



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE

AUG 31 2016

Commander, U.S. Pacific Fleet
250 Makalapa Drive
Pearl Harbor, HI 96860-3131

Dear Sir or Madam:

Enclosed is a Letter of Authorization (LOA) issued to the Commander, U.S. Pacific Fleet, under the authority of Section 101(a)(5)(A) of the Marine Mammal Protection Act (16 U.S.C. 1361 *et seq.*) and the regulations governing the take of marine mammals incidental to the Navy's training and testing activities in the Mariana Islands Training and Testing Study Area (50 C.F.R. Part 218, Subpart J). This authorization is effective until August 3, 2020 and covers the taking of marine mammals incidental to the Navy training and testing activities, as identified in the final rule, provided the mitigation, monitoring and reporting requirements are undertaken as required by the regulations and the LOA.

If you have any questions concerning the LOA or its requirements, please contact John Fiorentino, Office of Protected Resources, National Marine Fisheries Service, at 301-427-8477.

Sincerely,

Donna S. Wieting
Director, Office of Protected Resources

Enclosures





Letter of Authorization
As modified, August 31, 2016

The Commander, U.S. Pacific Fleet, 250 Makalapa Drive, Pearl Harbor, Hawaii 96860, and persons operating under his authority (i.e., Navy), are authorized to take marine mammals incidental to Navy training and testing activities conducted in the Mariana Islands Training and Testing Study Area in accordance with 50 CFR Part 218, Subpart J—Taking and Importing Marine Mammals; U.S. Navy's Mariana Islands Training and Testing (MITT) subject to the provisions of the Marine Mammal Protection Act (16 U.S.C. 1361 *et seq.*; MMPA) and the following conditions:

1. This Authorization is valid for the period August 3, 2015, through August 3, 2020.

2. This Authorization is valid only for the unintentional taking of the species of marine mammals and methods of take identified in Section 5(b) of this Authorization incidental to the training and testing activities specified in Section 4(a) of this Authorization and occurring within the MITT Study Area, (as depicted in the Navy's Final Environmental Impact Statement/Overseas Environmental Impact Statement (FEIS/OEIS)). The Study Area includes the existing Mariana Islands Range Complex, a transit corridor between the Mariana Islands and the Hawaii Range Complex, and Navy pier-side locations where maintenance or testing may occur.

3. This Authorization is valid only if the Holder of the Authorization or any person(s) operating under his authority implements the mitigation, monitoring, and reporting required pursuant to 50 CFR §§ 218.94 & 218.95 and implements the Terms and Conditions of this Authorization.

4. (a) This Authorization is valid for the training and testing activities identified below:

(1) The use of the following non-impulsive sources during training and testing:

- (i) LF4 – an average of 123 hours per year
- (ii) LF5 – an average of 11 hours per year
- (iii) LF6 – an average of 40 hours per year
- (iv) MF1 – an average of 1,872 hours per year
- (v) MF2 – an average of 625 hours per year
- (vi) MF3 – an average of 192 hours per year
- (vii) MF4 – an average of 214 hours per year
- (viii) MF5 – an average of 2,588 items per year
- (ix) MF6 – an average of 33 items per year
- (x) MF8 – an average of 123 hours per year
- (xi) MF9 – an average of 47 hours per year
- (xii) MF10 – an average of 231 hours per year



- (xiii) MF11 – an average of 324 hours per year
- (xiv) MF12 – an average of 656 hours per year
- (xv) HF1 – an average of 113 hours per year
- (xvi) HF4 – an average of 1,060 hours per year
- (xvii) HF5 – an average of 336 hours per year
- (xviii) HF6 – an average of 1,173 hours per year
- (xix) ASW1 – an average of 144 hours per year
- (xx) ASW2 – an average of 660 items per year
- (xxi) ASW3 – an average of 3,935 hours per year
- (xxii) ASW4 – an average of 32 items per year
- (xxiii) TORP1 – an average of 115 items per year
- (xxiv) TORP2 – an average of 62 items per year
- (xxv) M3 – an average of 112 hours per year
- (xxvi) SD1 – an average of 2,341 hours per year

(2) The use of the following impulsive source detonations during training and testing:

- (i) E1 (0.1 lb to 0.25 lb NEW) – an average of 10,140 detonations per year
- (ii) E2 (0.26 lb to 0.5 lb NEW) – an average of 106 detonations per year
- (iii) E3 (>0.5 lb to 2.5 lb NEW) – an average of 932 detonations per year
- (iv) E4 (>2.5 lb to 5 lb NEW) – an average of 420 detonations per year
- (v) E5 (>5 lb to 10 lb NEW) – an average of 684 detonations per year
- (vi) E6 (>10 lb to 20 lb NEW) – an average of 76 detonations per year
- (vii) E8 (>60 lb to 100 lb NEW) – an average of 16 detonations per year
- (viii) E9 (>100 lb to 250 lb NEW) – an average of 4 detonations per year
- (ix) E10 (>250 lb to 500 lb NEW) – an average of 12 detonations per year
- (x) E11 (>500 lb to 650 lb NEW) – an average of 6 detonations per year
- (xi) E12 (>650 lb to 2,000 lb NEW) – an average of 184 detonations per year

(b) This Authorization is also valid for the activities and sources listed in 4(a) should the amounts (i.e., hours, items, detonations) vary from those estimated in 4(a), provided that the variation does not result in exceeding the amount of take indicated in 5(a), below.

