



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

**JAN 23 2013**

Admiral Cecil D. Haney  
Commander  
United States Pacific Fleet  
250 Makalapa Drive  
Pearl Harbor, Hawaii 96860-3131

Dear Admiral Walsh:

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 Navy training activities in the Hawaii Range Complex. This is in response to the National Marine Fisheries Service's reinitiation of section 7 of the Endangered Species Act, pursuant to the recent listing of the Main Hawaiian Islands insular Distinct Population Segment of false killer whales under the Endangered Species Act (77 FR 70915, November 28, 2012). This authorization is effective for the remainder of the regulations and covers the taking of marine mammals incidental to the Navy training exercises identified in the final rule, which include the use of active sonar sources and explosives, provided the mitigation, monitoring, and reporting requirements are undertaken as required by the regulations (74 FR 1456, January 12, 2009) and the LOA.

If you have any questions concerning the LOA or its requirements, please contact Michelle Magliocca, Office of Protected Resources, National Marine Fisheries Service at 301-427-8401.

Sincerely,

Helen M. Golde, Acting Director  
Office of Protected Resources

Enclosure



DEPARTMENT OF COMMERCE  
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION  
NATIONAL MARINE FISHERIES SERVICE

Letter of Authorization

The Commander, U.S. Pacific Fleet (CPF), 250 Makalapa Drive, Pearl Harbor, HI 96860-7000, and persons operating under his authority (i.e., Navy), are authorized to take marine mammals incidental to Navy exercises conducted in the Hawaii Range Complex (HRC) in accordance with 50 CFR Part 216, Subpart P – Taking Marine Mammals Incidental to U.S. Navy Training in the Hawaii Range Complex (HRC) 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 January 18, 2013, through January 5, 2014.
2. This Authorization is valid only for the unintentional taking of the species of marine mammals and methods of take identified in 50 CFR § 216.172(c) and Condition (5) of this Authorization incidental to the activities specified in 50 CFR § 216.170(c) and Condition (4)(a) of this Authorization and occurring within the Hawaii Operational Area, which extends from 16 to 43° N. lat. and from 150 to 179° degrees W. long.
3. This Authorization is valid only if the Holder of the Authorization or any person(s) operating under his authority implements the mitigation, monitoring, and reporting required pursuant to 50 CFR §§ 216.174 & 216.175 and implements the Terms and Conditions of this Authorization.
4. (a) This Authorization is valid for the activities and designated amounts of use listed below, during the period from January 15, 2012 through January 5, 2014:
  - (1) The use of the following mid-frequency active sonar (MFAS) and high-frequency active sonar (HFAS) sources, or similar sources, for U.S. Navy anti-submarine warfare (ASW) training, maintenance, and research, development, testing, and evaluation (RDT&E) in the amounts indicated below:
    - (i) AN/SQS-53 (hull-mounted sonar) – 2,568 hours (an average of 1,284 hours annually)
    - (ii) AN/SQS-56 (hull-mounted sonar) – 766 hours (an average of 383 hours annually)
    - (iii) AN/AQS-22 or AN/AQS-13 (helicopter dipping sonar) – 2,020 dips (an average of 1,010 dips annually)

(iv) SSQ-62 (sonobuoys) – 4,846 sonobuoys (an average of 2,423 sonobuoys annually)

(v) MK-48, MK-46, or MK-54 (torpedoes) – 626 torpedoes (an average of 313 torpedoes annually)

(vi) AN/BQQ-10 or AN/BQQ-5 (submarine mounted sonar) – 400 hours (an average of 200 hours annually)

(vii) AN/SSQ-110A (IEER)/SSQ-125 (AEER) – up to eight events (an average of 1,920 buoys annually) combined of either AEER or EER/IEER

(2) The detonation of the underwater explosives indicated in (2)(i) conducted as part of the training exercises indicated in (2)(ii):

(i) Underwater Explosives:

- (A) 5” Naval Gunfire – 19 lbs (an average of 9.5 lbs annually)
- (B) 76 mm rounds – 3.2 lbs (an average of 1.6 lbs annually)
- (C) Maverick – 157 lbs (an average of 78.5 lbs annually)
- (D) Harpoon – 896 lbs (an average of 448 lbs annually)
- (E) MK-82 – 476 lbs (an average of 238 lbs annually)
- (F) MK-83 – 1,148 lbs (an average of 574 lbs annually)
- (G) MK-84 – 1,890 lbs (an average of 945 lbs annually)
- (H) MK-48 – 1,702 lbs (an average of 851 lbs annually)
- (I) Demolition Charges – 40 lbs (an average of 20 lbs annually)
- (J) EER/IEER – 10 lbs (an average of 5 lbs annually)

