Awareness Mitigation Areas (year-round):*

(I) Navy personnel will avoid planning major training exercises (Composite Training Unit Exercises or Fleet Exercises/Sustainment Exercises) to the maximum extent practicable.

(2) Navy personnel must not conduct more than four major training exercises per year (all or a portion of the exercise) within the mitigation area.

(3) If the Navy needs to conduct additional major training exercises in the mitigation area in support of training requirements driven by national security concerns, Navy personnel must provide NMFS with advance notification and include the information in its annual training and testing activity reports submitted to NMFS.

(3) *Mitigation areas in the Gulf of Mexico for sonar. (i) Mitigation area requirements.*

(A) *Gulf of Mexico Planning Awareness Mitigation Areas (year-round):*

(I) Navy personnel must not conduct major training exercises within the mitigation area (all or a portion of the exercise).

(2) If the Navy needs to conduct a major training exercise within the mitigation areas in support of training requirements driven by national security concerns, Navy personnel must confer with NMFS to verify that potential impacts are adequately addressed.

(B) *Bryde's Whale Mitigation Area (year-round):*

(1) Navy personnel must report the total hours and counts of active sonar and in-water explosives used in the mitigation area in its annual training and testing activity reports submitted to NMFS.

(2) Navy personnel must not conduct greater than 200 hrs of hull-mounted mid-frequency active sonar per year within the mitigation area.

(3) The Navy must not use explosives (except during mine warfare activities) within the mitigation area.

7. Monitoring and Reporting. When conducting activities identified in Condition 4 of this Authorization and § 218.80(c) of the regulations, the Holder of the Authorization and any person(s) operating under his or her authority must implement the following monitoring and reporting measures. All reports must be submitted to the Director, Office of Protected Resources, National Marine Fisheries Service, 1315 East-West Highway, Silver Spring MD 20910.

(a) *Unauthorized take.* The Navy must notify NMFS immediately (or as soon as operational security considerations allow) if the specified activities identified in § 218.80 of the regulations and Condition 4 of this Authorization are thought to have resulted in the mortality or serious injury of any marine mammals, or in any Level A or Level B harassment take of marine mammals not identified in this subpart.

(b) *Monitoring and reporting under the LOAs.* The Navy must conduct all monitoring and reporting as required under this Authorization, including abiding by the AFTT Study Area monitoring program. Details on program goals, objectives, project selection process, and current projects are available at www.navy-marinespeciesmonitoring.us.

(c) *Notification of injured, live stranded, or dead marine mammals.* The Navy must comply with the Notification and Reporting Plan that is attached as Appendix 1 to this Authorization and sets notification, reporting, and other requirements when dead, injured, or live stranded marine mammals are detected. The Notification and Reporting Plan is also available at www.fisheries.noaa.gov/national/marine-mammal-protection/incidental-take-authorizations-military-readiness-activities.

(d) *Annual AFTT Study Area marine species monitoring report.* The Navy must submit an annual report of the AFTT Study Area monitoring describing the implementation and results from the previous calendar year. Data collection methods must be standardized across range complexes and study areas to allow for comparison in different geographic locations. The report must be submitted to the Director, Office of Protected Resources of NMFS either within 90 days

after the calendar year, or within 90 days after the conclusion of the monitoring year to be determined by the Adaptive Management process. This report will describe progress of knowledge made with respect to monitoring plan study questions across all Navy ranges associated with the Integrated Comprehensive Monitoring Program. Similar study questions must be treated together so that progress on each topic can be summarized across all Navy ranges. The report need not include analyses and content that does not provide direct assessment of cumulative progress on the monitoring plan study questions.