5. (a) The incidental take of marine mammals under the activities identified in 4(a), above, and § 218.90(c) is limited to the species listed in 5(b) and 5(c) below, by the indicated method of take and the indicated number of times (estimated based on the authorized amounts of sound source operation):

(b) Level B Harassment for all Training and Testing Activities:

(1) Mysticetes:

- (i) Blue whale (*Balaenoptera musculus*) – 140 (an average of 28 annually)

- (ii) Bryde's whale (*Balaenoptera edeni*) – 1,990 (an average of 398 annually)
- (iii) Fin whale (*Balaenoptera physalus*) - 140 (an average of 28 annually)
- (iv) Humpback whale (*Megaptera novaeangliae*) – 4,300 (an average of 860 annually)
- (v) Minke whale (*Balaenoptera acutorostrata*) – 505 (an average of 101 annually)
- (vi) Sei whale (*Balaenoptera borealis*) – 1,595 (an average of 319 annually)
- (vii) Omura's whale (*Balaenoptera omurai*) - 515 (an average of 103 annually)

(2) Odontocetes:

- (i) Blainville's beaked whale (*Mesoplodon densirostris*) – 22,130 (an average of 4,426 annually)
- (ii) Bottlenose dolphin (*Tursiops truncatus*) – 3,705 (an average of 741 annually)
- (iii) Cuvier's beaked whale (*Ziphius cavirostris*) – 112,705 (an average of 22,541 annually)
- (iv) Dwarf sperm whale (*Kogia sima*) – 71,085 (an average of 14,217 annually)
- (v) False killer whale (*Pseudorca crassidens*) – 2,775 (an average of 555 annually)
- (vi) Fraser's dolphin (*Lagenodelphis hosei*) – 12,860 (an average of 2,572 annually)
- (vii) Ginkgo-toothed beaked whale (*Mesoplodon ginkgodens*) – 19,485 (an average of 3,897 annually)
- (viii) Killer whale (*Orcinus orca*) – 420 (an average of 84 annually)
- (ix) Longman's beaked whale (*Indopacetus pacificus*) – 9,620 (an average of 1,924 annually)
- (x) Melon-headed whale (*Peponocephala electra*) – 10,425 (an average of 2,085 annually)
- (xi) Pantropical spotted dolphin (*Stenella attenuata*) – 64,055 (an average of 12,811 annually)
- (xii) Pygmy killer whale (*Feresa attenuata*) – 525 (an average of 105 annually)
- (xiii) Pygmy sperm whale (*Kogia breviceps*) – 27,895 (an average of 5,579 annually)
- (xiv) Risso's dolphin (*Grampus griseus*) – 2,525 (an average of 505 annually)
- (xv) Rough-toothed dolphin (*Steno bredanensis*) – 9,095 (an average of 1,819 annually)
- (xvi) Short-finned pilot whale (*Globicephala macrorhynchus*) – 9,075 (an average of 1,815 annually)
- (xvii) Sperm whale (*Physeter macrocephalus*) – 2,530 (an average of 506 annually)
- (xviii) Spinner dolphin (*Stenella longirostris*) – 2,945 (an average of 589 annually)
- (xix) Striped dolphin (*Stenella coerulealba*) – 16,490 (an average of 3,298 annually)

(c) Level A Harassment for all Training and Testing Activities:

(1) Odonotocetes:

- (i) Dwarf sperm whale (*Kogia sima*) – 205 (an average of 41 annually)
- (ii) Pygmy sperm whale (*Kogia breviceps*) – 75 (an average of 15 annually)

6. Mitigation – The Holder of this Authorization, and any individuals operating under his authority, must implement the following mitigation measures when conducting activities identified in Section 4 of this Authorization:

(a) Lookouts – The following are protective measures concerning the use of lookouts:

(1) Lookouts positioned on surface ships will be dedicated solely to diligent observation of the air and surface of the water. Their observation objectives will include, but are not limited to, detecting the presence of biological resources and recreational or fishing boats, observing mitigation zones, and monitoring for vessel and personnel safety concerns.

(2) Lookouts positioned in aircraft or on boats will, to the maximum extent practicable and consistent with aircraft and boat safety and training and testing requirements, comply with the observation objectives described above.

(3) Lookout measures for non-impulsive sound:

(i) With the exception of vessels less than 65 ft (20 m) in length and ships that are minimally manned, ships using low-frequency or hull-mounted mid-frequency active sonar sources associated with anti-submarine warfare and mine warfare activities at sea will have two lookouts at the forward position. For the purposes of this rule, low-frequency active sonar does not include surface towed array surveillance system low-frequency active sonar.

(ii) While using low-frequency or hull-mounted mid-frequency active sonar sources associated with anti-submarine warfare and mine warfare activities at sea, ships less than 65 ft (20 m) in length and ships that are minimally manned will have one lookout at the forward position of the vessel due to space and manning restrictions.

(iii) Ships conducting active sonar activities while moored or at anchor (including pierside testing or maintenance) will maintain one lookout.

(iv) Surface ships or aircraft conducting high-frequency or non-hull mounted mid-frequency active sonar activities associated with anti-submarine warfare and mine warfare activities at sea will have one lookout.

(4) Lookout measures for explosives and impulsive sound:

(i) Aircraft conducting Improved Extended Echo-Ranging System (IEER) sonobuoy activities and explosive sonobuoy exercises will have one lookout.

(ii) Surface vessels conducting anti-swimmer grenade activities will have one lookout.