(ii) Training Events:

- (A) Mine Neutralization – 136 exercises (an average of 68 exercises annually)
- (B) Air-to-Surface MISSILEX – 100 exercises (an average of 50 exercises annually)
- (C) Surface-to-Surface MISSILEX – 24 exercises (an average of 12 exercises annually)
- (D) BOMBEX – 76 exercises (an average of 38 exercises annually)
- (E) SINKEX – 12 exercises (an average of 6 exercises annually)
- (F) Surface-to-Surface GUNEX – 182 exercises (an average of 91 exercises annually)
- (G) Naval Surface Fire Support – 56 exercises (an average of 28 exercises annually)
- (H) EER/IEER – up to eight events (an average of 1,920 buoys annually) combined of either AEER or EER/IEER

(b) If the number of sonar hours, dips, and sonobuoys, and exercises indicated in Condition 4(a)(1) are exceeded by more than 10 percent, subsequent LOAs issued under the HRC final rule will ensure that the total activities over five years do not result in exceeding the amount of authorized marine mammal takes indicated in 50 CFR 216.172(c).

(c) The sonar hours conducted as described in Condition (4)(a)(1) will be seasonally and spatially distributed such that no additional exposures of humpback whales to MFAS/HFAS would occur beyond those used to estimate take in the years with a RIMPAC.

5. This authorization is valid only for the incidental take of the following marine mammal species, and only by the indicated method and amount of take. The authorized take numbers include the total take occurring during the period from January 15, 2012 through January 5, 2014:

(a) Level B Harassment:

(i) Mysticetes:

- (A) Humpback whale (*Megaptera novaeangliae*) – 2,992 (not to exceed 1,496 annually)
- (B) Minke whale (*Balaenoptera acutorostrata*) – 140
- (C) Sei whale (*Balaenoptera borealis*) – 2 (not to exceed 1 annually)
- (D) Fin whale (*Balaenoptera physalus*) – 44 (not to exceed 22 annually)
- (E) Bryde’s whale (*Balaenoptera edeni*) – 128

(ii) Odontocetes:

- (A) Sperm whales (*Physeter macrocephalus*) – 1,600 (not to exceed 800 annually)
- (B) Pygmy sperm whales (*Kogia breviceps*) – 1,904
- (C) Dwarf sperm whale (*Kogia sima*) – 4,668
- (D) Cuvier’s beaked whale (*Ziphius cavirostris*) – 2,530
- (E) Blainville’s beaked whale (*Mesoplodon densirostris*) – 786
- (F) Longman’s beaked whale (*Indopacetus pacificus*) – 232
- (G) Rough-toothed dolphin (*Steno bredanensis*) – 2,370
- (H) Bottlenose dolphin (*Tursiops truncatus*) – 1,614
- (I) Pan-tropical dolphins (*Stenella attenuata*) – 4,838
- (J) Spinner dolphins (*Stenella longirostris*) – 926
- (K) Striped dolphins (*Stenella coeruleoalba*) – 7,060
- (L) Risso’s dolphin (*Grampus griseus*) – 1,094
- (M) Melon-headed whale (*Peponocephala electra*) – 1,314
- (N) Fraser’s dolphin (*Lagenodelphis hosei*) – 2,744
- (O) Pygmy killer whale (*Feresa attenuata*) – 432
- (P) False killer whale (*Pseudorca crassidens*), Main Hawaiian Islands insular DPS – 8 (not to exceed 4 annually)

(Q) False killer whale (*Pseudorca crassidens*), Main Hawaiian Islands pelagic – 70

(R) False killer whale (*Pseudorca crassidens*), Northwest Hawaiian Islands – 24

(S) Killer whale (*Orcinus orca*) – 102

(T) Short-finned pilot whale (*Globicephala macrorhynchus*) – 3,956

(ii) Pinnipeds: Hawaiian monk seal (*Monachus schauinslandi*) – 242 (not to exceed 121 annually)

(b) Level A Harassment and/or mortality of 10 individuals of each of the species listed below over the course of the 5-year regulations: Bottlenose dolphin (*Tursiops truncatus*), Pygmy and Dwarf sperm whales (*Kogia breviceps* and *K. sima*), Melon-headed whale (*Peponocephala electra*), Pantropical spotted dolphin (*Stenella attenuata*), Pygmy killer whale (*Feresa attenuata*), Short-finned pilot whale (*Globicephala macrorhynchus*), Striped dolphin (*Stenella coeruleoalba*), Cuvier's beaked whale (*Ziphius cavirostris*), Blainville's beaked whale (*Mesoplodon densirostris*), and Longman's beaked whale (*Indopacetus pacificus*).