(e) *Annual AFTT Study Area training and testing reports.* Each year, the Navy must submit a preliminary report (Quick Look Report) detailing the status of authorized sound sources within 21 days after the anniversary of the date of issuance of each LOA to the Director, Office of Protected Resources, NMFS. Each year, the Navy must submit a detailed report within 3 months after the anniversary of the date of issuance of each LOA to the Director, Office of Protected Resources, NMFS. The annual reports must contain information on Major Training Exercises (MTEs), Sinking Exercise (SINKEX) events, and a summary of all sound sources used, including within specified mitigation reporting areas, as described in paragraph (e)(3) of this Condition. The analysis in the detailed report must be based on the accumulation of data from the current year's report and data collected from the previous report. The detailed reports must contain information identified in paragraphs (e)(1) through (5) of this Condition.

(1) *MTEs.* This section of the report must contain the following information for MTEs conducted in the AFTT Study Area:

(i) Exercise Information (for each MTE):

- (A) Exercise designator.
- (B) Date that exercise began and ended.
- (C) Location.
- (D) Number and types of active sonar sources used in the exercise.
- (E) Number and types of passive acoustic sources used in exercise.
- (F) Number and types of vessels, aircraft, and other platforms, participating in exercise.
- (G) Total hours of all active sonar source operation.
- (H) Total hours of each active sonar source bin.
- (I) Wave height (high, low, and average) during exercise.

(ii) Individual marine mammal sighting information for each sighting in each exercise when mitigation occurred:

- (A) Date/Time/Location of sighting.
- (B) Species (if not possible, indication of whale/dolphin/pinniped).
- (C) Number of individuals.
- (D) Initial Detection Sensor (*e.g.*, sonar, Lookout).
- (E) Indication of specific type of platform observation made from (including, for example, what type of surface vessel or testing platform).
- (F) Length of time observers maintained visual contact with marine mammal.
- (G) Sea state.

- (H) Visibility.
- (I) Sound source in use at the time of sighting.
- (J) Indication of whether animal was less than 200 yd, 200 to 500 yd, 500 to 1,000 yd, 1,000 to 2,000 yd, or greater than 2,000 yd from sonar source.
- (K) Mitigation implementation. Whether operation of sonar sensor was delayed, or sonar was powered or shut down, and how long the delay was.
- (L) If source in use was hull-mounted, true bearing of animal from the vessel, true direction of vessel's travel, and estimation of animal's motion relative to vessel (opening, closing, parallel).
- (M) Observed behavior. Lookouts must report, in plain language and without trying to categorize in any way, the observed behavior of the animal(s) (such as animal closing to bow ride, paralleling course/speed, floating on surface and not swimming, etc.) and if any calves were present.

(iii) An evaluation (based on data gathered during all of the MTEs) of the effectiveness of mitigation measures designed to minimize the received level to which marine mammals may be exposed. This evaluation must identify the specific observations that support any conclusions the Navy reaches about the effectiveness of the mitigation.

(2) *Sinking exercises (SINKEXs)*. This section of the report must include the following information for each SINKEX completed that year:

(i) Exercise information (gathered for each SINKEX):

- (A) Location.
- (B) Date and time exercise began and ended.
- (C) Total hours of observation by Lookouts before, during, and after exercise.
- (D) Total number and types of explosive source bins detonated.
- (E) Number and types of passive acoustic sources used in exercise.
- (F) Total hours of passive acoustic search time.
- (G) Number and types of vessels, aircraft, and other platforms participating in exercise.
- (H) Wave height in feet (high, low, and average) during exercise.
- (J) Narrative description of sensors and platforms utilized for marine mammal detection and timeline illustrating how marine mammal detection was conducted.

(ii) Individual marine mammal observation (by Navy Lookouts) information (gathered for each marine mammal sighting) for each sighting where mitigation was implemented:

- (A) Date/Time/Location of sighting.
- (B) Species (if not possible, indicate whale, dolphin, or pinniped).
- (C) Number of individuals.
- (D) Initial detection sensor (e.g., sonar or Lookout).
- (E) Length of time observers maintained visual contact with marine mammal.
- (F) Sea state.
- (G) Visibility.