(iii) During general mine countermeasure and neutralization activities using up to a 20-lb net explosive weight detonation (bin E6 and below), vessels greater than 200 ft (61 m) will have two lookouts, while vessels less than 200 ft (61 m) or aircraft will have one lookout.

(iv) Mine neutralization activities involving positive control diver-placed charges using up to a 20-lb net explosive weight detonation will have two lookouts. The divers placing the charges on mines will report all marine mammal sightings to their supporting small boat or Range Safety Officer.

(v) When mine neutralization activities using diver-placed charges with up to a 20-lb net explosive weight detonation are conducted with a time-delay firing device, four lookouts will be used. Two lookouts will be positioned in each of two small rigid hull inflatable boats. When aircraft are used, the pilot or member of the aircrew will serve as an additional lookout. The divers placing the charges on mines will report all marine mammal sightings to their supporting small boat or Range Safety Officer. (vi) When mine neutralization activities using diver-placed charges with up to a 29-lb net explosive weight detonation (bin E7) are conducted with a time-delay firing device, four lookouts will be used. Two lookouts will be positioned in each of two small rigid hull inflatable boats or on one boat and in one helicopter when aircraft are used. The divers placing the charges on mines will report all marine mammal sightings to their dive support vessel or Range Safety Officer.

(vii) Surface vessels or aircraft conducting small- and medium-caliber gunnery exercises against a surface target will have one lookout.

(viii) Surface vessels conducting large-caliber gunnery exercises against a surface target will have one lookout.

(ix) Aircraft conducting missile exercises (including rockets) against surface targets will have one lookout.

(x) Aircraft conducting bombing exercises will have one lookout.

(xi) During explosive torpedo testing, one lookout will be used and positioned in an aircraft.

(xii) During sinking exercises, two lookouts will be used. One lookout will be positioned in an aircraft and one on a surface vessel.

(xiii) Surface vessels conducting explosive and non-explosive large-caliber gunnery exercises will have one lookout.

(5) Lookout measures for physical strike and disturbance:

(i) While underway, surface ships will have at least one lookout.

(ii) During activities using towed in-water devices, that are towed from a manned platform, one lookout will be used.

(iii) Non-explosive small-, medium-, and large-caliber gunnery exercises using a surface target will have one lookout.

(iv) Non-explosive bombing exercises will have one lookout.

(v) Aircraft conducting non-explosive missile exercises against a surface target will have one lookout

(b) Mitigation Zones – The following are protective measures concerning the implementation of mitigation zones:

(1) Mitigation zones will be measured as the radius from a source and represent a distance to be monitored.

(2) Visual detections of marine mammals within a mitigation zone will be communicated immediately to a watch station for information dissemination and appropriate action.

(3) Mitigation zones for non-impulsive sound:

(i) When marine mammals are visually detected, the Navy shall ensure that low-frequency and hull-mounted mid-frequency active sonar transmission levels are limited to at least 6 dB below normal operating levels (for sources that can be powered down during the activity) if any visually detected marine mammals are within 1,000 yd (914 m) of the source (i.e., the bow).

(ii) The Navy shall ensure that low-frequency and hull-mounted mid-frequency active sonar transmissions are limited to at least 10 dB below the equipment's normal operating level (for sources that can be powered down during the activity) if any detected marine mammals are sighted within 500 yd (457 m) of the source.

(iii) The Navy shall ensure that low-frequency and hull-mounted mid-frequency active sonar transmissions (for sources that can be turned off during the activity) are ceased if any visually detected marine mammals are within 200 yd (183 m) of the sonar dome. Active transmission will recommence if any one of the following conditions is 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 and speed and the relative motion between the animal and the source; the mitigation zone has been clear from any additional sightings for a period of 30 minutes; the ship has transited more than 2,000 yd (1.8 km) beyond the location of the last sighting; or the ship concludes that dolphins are deliberately closing in on the ship to ride the ship's bow wave (and there are no other marine mammal sightings within the mitigation zone).

(iv) If the source is not able to be powered down during the activity (e.g., low-frequency sources within bins LF4 and LF5), mitigation will involve ceasing active transmission if a marine mammal is sighted within 200 yd (183 m). Active transmission will recommence if any one of the following conditions is 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 and speed and the relative motion between the animal and the source; the mitigation zone has been clear from any additional sightings for a period of 30 minutes; or the ship has transited more than 400 yd (366 m) beyond the location of the last sighting.

(v) With the exception of activities involving platforms operating at high altitudes, when marine mammals are visually detected, the Navy shall ensure that high-frequency and non-hull-mounted mid-frequency active sonar transmission (for sources that can be turned off during the activity) is ceased if any visually detected marine mammals are within 200 yd (183 m) of the source. Active transmission will recommence if any one of the following conditions is 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 and speed and the relative motion between the animal and the source, the mitigation zone has been clear from any additional sightings for a period of 10 minutes for an aircraft-deployed source, the mitigation zone has been clear from any additional sightings for a period of 30 minutes for a vessel-deployed source, the vessel or aircraft has repositioned itself more than 400 yd (366 m) away from the location of the last sighting, or the vessel concludes that dolphins are deliberately closing in to ride the vessel's bow wave (and there are no other marine mammal sightings within the mitigation zone).

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

(vii) Generally, the Navy shall operate sonar at the lowest practicable level, not to exceed 235 dB, except as required to meet tactical training objectives.