(c) If any of the take in Condition (5)(b) occurs, it will be deducted from the take to be authorized in subsequent LOAs under 50 CFR Subpart P so as to ensure that the total taking over 5 years does not exceed the amounts indicated in Condition 5(b) and 50 CFR § 216.172(c).

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 50 CFR § 216.170(c) and Condition 4(a) of this Authorization:

(1) Mitigation Measures for ASW training:

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

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

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

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

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

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

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

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

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

(x) Personnel on lookout shall employ visual search procedures employing a scanning methodology in accordance with the Lookout Training Handbook (NAVEDTRA 12968-D).

(xi) After sunset and prior to sunrise, lookouts shall employ Night Lookouts Techniques in accordance with the Lookout Training Handbook.

(xii) Personnel on lookout shall be responsible for reporting all objects or anomalies sighted in the water (regardless of the distance from the vessel) to the Officer of the Deck.

(xiii) CPF shall distribute the final mitigation measures contained in this Authorization and NMFS' Biological Opinion to the Fleet.

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

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

(xvi) During mid-frequency active sonar training activities, personnel shall utilize all available sensor and optical systems (such as Night Vision Goggles) to aid in the detection of marine mammals.

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

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

(xix) Marine mammal detections shall be reported immediately to assigned Aircraft Control Unit for further dissemination to ships in the vicinity of the marine species as appropriate where it is reasonable to conclude that the course of the ship will likely result in a closing of the distance to the detected marine mammal.

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

(A) Ships and submarines shall continue to limit maximum MFAS transmission levels by this 6-dB factor until the marine mammal has been seen to leave the 1,000-yard safety zone, has not been detected for 30 minutes, or the vessel has transited more than 2,000 yards (1,829 m) beyond the location of the last detection.

(B) The Navy shall ensure that MFAS transmissions will be limited to at least 10 dB below the equipment's normal operating level if any detected animals are within 500 yards (457 m) of the sonar dome. Ships and submarines shall continue to limit maximum ping levels by this 10-dB factor until the marine mammal has been seen to leave the 500-yard safety zone, has not been detected for 30 minutes, or the vessel has transited more than 2,000 yards (1,829 m) beyond the location of the last detection.

(C) The Navy shall ensure that MFAS transmissions are ceased if any detected marine mammals are within 200 yards (183 m) of the sonar dome. MFAS transmissions will not resume until the marine mammal has been seen to leave the 200-yard safety zone, has not been detected for 30 minutes, or the vessel has transited more than 2,000 yards (1,829 m) beyond the location of the last detection.

(D) Special conditions applicable for dolphins and porpoises only: If, after conducting an initial maneuver to avoid close quarters with dolphins or porpoises, the Officer of the Deck concludes that dolphins or porpoises are deliberately closing to ride the vessel's bow wave, no further mitigation actions are necessary while the dolphins or porpoises continue to exhibit bow wave riding behavior.

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

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

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

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

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

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

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

(xxvii) Humpback Whale Cautionary Area – this area is defined as the area extending 5 km (2.7 nm) from a line drawn from Kaunakakai on the island of Molokai to Kaena Point on the Island of Lanai; and an area extending 5 km (2.7 nm) from a line drawn from Kaunolu on the Island of Lanai to the most Northeastern point on the Island of Kahoolawe; and within a line drawn from Kanapou Bay on the Island of Kahoolawe to Kanahena Point on the Island of Maui and a line drawn from Cape Halawa on the Island of Molokai to Lipoa Point on the Island of Maui, excluding the existing submarine operating area. Following are the required measures related to this area:

(A) Should national security needs require MFAS training and testing in the cautionary area between 15 December and 15 April, it must be personally authorized by the CPF based on his determination that training and testing in that specific area is required for national security purposes. This authorization shall be documented by the CPF in advance of transiting and training in the cautionary area, and the determination shall be based on the unique characteristics of the area from a military readiness perspective, taking into account the importance of the area for humpback whales and the need to minimize adverse impacts on humpback whales from MFAS whenever practicable. Further, the CPF will provide specific direction on required mitigation measures prior to operational units transiting to and training in the cautionary area.