(H) Whether sighting was before, during, or after detonations/exercise, and how many minutes before or after.

(I) Distance of marine mammal from actual detonations: Less than 200 yd, 200 to 500 yd, 500 to 1,000 yd, 1,000 to 2,000 yd, or greater than 2,000 yd (or target spot if not yet detonated).

(J) Lookouts must report, in plain language and without trying to categorize in any way, the observed behavior of the animal(s) (such as animal closing to bow ride, paralleling course/speed, floating on surface and not swimming etc.), including speed and direction and if any calves were present.

(K) Resulting mitigation implementation: The report must indicate whether explosive detonations were delayed, ceased, modified, or not modified due to marine mammal presence and for how long.

(L) If observation occurred while explosives were detonating in the water, indicate munition type in use at time of marine mammal detection.

(3) *Summary of sources used.* This section of the report must include the following information summarized from the authorized sound sources used in all training and testing events:

(i) Total annual hours or quantity (per the LOA) of each bin of sonar or other acoustic sources (pile driving and air gun activities); and

(ii) Total annual expended/detonated ordnance (missiles, bombs, sonobuoys, etc.) for each explosive bin.

(4) *Geographic information presentation.* The reports must present an annual (and seasonal, where practical) depiction of training and testing bin usage (as well as pile driving activities) geographically across the AFTT Study Area.

(5) *Sonar exercise notification.* The Navy must submit to NMFS an electronic report within fifteen calendar days after the completion of any MTE indicating:

(i) Location of the exercise;

(ii) Beginning and end dates of the exercise; and

(iii) Type of exercise.

(f) *Seven-year close-out comprehensive training and testing report.* This report must be included as part of the 2025 annual training and testing report. This report must provide the annual totals for each sound source bin with a comparison to the annual allowance and the seven-year total for each sound source bin with a comparison to the seven-year allowance. The draft report must be submitted within three months after the expiration of this subpart to the Director, Office of Protected Resources, NMFS. NMFS must submit comments on the draft close-out report, if any, within three months of receipt. The report will be considered final after the Navy

has addressed NMFS' comments, or 3 months after the submittal of the draft if NMFS does not provide comments.

(g) *Communication plan.* The Navy and NMFS shall develop a communication plan that will include all of the communication protocols (phone trees, etc.) and associated contact information required for NMFS and the Navy to carry out the necessary expeditious communication required in the event of a stranding or ship strike, including information described in the proposed notification measures above.

8. Prohibitions. Notwithstanding the takings identified in Condition 5 of this LOA and authorized under this LOA and 50 CFR Part 218, Subpart I, no person in connection with the activities described in Condition 4 of this Authorization may take any marine mammal specified in Condition 5 of this Authorization other than by incidental take and in the course of conducting the activities specified in Condition 4; take any marine mammal other than a species or stock identified in Condition 5; take a marine mammal specified in Condition 5 if such taking results in more than a negligible impact on the species or stock of such marine mammal; or violate, or fail to comply with, the terms, conditions, and requirements of the regulations or this LOA.

9. (a) An LOA issued under 50 CFR §§ 216.106 and 218.86 for the activities identified in Condition 4 of this Authorization and § 218.80 of the regulations may be renewed or modified upon request of the applicant, provided that:

(1) The proposed specified activity and mitigation, monitoring, and reporting measures, as well as the anticipated impacts, are the same as those described and analyzed for the regulations (excluding changes made pursuant to the adaptive management provision under Condition 10 of this Authorization), and

(2) NMFS determines that the mitigation, monitoring, and reporting measures required by the previous LOA under the regulations were implemented.

(b) For LOA modification or renewal requests by the applicant that include changes to the activity or the mitigation, monitoring, or reporting measures (excluding changes made pursuant to the adaptive management provision under Condition 10 of this Authorization) that do not change the findings made for the regulations or result in no more than a minor change in the total estimated number of takes (or distribution by species or years), NMFS may publish a notice of proposed LOA in the **Federal Register**, including the associated analysis illustrating the change, and solicit public comment before issuing the LOA.