(4) Mitigation zones for explosive and impulsive sound:

(i) A mitigation zone with a radius of 600 yd (549 m) shall be established for IEER sonobuoys (bin E4). Mitigation would include pre-exercise aerial observation and passive acoustic monitoring, which would begin 30 minutes before the first source/receiver pair detonation and continue throughout the duration of the exercise. The pre-exercise aerial observation would include: the time it takes to deploy the sonobuoy pattern (deployment is conducted by aircraft dropping sonobuoys in the water). Explosive detonations would cease if a marine mammal is sighted within the mitigation zone. Detonations would recommence if any one of the following conditions is met: the animal is observed exiting the mitigation zone, the animal is thought to have exited the mitigation zone based on its course and speed and the relative motion between the animal and the source, or the mitigation zone has been clear from any additional sightings for a period of 30 minutes.

Passive acoustic monitoring would be conducted with Navy assets, such as sonobuoys, already participating in the activity. These assets would only detect vocalizing marine mammals within the frequency bands monitored by Navy personnel. Passive acoustic detections would not provide range or bearing to detected animals, and therefore cannot provide locations of these animals. Passive acoustic detections would be reported to lookouts posted in aircraft and on vessels in order to increase vigilance of their visual observation.

(ii) A mitigation zone with a radius of 350 yd (320 m) shall be established for explosive sonobuoys using 0.5-2.5 lb net explosive weight (bin E3). Mitigation would include pre-exercise aerial monitoring during deployment of the field of sonobuoy pairs (typically up to 20 minutes) and continuing throughout the duration of the exercise within

a mitigation zone of 350 yd (320 m) around an explosive sonobuoy. Explosive detonations would cease if a marine mammal is sighted within the mitigation zone. Detonations would recommence if any one of the following conditions is met: the animal is observed exiting the mitigation zone, the animal is thought to have exited the mitigation zone based on its course and speed and the relative motion between the animal and the source, or the mitigation zone has been clear from any additional sightings for a period of 10 minutes.

Passive acoustic monitoring would also be conducted with Navy assets, such as sonobuoys, already participating in the activity. These assets would only detect vocalizing marine mammals within the frequency bands monitored by Navy personnel. Passive acoustic detections would not provide range or bearing to detected animals, and therefore cannot provide locations of these animals. Passive acoustic detections would be reported to lookouts posted in aircraft in order to increase vigilance of their visual observation.

(iii) A mitigation zone with a radius of 200 yd (183 m) shall be established for anti-swimmer grenades (bin E2). Mitigation would include visual observation from a small boat immediately before and during the exercise within a mitigation zone of 200 yd (183 m) around an anti-swimmer grenade. Explosive detonations would cease if a marine mammal is sighted within the mitigation zone. Detonations would recommence if any one of the following conditions is met: the animal is observed exiting the mitigation zone, the animal is thought to have exited the mitigation zone based on its course and speed and the relative motion between the animal and the source, the mitigation zone has been clear from any additional sightings for a period of 30 minutes, or the activity has been repositioned more than 400 yd (366 m) away from the location of the last sighting.

(iv) A mitigation zone ranging from 350 yd (320 m) to 800 yd (732 m), dependent on charge size and if the activity involves the use of diver-placed charges, shall be established for mine countermeasure and neutralization activities using positive control firing devices. Mitigation zone distances are specified for charge size in Table 7 of the preamble of the final rule.

During general mine countermeasure and neutralization activities, mitigation would include visual observation from one or more small boats or aircraft beginning 30 minutes before, during, and 30 minutes after (when helicopters are not involved in the activity) or 10 minutes before, during, and 10 minutes after (when helicopters are involved in the activity) the completion of the exercise within the mitigation zones around the detonation site.

For activities involving diver-placed charges, visual observation would be conducted by either two small boats, or one small boat in combination with one helicopter. Boats would position themselves near the mid-point of the mitigation zone radius (but always outside the detonation plume radius and human safety zone) and travel in a circular pattern around the detonation location. When using two boats, each boat would be positioned on opposite sides of the detonation location, separated by 180 degrees. If used, helicopters would travel in a circular pattern around the detonation location.

For both general and diver-placed positive control mine countermeasure and neutralization activities, explosive detonations will cease if a marine mammal is sighted

within the mitigation zone. Detonations will recommence if any one of the following conditions is 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 and speed and the relative motion between the animal and the source, the mitigation zone has been clear from any additional sightings for a period of 30 minutes, when helicopters are not involved in the activity or the mitigation zone has been clear from any additional sightings for a period of 10 minutes when helicopters are involved in the activity.

(v) A mitigation zone with a radius of 1,000 yd (914 m) shall be established for mine countermeasure and neutralization activities using diver-placed time-delay firing devices (bin E6). Mine neutralization activities involving diver-placed charges would not include time-delay longer than 10 minutes. Mitigation would include visual observation from small boats or aircraft commencing 30 minutes before, during, and until 30 minutes after the completion of the exercise within a mitigation zone of 1,000 yd (914 m) around the detonation site. During activities using time-delay firing devices involving up to a 20 lb net explosive weight charge, visual observation will take place using two small boats. Fuse initiation would recommence if any one of the following conditions is met: the animal is observed exiting the mitigation zone, the animal is thought to have exited the mitigation zone based on its course and speed and the relative motion between the animal and the source, or the mitigation zone has been clear from any additional sightings for a period of 30 minutes.