(B) The Navy shall provide advance notification to NMFS of any such activities (listed in xxvii(A), above).

(C) The Navy shall include in its periodic reports for compliance with the MMPA whether or not activities occurred in the Humpback Whale Cautionary Area described above and any observed effects on humpback whales due to the conduct of these activities.

(xxviii) The Navy shall abide by the letter of the final “Stranding Response Plan for Major Navy Training Exercises in the HRC” (Attachment A) to include the following measures:

(A) Shutdown Procedures – When an Uncommon Stranding Event (USE – as defined in 50 C.F.R. § 216.171(b) and Attachment A) occurs during a Major Training Exercise (MTE, including RIMPAC, USWEX, or Multi-Strike Group Exercise) in the HRC, the Navy shall implement the procedures described below.

(1) The Navy shall implement a shutdown (as defined in 50 C.F.R. § 216.171(b) and Attachment A) when advised by a NMFS Office of Protected Resources Headquarters Senior Official designated in the HRC Stranding Communication Protocol of the need to implement shutdown procedures because 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.

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

(3) If the Navy finds an injured or dead animal 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.

(4) In the event, following a USE, that: a) qualified individuals are attempting to herd animals back out to the open ocean and animals are not willing to leave, or b) animals are seen repeatedly heading for the open ocean but turning back to shore, NMFS and the Navy shall coordinate (including an investigation of other potential anthropogenic stressors in the area) to determine if the proximity of MFAS 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.

(B) Within 72 hours of the notification of the USE the Navy will inform NMFS where and when they were conducting training (within 80 nm and 72 hours of the event) and whether or not they were operating sonar or detonating explosives. Within 7 days of

the completion of any exercises that were being conducted within 80 nm or 72 hours prior to the event, the Navy will further provide information to NMFS (per the HRC Stranding Communication Protocol), as available, regarding the number and types of acoustic/explosive sources, direction and speed of units using MFAS, and marine mammal sightings information associated with those training activities. Information not initially available regarding the 80 nm, 72 hours, 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 (or classified information to qualified NMFS staff), if available.

(xxix) While in transit, Navy vessels shall be alert at all times, use extreme caution, and proceed at a "safe speed" so that the vessel can take proper and effective action to avoid a collision with any marine animal and can be stopped within a distance appropriate to the prevailing circumstances and conditions.

(xxx) When marine mammals have been sighted in the area, Navy vessels shall increase vigilance and take reasonable and practicable actions to avoid collisions and activities that might result in close interaction of naval assets and marine mammals. Actions may include changing speed and/or direction and are dictated by environmental and other conditions (e.g., safety, weather).

(2) Mitigation for IEER (SSQ-11) and AEER (SSQ-125)

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

(ii) Crews shall conduct a minimum of 30 minutes of visual and acoustic monitoring of the search area prior to commanding the first post detonation. This 30-minute observation period may include pattern deployment time.

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

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

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

(vi) Visual Detection:

(A) If marine mammals are visually detected within 1,000 yards (914 m) of the source sonobuoy (AN/SSQ-110A/SSQ-125) intended for use, then that payload shall not be detonated (AN-SSQ-110 only) or activated (AN/SSQ-125). Aircrews may utilize this post once the marine mammals have not been re-sighted for 30 minutes, or are observed to have moved outside the 1,000 yards (914 m) safety buffer.

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

(vii) Aircrews shall make every attempt to manually detonate the unexploded charges at each post in the pattern prior to departing the operations area by using the "Payload 1 Release" command followed by the "Payload 2 Release" command (applies to SSQ-110 sonobuoys only; SSQ-125 sonobuoys do not contain an explosive charge). Aircrews shall refrain from using the "Scuttle" command when two payloads remain at a given post. Aircrews will ensure that a 1,000 yard (914 m) safety buffer, visually clear of marine mammals, is maintained around each post as is done during ASW training using active sound sources.

(viii) Aircrews shall only leave posts with unexploded charges in the event of a sonobuoy malfunction (applies to SSQ-110 sonobuoy only), an aircraft system malfunction, or when an aircraft must immediately depart the area due to issues such as fuel constraints, inclement weather, and in-flight emergencies. In these cases, the sonobuoy will self-scuttle using the secondary or tertiary method.