10. An LOA issued under 50 CFR §§ 216.106 and 218.86 for the activities identified in Condition 4 of this Authorization and § 218.80 of the regulations may be modified by NMFS under the following circumstances:

(1) *Adaptive management.* After consulting with the Navy regarding the practicability of the modifications, NMFS may modify (including adding or removing measures) the existing mitigation, monitoring, or reporting measures if doing so creates a reasonable likelihood of more

effectively accomplishing the goals of the mitigation and monitoring.

(i) Possible sources of data that could contribute to the decision to modify the mitigation, monitoring, or reporting measures in an LOA include:

(A) Results from the Navy's monitoring from the previous year(s);

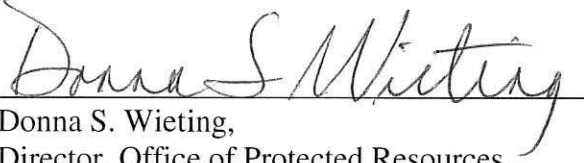
(B) Results from other marine mammal and/or sound research or studies; or

(C) Any information that reveals marine mammals may have been taken in a manner, extent, or number not authorized by the regulations and this Authorization.

(ii) If, through adaptive management, the modifications to the mitigation, monitoring, or reporting measures are substantial, NMFS will publish a notice of planned LOA in the **Federal Register** and solicit public comment.

(2) *Emergencies.* If NMFS determines that an emergency exists that poses a significant risk to the well-being of the species or stocks of marine mammals specified in § 218.82 of the regulations, an LOA may be modified without prior notification or opportunity for public comment. Notification would be published in the **Federal Register** within 30 days of the action.