Survey boats would position themselves near the mid-point of the mitigation zone radius (but always outside the detonation plume radius/human safety zone) and travel in a circular pattern around the detonation location. One lookout from each boat would look inward toward the detonation site and the other lookout would look outward away from the detonation site. When using two small boats, each boat would be positioned on opposite sides of the detonation location, separated by 180 degrees. If available for use, helicopters would travel in a circular pattern around the detonation location.

(vi) A mitigation zone with a radius of 200 yd (183 m) shall be established for small- and medium-caliber gunnery exercises with a surface target (bin E2). Mitigation would include visual observation from a vessel or aircraft immediately before and during the exercise within a mitigation zone of 200 yd (183 m) around the intended impact location. Vessels would observe the mitigation zone from the firing position. When aircraft are firing, the aircrew would maintain visual watch of the mitigation zone during the activity. Firing would cease if a marine mammal is sighted within the mitigation zone. Firing would recommence if any one of the following conditions is met: the animal is observed exiting the mitigation zone, the animal is thought to have exited the mitigation zone based on its course and speed and the relative motion between the animal and the source, the mitigation zone has been clear from any additional sightings for a period of 10 minutes for a firing aircraft, the mitigation zone has been clear from any additional sightings for a period of 30 minutes for a firing vessel, or the intended target location has been repositioned more than 400 yd (366 m) away from the location of the last sighting.

(vii) A mitigation zone with a radius of 600 yd (549 m) shall be established for large-caliber gunnery exercises with a surface target (bin E5). Mitigation would include visual observation from a ship immediately before and during the exercise within a

mitigation zone of 600 yd (549 m) around the intended impact location. Ships would observe the mitigation zone from the firing position. Firing would cease if a marine mammal is sighted within the mitigation zone. Firing would recommence if any one of the following conditions is met: the animal is observed exiting the mitigation zone, the animal is thought to have exited the mitigation zone based on its course and speed and the relative motion between the animal and the source, or the mitigation zone has been clear from any additional sightings for a period of 30 minutes.

(viii) A mitigation zone with a radius of 900 yd (823 m) around the deployed target shall be established for missile exercises involving aircraft firing up to 250 lb net explosive weight using and a surface target (bin E9). When aircraft are firing, mitigation would include visual observation by the aircrew or supporting aircraft prior to commencement of the activity within a mitigation zone of 900 yd (823 m) around the deployed target. Firing would recommence if any one of the following conditions is met: the animal is observed exiting the mitigation zone, the animal is thought to have exited the mitigation zone based on its course and speed and the relative motion between the animal and the source, or the mitigation zone has been clear from any additional sightings for a period of 10 minutes or 30 minutes (depending on aircraft type).

(ix) A mitigation zone with a radius of 2,000 yd (1.8 km) shall be established for missile exercises involving aircraft firing >250 to 500 lb net explosive weight using and a surface target (bin E10). When aircraft are firing, mitigation would include visual observation by the aircrew prior to commencement of the activity within a mitigation zone of 2,000 yd (1.8 km) around the intended impact location. Firing would cease if a marine mammal is sighted within the mitigation zone. Firing would recommence if any one of the following conditions is met: the animal is observed exiting the mitigation zone, the animal is thought to have exited the mitigation zone based on its course and speed and the relative motion between the animal and the source, or the mitigation zone has been clear from any additional sightings for a period of 10 minutes or 30 minutes (depending on aircraft type). (x) A mitigation zone with a radius of 2,000 yd (1.8 km) shall be established for missile exercises with 251 to 500 lb net explosive weight and a surface target (E10)

(xi) A mitigation zone with a radius of 2,500 yd (2.3 km) shall be established for bombing exercises (bin E12). Mitigation would include visual observation from the aircraft immediately before the exercise and during target approach within a mitigation zone of 2,500 yd (2.3 km) around the intended impact location. Bombing would cease if a marine mammal is sighted within the mitigation zone. Bombing would recommence if any one of the following conditions is met: the animal is observed exiting the mitigation zone, the animal is thought to have exited the mitigation zone based on its course and speed and the relative motion between the animal and the source, or the mitigation zone has been clear from any additional sightings for a period of 10 minutes.

(xii) A mitigation zone with a radius of 2,100 yd (1.9 km) shall be established for torpedo (explosive) testing (except for aircraft operating at high altitudes) (bin E11). Mitigation would include visual observation by aircraft immediately before, during, and after the exercise within a mitigation zone of 2,100 yd (1.9 km) around the intended impact location. Firing would cease if a marine mammal is sighted within the mitigation zone. Firing would recommence if any one of the following conditions is met: the

animal is observed exiting the mitigation zone, the animal is thought to have exited the mitigation zone based on its course and speed and the relative motion between the animal and the source, or the mitigation zone has been clear from any additional sightings for a period of 10 minutes or 30 minutes (depending on aircraft type).

In addition to visual observation, passive acoustic monitoring would be conducted with Navy assets, such as passive ships sonar systems or sonobuoys, already participating in the activity. Passive acoustic observation would be accomplished through the use of remote acoustic sensors or expendable sonobuoys, or via passive acoustic sensors on submarines when they participate in the proposed action. These assets would only detect vocalizing marine mammals within the frequency bands monitored by Navy personnel. Passive acoustic detections would not provide range or bearing to detected animals, and therefore cannot provide locations of these animals. Passive acoustic detections would be reported to the lookout posted in the aircraft in order to increase vigilance of the visual observation and to the person in control of the activity for their consideration in determining when the mitigation zone is free of visible marine mammals.