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

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

(3) Mitigation for Demolitions (DEMOS) and Mine Countermeasure (MCM) Training (Up to 20 lb).

(i) Exclusion Zones – Explosive charges shall not be detonated if a marine mammal is detected within 700 yards (640 m) of the detonation site.

(ii) Pre-Exercise Surveys – For MCM training activities, the Navy shall conduct a pre-exercise survey within 30 minutes prior to the commencement of the scheduled explosive event. The survey may be conducted from the surface, by divers, and/or from the air. If a marine

mammal is detected within the survey area, the exercise shall be suspended until the animal voluntarily leaves the area.

(iii) Post-Exercise Surveys – Surveys within the same radius shall also be conducted within 30 minutes after the completion of the explosive event.

(iv) Reporting – Any evidence of a marine mammal that may have been injured or killed by the action shall be reported immediately to NMFS.

(v) Mine Laying Training – Though mine laying training operations involve aerial drops of inert training shapes on floating targets, measures 1, 2, and 3 for Demolitions and Mine countermeasures (above) will apply to mine laying training. To the maximum extent feasible, the Navy shall retrieve inert mine shapes dropped during Mine Laying Training.

(4) Mitigation for SINKEX, GUNEX, MISSILEX, and BOMBEX.

(i) All weapons firing shall be conducted during the period 1 hour after official sunrise to 30 minutes before official sunset.

(ii) Extensive range clearance operations shall be conducted in the hours prior to commencement of the exercise.

(iii) An exclusion zone with a radius of 1.5 nm (2.41 km) shall be established around each target. This 1.5 nm (2.41 km) zone includes a buffer of 0.5 nm (0.93 km) to account for errors, target drift, and animal movement. In addition to the 1.5 nm (2.41 km) exclusion zone, a further safety zone, which extends from the exclusion zone at 1.5 nm out an additional 0.5 nm (0.93 km), shall be surveyed. Together, the zones extend out 2 nm (3.7 km) from the target.

(iv) A series of surveillance over-flights shall be conducted within the exclusion and the safety zones, prior to and during the exercise, when feasible. Survey protocol would be as follows:

(A) Overflights within the exclusion zone shall be conducted in a manner that optimizes the surface area of the water observed. This may be accomplished through the use of the Navy's Search and Rescue (SAR) Tactical Aid (TACAID).

(B) All visual surveillance activities shall be conducted by Navy personnel trained in visual surveillance. At least one member of the mitigation team shall have completed the Navy's marine mammal training program for lookouts.

(C) In addition to the overflights, the exclusion zone shall be monitored by passive acoustic means, when assets are available. This passive acoustic monitoring shall be maintained throughout the exercise. Potential assets include sonobuoys, which can be utilized to detect any vocalizing marine mammals in the vicinity of the exercise. The sonobuoys shall be re-seeded as necessary throughout the exercise. Additionally, passive sonar onboard submarines may be utilized to detect any vocalizing marine mammals in

the area. The Officer Conducting the Exercise (OCE) shall be informed of any aural detection of marine mammals and would include this information in the determination of when it is safe to commence the exercise.

(D) On each day of the exercise, aerial surveillance of the exclusion and safety zones shall commence two hours prior to the first firing.

(E) The results of all visual, aerial, and acoustic searches shall be reported immediately to the OCE. No weapons launches or firing would commence until the OCE declares the safety and exclusion zones free of marine mammals.

(F) If a marine mammal observed within the exclusion zone is diving, firing shall be delayed until the animal is re-sighted outside the exclusion zone, or 30 minutes has elapsed.

(G) During breaks in the exercise of 30 minutes or more, the exclusion zone shall again be surveyed for any marine mammals. If marine mammals are sighted within the exclusion zone, the OCE would be notified, and the procedure described above would be followed.

(H) Upon sinking of the vessel, a final surveillance of the exclusion zone shall be monitored for two hours, or until sunset, to verify that no marine mammals were harmed.

(v) Aerial surveillance would be conducted using helicopters or other aircraft based on necessity and availability. These aircraft shall be capable of (and shall, to the extent practicable) flying at the slow safe speeds necessary to enable viewing of marine mammals with unobstructed, or minimally obstructed, downward and outward visibility. The Navy may cancel the exclusion and safety zone surveys in the event that a mechanical problem, emergency search and rescue, or other similar and unexpected event preempts the use of one of the aircraft onsite for the exercise.