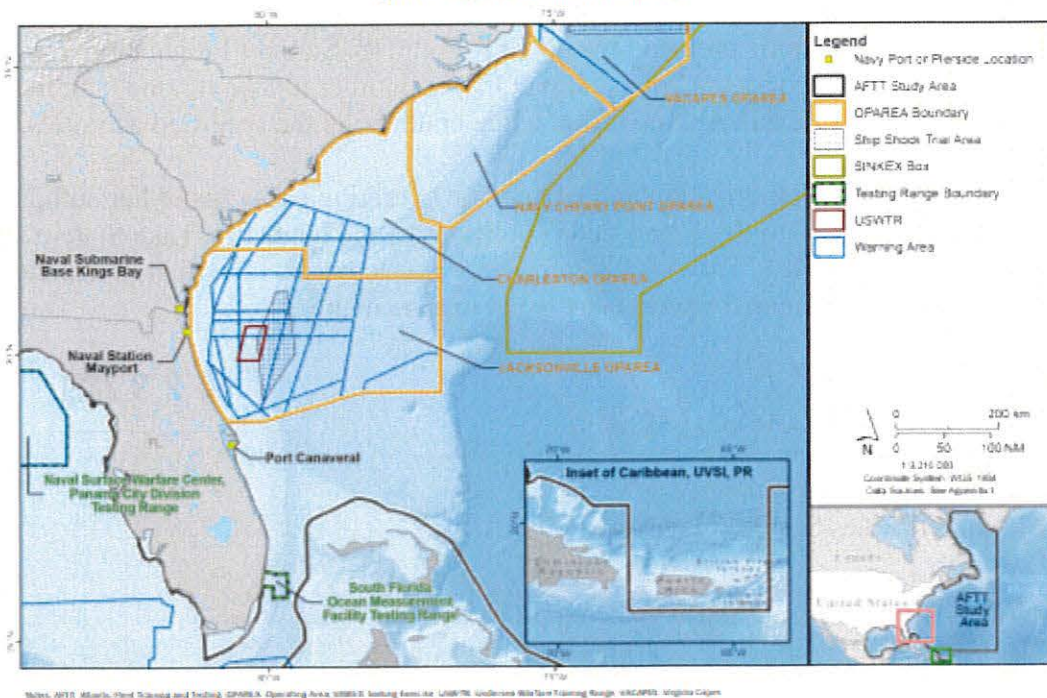
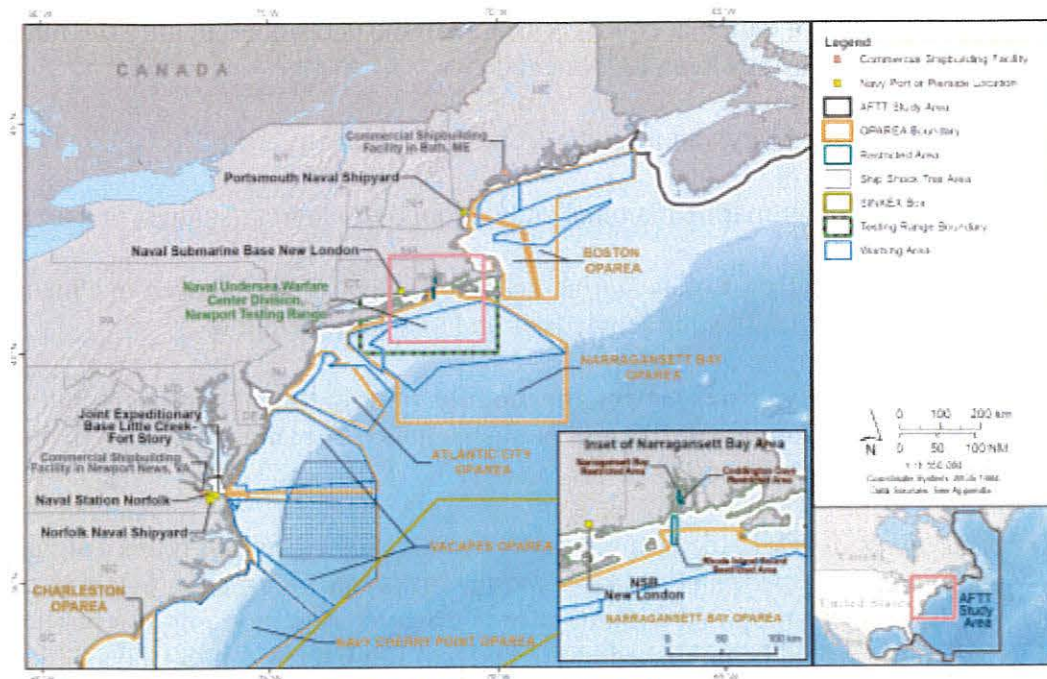
11. A copy of this Authorization and or a document containing the equivalent requirements specified in this Authorization and the 50 CFR Part 218, Subpart I regulations, must be in the possession of the on-site Commanding Officer in order to take marine mammals under the authority of this Authorization while conducting the specified activities.
12. The Holder of this Authorization and any person operating under his or her authority is required to comply with the Terms and Conditions of the Incidental Take Statement corresponding to NMFS' Biological Opinion for the activities identified in Condition 4 as they pertain to Endangered Species Act listed marine mammals.


Donna S. Wieting,
Director, Office of Protected Resources,
National Marine Fisheries Service.

DEC 23 2019

Date

Figures 1 and 2 of the AFTT Study Area as shown in the 2018 AFTT FEIS/OEIS.