(xiii) A mitigation zone with a radius of 2.5 nautical miles (nm) around the target ship hulk shall be established for sinking exercises (bin E12). Mitigation would include aerial observation beginning 90 minutes before the first firing, visual observations from vessels throughout the duration of the exercise, and both aerial and vessel observation immediately after any planned or unplanned breaks in weapons firing of longer than 2 hours. Prior to conducting the exercise, the Navy would review remotely sensed sea surface temperature and sea surface height maps to aid in deciding where to release the target ship hulk.

The Navy would also monitor using passive acoustics during the exercise. Passive acoustic monitoring would be conducted with Navy assets, such as passive ships sonar systems or sonobuoys, already participating in the activity. These assets would only detect vocalizing marine mammals within the frequency bands monitored by Navy personnel. Passive acoustic detections would not provide range or bearing to detected animals, and therefore cannot provide locations of these animals. Passive acoustic detections would be reported to lookouts posted in aircraft and on vessels in order to increase vigilance of their visual observation. Lookouts will also increase observation vigilance before the use of torpedoes or unguided ordnance with a net explosive weight of 500 lb or greater, or if the Beaufort sea state is a 4 or above.

The exercise would cease if a marine mammal is sighted within the mitigation zone. The exercise would recommence if any one of the following conditions is met: the animal is observed exiting the mitigation zone, the animal is thought to have exited the mitigation zone based on its course and speed and the relative motion between the animal and the source, or the mitigation zone has been clear from any additional sightings for a period of 30 minutes. Upon sinking the vessel, the Navy would conduct post-exercise visual observation of the mitigation zone for 2 hours (or until sunset, whichever comes first).

(xiv) A mitigation zone with a radius of 70 yd (64 m) within 30 degrees on either side of the gun target line on the firing side of the vessel for explosive and non-explosive large-caliber gunnery exercises conducted from a ship. Firing would cease if a marine mammal is sighted within the mitigation zone. Firing would recommence if any one of

the following conditions is met: the animal is observed exiting the mitigation zone, the animal is thought to have exited the mitigation zone based on its course and speed and the relative motion between the animal and the source, the mitigation zone has been clear from any additional sightings for a period of 30 minutes, or the vessel has repositioned itself more than 140 yd (128 m) away from the location of the last sighting.

(5) Mitigation zones for vessels and in-water devices:

(i) A mitigation zone of 500 yd (457 m) for observed whales and 200 yd (183 m) for all other marine mammals (except bow riding dolphins) shall be established for all vessel movement, providing it is safe to do so.

(ii) A mitigation zone of 250 yd (229 m) shall be established for all towed in-water devices that are towed from a manned platform, providing it is safe to do so.

(6) Mitigation zones for non-explosive practice munitions:

(i) A mitigation zone of 200 yd (183 m) shall be established for non-explosive small-, medium-, and large-caliber gunnery exercises using a surface target. Mitigation would include visual observation immediately before and during the exercise within a mitigation zone of 200 m around the intended impact location. Firing would cease if a marine mammal is visually detected within the mitigation zone. Firing would recommence if any one of the following conditions are met: the animal is observed exiting the mitigation zone, the animal is thought to have exited the mitigation zone based on its course and speed and the relative motion between the animal and the source, the mitigation zone has been clear from any additional sightings for a period of 10 minutes for a firing aircraft, the mitigation zone has been clear from any additional sightings for a period of 30 minutes for a firing vessel, or the intended target location has been repositioned more than 400 yd (366 m) away from the location of the last sighting and the animal's estimated course direction.

(ii) A mitigation zone of 1,000 yd (914 m) shall be established for non-explosive bombing exercises. Mitigation would include visual observation from the aircraft immediately before the exercise and during target approach within a mitigation zone of 1000 yd (914 m) around the intended impact location. Bombing would cease if a marine mammal is visually detected within the mitigation zone. Bombing would recommence if any one of the following conditions are met: the animal is observed exiting the mitigation zone, the animal is thought to have exited the mitigation zone based on its course and speed and the relative motion between the animal and the source, or the mitigation zone has been clear from any additional sightings for a period of 10 minutes.

(iii) When aircraft are firing, a mitigation zone of 900 yd (823 m) shall be established for non-explosive missile exercises using a surface target. Firing would cease if a marine mammal is visually detected within the mitigation zone. Firing would recommence if any one of the following conditions are met: the animal is observed exiting the mitigation zone, the animal is thought to have exited the mitigation zone based on its course and speed and the relative motion between the animal and the source,

or the mitigation zone has been clear from any additional sightings for a period of 10 minutes or 30 minutes (depending on aircraft type).

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

(1) Shutdown Procedures - When an Uncommon Stranding Event (USE - defined in § 218.91) occurs during a Major Training Exercise (MTE) in the MITT Study Area, the Navy shall implement the procedures described below.

(i) The Navy shall implement a shutdown (as defined § 218.91) when advised by a NMFS Office of Protected Resources Headquarters Senior Official designated in the MITT Study Area Stranding Communication Protocol that a USE involving live animals has been identified and that at least one live animal is located in the water. NMFS and the Navy will maintain a dialogue, as needed, regarding the identification of the USE and the potential need to implement shutdown procedures.

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

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

(iv) In the event, following a USE, that qualified individuals are attempting to herd animals back out to the open ocean and animals are not willing to leave, or animals are seen repeatedly heading for the open ocean but turning back to shore, NMFS and the Navy shall coordinate (including an investigation of other potential anthropogenic stressors in the area) to determine if the proximity of mid-frequency active sonar training activities or explosive detonations, though farther than 14 nm from the distressed animal(s), is likely contributing to the animals’ refusal to return to the open water. If so, NMFS and the Navy will further coordinate to determine what measures are necessary to improve the probability that the animals will return to open water and implement those measures as appropriate.