(vi) Where practicable, the Navy shall conduct the exercise in sea states that are ideal for marine mammal sighting, i.e., Beaufort Sea State 3 or less. In the event of a Beaufort Sea State of 4 or above, the Navy shall utilize additional aircraft (conducting tight search patterns), if available, to increase survey efforts within the zones.

(vii) The exercise shall not be conducted unless the exclusion zone can be adequately monitored visually.

(viii) In the unlikely event that any marine mammals are harmed during the exercise, a detailed description of the animal shall be documented, the location noted, and if possible, photos taken. This information shall be provided to NMFS as soon as practicable.

(4) Mitigation for Underwater Detonations Using Positive Control during MINEX.

(i) Underwater detonations using positive control devices shall only be conducted during daylight hours.

(ii) A mitigation zone of 700 yd shall be established around each underwater detonation point.

(iii) A minimum of two boats shall be deployed; one boat will act as an observer platform, while the other boat will provide diver support.

(iv) Two observers will survey the detonation area and the mitigation zone for marine mammals beginning at least 30 min prior to the scheduled explosive event and lasting until at least 30 min following detonation.

(A) If a marine mammal is sighted within the 700-yd mitigation zone or moving towards it, underwater detonation events shall be suspended until the marine mammal has voluntarily left the area and the area is clear of marine mammals for at least 30 min.

(B) Immediately following the detonation, visual monitoring for affected marine mammals within the monitoring zone would continue for 30 min.

(C) Any marine mammal observed after an underwater detonation either injured or exhibiting signs of distress would be reported via Navy operational chain of command to Navy environmental representatives from U.S. Pacific Fleet, Environmental Readiness Office. Using Marine Mammal Stranding communication trees and contact procedures established for the HRC, the Navy would report these events to the Stranding Coordinator of NMFS' Pacific Islands Regional Office. These reports would contain the date and time of the sighting, location, species description, and indication of the animal's status.

(5) Mitigation for Underwater Detonations Using Time-delay firing devices (TDFDs).

(i) Underwater detonations using TDFDs shall only be conducted during daylight hours.

(ii) Time-delays longer than 10 min shall not be used.

(iii) Initiation of the firing device shall not start until the mitigation zone is clear for a full 30 min prior to initiation of the timer.

(iv) A monitoring and mitigation zone shall be established around each underwater detonation location, as indicated in (5)(iv)(A), based on charge weight and length of time-delay used.

(A)

Charge Weight (lb)	Timed-Delay					
	5 min	6 min	7 min	8 min	9 min	10 min
5	1,000 yd	1,000 yd	1,000 yd	1,000 yd	1,400 yd	1,400 yd

10	1,000 yd	1,000 yd	1,000 yd	1,400 yd	1,400 yd	1,400 yd
15-29	1,000 yd	1,000 yd	1,400 yd	1,400 yd	1,500 yd	1,500 yd

(B) When conducting surveys, boats shall position themselves near the mid-point of the mitigation zone radius (but always outside the detonation plume/human safety zone) and travel in a circular pattern around the detonation location, surveying both the inner and outer areas.

(C) To the best extent practical, boats shall maintain a 10-knot search speed to ensure adequate coverage of the mitigation zone.

(v) TDFD detonations with a mitigation zone of 1,000 yd:

(A) A minimum of two boats shall be used to survey for marine mammals.

(B) Each boat shall be positioned on opposite sides of the detonation location, separated by 180 degrees.

(vi) TDFD detonations with a mitigation zone of  $\geq 1,400$  yd:

(A) A minimum of three boats or two boats and one helicopter shall be used to survey for marine mammals.

(B) When using at least three boats, each boat would be positioned equidistant from one another (120 degrees separation for three boats, 90 degrees separation for four boats, etc.)

(C) A helicopter, if available, can be used in lieu of one of the required boats.

(vii) Two dedicated observers in each boat would conduct continuous visual surveys of the monitoring zone for the duration of the training event.

(viii) Monitoring zones would be surveyed beginning 30 min prior to detonation and for 30 min after detonation.

(A) Divers placing the charges on mines shall observe the immediate underwater area around a detonation site for marine mammals and report sightings to surface observers.

(B) If a marine mammal is sighted within an established mitigation zone or moving towards it, underwater detonation events would be suspended until the marine mammal voluntarily leaves the area and the area is clear of marine mammals for at least 30 min.

(C) Immediately following the detonation, visual monitoring for affected marine mammals within the monitoring zone would continue for 30 min.