Appendix 1:

NOTIFICATION AND REPORTING PLAN FOR THE U.S. NAVY ATLANTIC FLEET TRAINING AND TESTING STUDY AREA

BACKGROUND

This Notification and Reporting Plan will be cited as a requirement in the U.S. Navy (Navy) Atlantic Fleet Training and Testing (AFTT) Study Area final rule and requirements outlined below will be included as part of the Navy's Marine Mammal Protection Act (MMPA) Letters of Authorization (LOAs). The LOAs indicate the conditions under which the Navy is authorized to take marine mammals pursuant to Navy training and testing activities, involving sonar, explosive detonations, or vessel movements, conducted in the waters in the AFTT Study Area. This Notification and Reporting Plan is specifically intended to outline the applicable requirements the authorization is conditioned upon in the event that a marine mammal stranding (or milling) event is reported in or immediately adjacent to (within 50 kilometer (km) (27 nautical miles (nmi) of) the AFTT Study Area. Since the National Marine Fisheries Service (NMFS) considers all plausible causes when investigating any injury, death, or stranding, any reporting provided pursuant to this plan does not, in any way, presume that any injuries, deaths, strandings, or milling events are related to, or caused by, Navy training or testing activities. All data provided will undergo appropriate security procedures prior to release to NMFS.

REQUIREMENTS

1) Notification of the Discovery of a Stranded Marine Mammal

a. Discovery of any Stranded Marine Mammal¹

In the event that Navy personnel (uniformed military, civilian, or contractors while conducting Navy work) discover a live or dead stranded marine mammal within the AFTT Study Area or on Navy property, the Navy shall report the incident to NMFS (see communication protocols below) as soon as feasible. Reports of stranded pinnipeds on rookeries (*e.g.*, sea lions on San Nicolas Island, CA) are exempt from this provision.

The Navy will provide NMFS with:

- Time, date, and location (latitude/longitude) of the first discovery (and updated location information if known and applicable);
- Species identification (if known) or description of the animal(s) involved;

¹ As defined in Title IV of the MMPA, a "stranding" is defined as "an event in the wild in which (A) a marine mammal is dead and is (i) on a beach or shore of the United States, or (ii) in waters under the jurisdiction of the United States (including any navigable waters) ; or (B) a marine mammal is alive and is (i) on a beach or shore of the United States and unable to return to the water; (ii) on a beach or shore of the United States and, although able to return to the water, is in need of apparent medical attention; or (iii) in the waters under the jurisdiction of the United States (including any navigable waters), but is unable to return to its natural habitat under its own power or without assistance."

- Condition of the animal(s) (including carcass condition if the animal is dead);
- Observed behaviors of the animal(s), if alive;
- If available, photographs or video footage of the animal(s); and
- General circumstances under which the animal was discovered (*e.g.*, during an MTE, explosive event, found on Navy property, or by transiting vessel).

b. Vessel Strike

Within the boundaries of the AFTT Study Area, whether such ship strike was authorized by the LOAs or not, in the event of a ship strike of a marine mammal by any Navy vessel, the Navy shall immediately report, or as soon as security clearance procedures and safety conditions allow, the information above in (a), to NMFS (see Communication Protocols below).

As soon as feasible, but no later than seven (7) business days, the Navy shall additionally report to NMFS, the:

- Vessel's speed during and leading up to the incident;
- Vessel's course/heading and what training or testing activity was being conducted (if applicable);
- Status of all sound sources in use (*e.g.*, active sonar, explosives);
- Description of avoidance measures/requirements that were in place at the time of the strike and what additional measures were taken, if any, to avoid strike;
- Environmental conditions (*e.g.*, wind speed and direction, Beaufort sea state, cloud cover, visibility) immediately preceding the strike;
- Estimated size and length of animal that was struck;
- Description of the behavior of the marine mammal immediately preceding and following the strike;
- If available, description of the presence and behavior of any other marine mammals immediately preceding the strike;
- Estimated fate of the animal (*e.g.*, dead, injured but alive, injured and moving, blood or tissue observed in the water, status unknown, disappeared, etc.);
- To the extent practicable, photographs or video footage of the animal(s); and
- Any relevant information discovered during Navy's investigation of a ship strike, including but not limited to other in-water platforms in use within a mile immediately preceding the strike, as available.