(v) Within 72 hours of NMFS notifying the Navy of the presence of a USE, the Navy shall provide available information to NMFS (per the MITT Study Area Communication Protocol) regarding the location, number and types of acoustic/explosive sources, direction and speed of units using mid-frequency active sonar, and marine mammal sightings information associated with training activities occurring within 80 nm (148 km) and 72 hours prior to the USE event. Information not initially available regarding the 80-nm (148-km), 72-hour period prior to the event will be provided as soon

as it becomes available. The Navy will provide NMFS investigative teams with additional relevant unclassified information as requested, if available.

7. Monitoring and Reporting – When conducting operations identified in 50 CFR § 218.90 and Section 4 of this Authorization, the Holder of the Authorization and any person(s) operating under his authority must implement the following monitoring and reporting measures. All reports should be submitted to the Director, Office of Protected Resources, National Marine Fisheries Service, 1315 East-West Highway, Silver Spring MD 20910.

(a) General Notification of Injured or Dead Marine Mammals – Navy personnel shall ensure that NMFS (regional stranding coordinator) is notified immediately (or as soon as clearance procedures allow) if an injured or dead marine mammal is found during or shortly after, and in the vicinity of, any Navy training or testing activity utilizing mid- or high-frequency active sonar, or underwater explosive detonations. The Navy shall provide NMFS with species or description of the animal(s), the condition of the animal(s) (including carcass condition if the animal is dead), location, time of first discovery, observed behaviors (if alive), and photo or video (if available). The Navy shall consult the Stranding Response Plan to obtain more specific reporting requirements for specific circumstances.

(b) Vessel Strike – In the event that a Navy vessel strikes a whale, the Navy shall do the following:

(1) Immediately report to NMFS (pursuant to the established Communication Protocol):

- (i) Species identification if known;
- (ii) Location (latitude/longitude) of the animal (or location of the strike if the animal has disappeared);
- (iii) Whether the animal is alive or dead (or unknown); and
- (iv) Time of the strike.

(2) As soon as feasible, the Navy shall report to or provide to NMFS, the:

- (i) Size, length, and description (critical if species is not known) of animal;
- (ii) An estimate of the injury status (e.g., dead, injured but alive, injured and moving, blood or tissue observed in the water, status unknown, disappeared, etc.);
- (iii) Description of the behavior of the whale during event, immediately after the strike, and following the strike (until the report is made or the animal is no longer sighted);
- (iv) Vessel class/type and operation status;
- (v) Vessel length
- (vi) Vessel speed and heading; and
- (vii) To the best extent possible, obtain

(3) Within 2 weeks of the strike, provide NMFS:

(i) A detailed description of the specific actions of the vessel in the 30-minute timeframe immediately preceding the strike, during the event, and immediately after the strike (e.g., the speed and changes in speed, the direction and changes in the direction, other maneuvers, sonar use, etc., if not classified); and

(ii) A narrative description of marine mammal sightings during the event and immediately after, and any information as to sightings prior to the strike, if available; and

(iii) Use established Navy shipboard procedures to make a camera available to attempt to capture photographs following a ship strike.

(c) Annual MITT Monitoring Program Report – (1) The Navy shall submit an annual report describing the implementation and results of the MITT Monitoring Program, described in § 218.95. Data standards will be consistent to the extent appropriate across range complexes and study areas to allow for comparison in different geographic locations. Although additional information will be gathered, the protected species observers collecting marine mammal data pursuant to the MITT Monitoring Program shall, at a minimum, provide the same marine mammal observation data required in § 218.95. (2) As an alternative, the Navy may submit a multi-range complex annual monitoring plan report to fulfill this requirement. Such a report would describe progress of knowledge made with respect to monitoring plan study questions across multiple Navy ranges associated with the ICMP. Similar study questions shall be treated together so that progress on each topic shall 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. The report shall be submitted either 90 days after the calendar year, or 90 days after the conclusion of the monitoring year date to be determined by the Adaptive Management process.

(d) Sonar Exercise Notification – The Navy shall submit to NMFS either an electronic (preferably) or verbal report within 15 calendar days after the completion of any major exercise indicating:

(i) Location of the exercise.

(ii) Beginning and end dates of the exercise.

(iii) Type of exercise.

(e) Annual MITT Exercise and Testing Report – The Navy shall submit preliminary reports detailing the status of authorized sound sources within 21 days after the anniversary of the date of issuance of the Letter of Authorization. The Navy shall submit a detailed report 3 months after the anniversary of the date of issuance of the Letter of Authorization. The detailed annual report shall contain information on MTEs, Sinking Exercise (SINKEX) events, and a summary of sound sources used, as described below. The analysis in the detailed report will be based on the accumulation of data from the current year's report and data collected from previous reports. The detailed report shall contain information identified in § 218.95 (e)(1-5).

(1) Major Training Exercises/SINKEX:

(i) This section shall contain the reporting requirements for Coordinated and Strike Group exercises and SINKEX. Coordinated and Strike Group Major Training Exercises include:

(A) Joint Multi-Strike Group Exercise (Valiant Shield).

(B) Joint Expeditionary Exercise.

(ii) Exercise information for each MTE:

(A) Exercise designator.

(B) Date that exercise began and ended.