(D) Any marine mammal observed after an underwater detonation either injured or exhibiting signs of distress would be reported via Navy operational chain of command to Navy environmental representatives from U.S. Pacific Fleet, Environmental Readiness Office. Using Marine Mammal Stranding communication trees and contact procedures established for the HRC, the Navy would report these events to the Stranding Coordinator of NMFS' Pacific Islands Regional Office. These reports would contain the date and time of the sighting, location, species description, and indication of the animal's status.

7. Monitoring and Reporting – When conducting operations identified in 50 CFR § 216.170(c) and Condition 4(a), the Holder of the Authorization and any person(s) operating under his authority must implement the following monitoring and reporting measures. All reports should be submitted to the Director, Office of Protected Resources, National Marine Fisheries Service, 1315 East-West Highway, Silver Spring MD 20910 and a copy provided to the Assistant Regional Administrator for Protected Resources, Pacific Islands Regional Office, National Marine Fisheries Service, 1601 Kapiolani Boulevard, Suite 1110, Honolulu, HI 96814.

(a) The Navy must notify NMFS immediately (or as soon as clearance procedures allow) if the specified activity identified in Condition (4)(a) is thought to have resulted in the mortality or injury of any marine mammals, or in any take of marine mammals not identified in 50 C.F.R. § 216.172(c) and Condition 5.

(b) The Navy shall implement the 2012 Update to the HRC Monitoring Plan (Attachment B).

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

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

(e) Annual HRC Monitoring Plan Report – The Navy shall submit a report on October 1 describing the implementation and results (through August 1) of the HRC Monitoring Plan, described above. The report will also include any analysis conducted or conclusions reached based on the previous year's data that were not completed in time for the previous years monitoring report. Data collection methods will be standardized across range complexes to

allow for comparison in different geographic locations. Although additional information will be gathered, the marine mammal observers (MMOs) collecting marine mammal data pursuant to the HRC Monitoring Plan shall, at a minimum, provide the same marine mammal observation data required in condition (7)(F). The HRC Monitoring Plan Report may be provided to NMFS within a larger report that includes the required Monitoring Plan Reports from multiple Range Complexes.

(f) Annual HRC Exercise Report – The Navy shall submit an Annual HRC Exercise Report on October 1 (covering data gathered through August 1). This report shall contain the information identified below.

(1) MFAS/HFAS Major Training Exercises – This section shall contain the following information for Major Training Exercises (MTEs, which include RIMPAC, USWEX, and Multi Strike Group) conducted in the HRC:

(i) Exercise Information (for each MTE):

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

(ii) Individual marine mammal sighting info (for each sighting in each MTE):

- (A) Location of sighting
- (B) Species (if not possible – indication of whale/dolphin/pinniped)
- (C) Number of individuals
- (D) Calves observed (y/n)
- (E) Initial Detection Sensor
- (F) Indication of specific type of platform observation made from (including, for example, what type of surface vessel, i.e., FFG, DDG, or CG)
- (G) Length of time observers maintained visual contact with marine mammal
- (H) Wave height (in feet)
- (I) Visibility
- (J) Sonar source in use (y/n).
- (K) Indication of whether animal is <200yd, 200-500yd, 500-1,000yd, 1,000-2,000yd, or >2,000yd from sonar source in (J) above.

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

(M) If source in use (J) is hullmounted, true bearing of animal from ship, true direction of ship's travel, and estimation of animal's motion relative to ship (opening, closing, parallel).

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

(iii) An evaluation (based on data gathered during all of the MTEs) of the effectiveness of mitigation measures. This evaluation shall identify the specific observations that support any conclusions the Navy reaches about the effectiveness of the mitigation.

(2) ASW Summary – This section shall include the following information as summarized from both MTEs and non-major training exercises (i.e., unit-level exercises, such as TRACKEXs):

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

(ii) Total hours (from December 15 through April 15) of hull-mounted active sonar operation occurring in the dense humpback areas generally shown on the Mobley map (73 FR 35510, 35520) plus a 5-km buffer, but not including the Pacific Missile Range Facility. The Navy shall work with NMFS to develop the exact boundaries of this area.

(iii) Total estimated annual hours of hull-mounted active sonar operation conducted in Humpback Whale Cautionary area between December 15 and April 15.