2) Additional Information Requests

If NMFS personnel determine that the circumstances of any marine mammal stranding found within the AFTT Study Area or within 50 km (27 nmi) of the boundary of the AFTT Study Area, suggest investigation of the association of Navy activities is warranted (example circumstances noted below), and an investigation into the stranding is being pursued, NMFS personnel will submit a written request to the Navy asking that they provide the following initial available information as soon as possible, but no later than seven (7) business days after the request for information.

- Status of all permitted sound source and/or explosive use in the 48 hours (hrs) preceding and within 50 km (27 nmi) of the discovery/notification of the stranding by NMFS, or estimated time of stranding; and
- If available, description of the behavior of any marine mammal(s) sightings preceding (48 hrs and 50 km (27 nmi)) and immediately after the discovery of the stranding (as available).

Examples of circumstances that could trigger the additional information request include, but are not limited to, the following:

- Atypical nearshore milling events of live cetaceans;
- Mass strandings of cetaceans (two or more individuals, not including cow/calf pairs);
- Beaked whale strandings;
- Necropsies with findings of pathologies that are unusual for the species or area; and
- Stranded animals with findings consistent with blast trauma.

In the event that the investigation is still inconclusive, the investigation of the association of Navy activities is still warranted, and the investigation is still being pursued, NMFS may have additional information requests. If the previously mentioned factors are present (*i.e.*, investigation is still inconclusive, etc.), the Navy would be required to answer additional questions regarding their activities within 148 km (80 nmi) and 72 hrs prior, provided appropriate security clearance procedures are followed.

3) Actions to Minimize Additional Harm to Live-Stranded (or Milling) Marine Mammals

In the event of a live stranding (or near-shore atypical milling) event within the AFTT Study Area or within 50 km (27 nmi) of the boundary of the AFTT Study Area, where the stranding network is engaged in herding or other interventions to return animals to the water, NMFS (individuals specifically identified in the AFTT Stranding Communication Protocol, NMFS Office of Protected Resources (OPR) – HQ senior administrators) will advise the Navy of the need to implement shutdown procedures for all permitted active acoustic sources or explosive devices within 50 km (27 nmi) of the stranding. Following this initial shutdown, NMFS will communicate with the Navy to determine if circumstances support any modification of the shutdown zone. The Navy may decline to implement all or part of the shutdown if the holder of the LOA, or his/her designee, determines that it is necessary for national security. Shutdown procedures for live stranding or milling marine mammals include the following:

- If at any time, the marine mammal(s) die or are euthanized, or if herding/intervention efforts are stopped, NMFS (individuals specifically identified in the AFTT Stranding Communication Protocol) will immediately advise the Navy that the shutdown around that animal(s)' location is no longer needed.
- Otherwise, shutdown procedures will remain in effect until NMFS (individuals specifically identified in the AFTT Stranding Communication Protocol) determines and advises the Navy that, all live animals involved have left the area (either of their own volition or following an intervention).

- If further observations of the marine mammals indicate the potential for restranding, additional coordination with the Navy will be required to determine what measures are necessary to minimize that likelihood (*e.g.*, extending the shutdown or moving operations farther away) and to implement those measures as appropriate.

Shutdown procedures are not related to the investigation of the cause of the stranding and their implementation is not intended to imply that Navy activity is the cause of the stranding. Rather, shutdown procedures are intended to protect marine mammals exhibiting indicators of distress by minimizing their exposure to possible additional stressors, regardless of the factors that contributed to the stranding.

COMMUNICATION PROTOCOL

Effective communication is critical to the successful implementation of this Notification and Reporting Plan in the AFTT Study Area. Very specific protocols for communication, including identification of the Navy personnel authorized to implement a shutdown and the NMFS personnel authorized to advise the Navy of the need to implement shutdown procedures, have been identified. These protocols and associated phone trees are currently in usable form and will be finalized for the AFTT Study Area by January 2020 and updated yearly (or more frequently, as appropriate) in the document entitled “AFTT Stranding Communication Protocols.”