(C) Location (operating area).

(D) Number of items or hours (per the Letter of Authorization) of each sound source bin (impulsive and non-impulsive) used in the exercise.

(E) Number and types of vessels, aircraft, etc., participating in exercise.

(F) Individual marine mammal sighting information for each sighting when mitigation occurred during each MTE:

(1) Date/time/location of sighting.

(2) Species (if not possible, indication of whale/dolphin).

(3) Number of individuals.

(4) Initial detection sensor.

(5) Indication of specific type of platform the observation was made from (including, for example, what type of surface vessel or testing platform).

(6) Length of time observers maintained visual contact with marine mammal(s).

(7) Sea state.

(8) Visibility.

(9) Sound source in use at the time of sighting.

(10) Indication of whether animal is <200 yd, 200 to 500 yd, 500 to 1,000 yd, 1,000 to 2,000 yd, or >2,000 yd from sound source.

(11) Mitigation Implementation – Whether operation of sonar sensor was delayed, or sonar was powered or shut down, and how long the delay was; or whether navigation was changed or delayed.

(12) If source in use is a hull-mounted sonar, relative bearing of animal from ship, and estimation of animal's motion relative to ship (opening, closing, parallel).

(13) Observed behavior – Watchstanders shall 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 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 shall identify the specific observations that support any conclusions the Navy reaches about the effectiveness of the mitigation.

(iv) Exercise information for each SINKEX:

(A) List of the vessels and aircraft involved in the SINKEX.

(B) Location (operating area).

(C) Chronological list of events with times, including time of sunrise and sunset, start and stop time of all marine species surveys that occur before, during, and after the SINKEX, and ordnance used.

(D) Visibility and/or weather conditions, wind speed, cloud cover, etc. throughout exercise if it changes.

(E) Aircraft used in the surveys, flight altitude, and flight speed and the area covered by each of the surveys, given in coordinates, map, or square miles.

(F) Passive acoustic monitoring details (number of sonobuoys, area, detections of biologic activity, etc.).

(G) Individual marine mammal sighting information for each each sighting that required mitigation to be implemented:

(1) Date/time/location of sighting.

(2) Species (if not possible, indication of whale/dolphin).

(3) Number of individuals.

(4) Initial detection sensor.

(5) Indication of specific type of platform the observation was made from (including, for example, what type of surface vessel or platform).

(6) Length of time observers maintained visual contact with marine mammal(s).

(7) Sea state.

(8) Visibility.

(9) Indication of whether animal is <200 yd, 200-500 yd, 500-1,000 yd, 1,000-2,000 yd, or >2,000 yd from the target.

(10) Mitigation implementation – Whether the SINKEX was stopped or delayed and length of delay.

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

(H) List of the ordnance used throughout the SINEKX and net explosive weight (NEW) of each weapon and the combined NEW.

(2) Summary of Sources Used.

(i) This section shall include the following information summarized from the authorized sound sources used in all training and testing events:

(A) Total annual or quantity (per the Letter of Authorization) of each bin of sonar or other non-impulsive source;

(B) Total annual expended/detonated rounds (missiles, bombs, etc.) for each explosive bin; and

(C) IEER)/sonobuoy summary, including:

(1) Total expended/detonated rounds (buoys).

(2) Total number of self-scuttled IEER rounds.

(3) Geographic Information Presentation – The reports shall present an annual (and seasonal, where practical) depiction of training exercises and testing bin usage geographically across the Study Area.

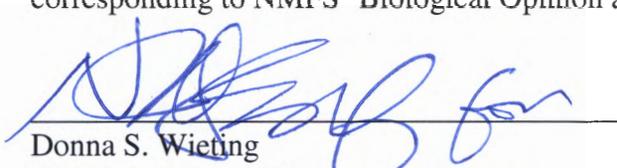
(f) 5-year Close-out Exercise and Testing Report – This report will be included as part of the 2020 annual exercise or testing report. This report will provide the annual totals for each sound source bin with a comparison to the annual allowance and the 5-year total for each sound source bin with a comparison to the 5-year allowance. Additionally, if there were any changes to the sound source allowance, this report will include a discussion of why the change was made and include the analysis to support how the change did or did not result in a change in the MITT FEIS/OEIS and final rule determinations. The report will be submitted 3 months after the expiration of the rule. NMFS will submit comments on the draft close-out report, if any, within 3 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.

8. Prohibitions – Notwithstanding takings contemplated in Section 4 of this Authorization and authorized by a Letter of Authorization issued under §§ 216.106 and 218.97, no person in connection with the activities described in Section 4 may take any marine mammal specified in Section 5 other than by incidental take as specified in § 218.92; take a marine mammal specified in Section 5 if such taking results in more than a negligible impact on the species or stocks of such marine mammal; or violate, or fail to comply with, the terms, conditions, and requirements of these regulations or a Letter of Authorization issued under §§ 216.106 and 218.97.

9. This Authorization may be modified, suspended, or withdrawn pursuant to 50 CFR § 216.98 if the Holder or any person operating under his authority fails to abide by the conditions prescribed herein or if the authorized taking is having more than a negligible impact on the species or stock of affected marine mammals.

10. A copy of this Authorization and the attached Subpart J of the regulations, or a document containing the equivalent requirements specified in this Authorization or 50 CFR Part 218, Subpart J, must be in the possession of the on-site Commanding Officer in order to take marine mammals under the authority of this Letter of Authorization while conducting the specified activity(ies).

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



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

AUG 31 2016
Date