(iv) Cumulative Impact Report – To the extent practicable, the Navy, in coordination with NMFS, shall develop and implement a method of annually reporting non-major (i.e., other than RIMPAC, USWEX, or Multi-Strike Group Exercises) training exercises utilizing hull-mounted sonar. The report shall present an annual (and seasonal, where practicable) depiction of non-major training exercises geographically across the HRC. The Navy shall either include (in the HRC annual report) the Cumulative Impact Report, as described above, or provide a brief annual progress update on the status of development of the Cumulative Report.

(3) SINKEXs – This section shall 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 watchstanders before, during, and after exercise
- (D) Total number and types of rounds expended / explosives 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, etc., participating in exercise
- (H) Wave height in feet (high, low and average during exercise)
- (I) 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)

- (A) Location of sighting
- (B) Species (if not possible, indicate whale, dolphin or pinniped)
- (C) Number of individuals
- (D) Whether calves were observed
- (E) Initial detection sensor
- (F) Length of time observers maintained visual contact with marine mammal
- (G) Wave height
- (H) Visibility
- (I) Whether sighting was before, during, or after detonations/exercise, and how many minutes before or after

(J) Distance of marine mammal from actual detonations (or target spot if not yet detonated) – use four categories to define distance: 1) the modeled injury threshold radius for the largest explosive used in that exercise type in that OPAREA (91 m for SINKEKX in HRC); 2) the required exclusion zone (1 nm for SINKEKX in HRC); (3) the required observation distance (if different than the exclusion zone (2 nm for SINKEKX in HRC); and, (4) greater than the required observed distance. For example, in this case, the observer would indicate if < 91 m, from 91 m – 1 nm, from 1 nm – 2 nm, and >2 nm.

(K) Observed behavior – Watchstanders will 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.

(L) Resulting mitigation implementation – Indicate whether explosive detonations were delayed, ceased, modified, or not modified due to marine mammal presence and for how long.

(M) If observation occurs while explosives are detonating in the water, indicate munition type in use at time of marine mammal detection.

(4) IEER/AEER Summary – This section shall include an annual summary of the following IEER information:

- (i) Total number of IEER/AEER events conducted in the HRC
- (ii) Total expended/detonated rounds (buoys)
- (iii) Total number of self-scuttled IEER rounds

(5) Explosives Summary – To the extent practicable, the Navy will provide the information described below for all of their explosive exercises. Until the Navy is able to report in full the information below, they will provide an annual update on the Navy's explosive tracking methods, including improvements from the previous year.

- (i) Total annual number of each type of explosive exercises identified in 50 C.F.R. § 216.170 and in Condition 4(a)(2) that are conducted in the HRC
- (ii) Total annual expended/detonated rounds (missiles, bombs, etc.) for each explosive type

(g) Sonar Exercise Notification – The Navy shall submit to the NMFS Office of Protected Resources (list of email addresses and phone numbers attached) either an electronic (preferably) or verbal report within 15 calendar days after the completion of any major exercise (RIMPAC, USWEX, or Multi Strike Group) indicating:

- (1) Location of the exercise
- (2) Beginning and end dates of the exercise
- (3) Type of exercise (e.g., RIMPAC, USWEX, or Multi Strike Group)

(h) HRC 5-yr Comprehensive Report – The Navy shall submit to NMFS a draft report that analyzes and summarizes all of the multi-year marine mammal information gathered during ASW and explosive exercises for which annual reports are required (Annual HRC Exercise Reports and HRC Monitoring Plan Reports). This draft report will be submitted in January 2013, covering activities that have occurred through June 1, 2012.

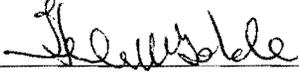
(i) Comprehensive National ASW Report – By June 2014, the Navy shall submit a draft Comprehensive National Report that analyzes, compares, and summarizes the active sonar data gathered (through January 1, 2014) from the watchstanders in accordance with the Monitoring Plans for the HRC, the Atlantic Fleet Active Sonar Training, the Southern California (SOCAL) Range Complex, the Mariana Islands Range Complex, the Northwest Training Range, and the Gulf of Alaska.

(j) The Navy shall respond to NMFS' comments and requests for additional information or clarification on the HRC Comprehensive Report, the draft National ASW report, the Annual HRC Exercise Report, or the Annual HRC Monitoring Plan Report (or the multi-Range Complex Annual Monitoring Plan Report, if that is how the Navy chooses to submit the information) if submitted within three months of receipt. These reports will be considered final after the Navy has addressed NMFS' comments or provided the requested information, or three months after the submittal of the draft if NMFS does not comment by then.

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

9. A copy of this Authorization (including Attachment A) and the attached Subpart P of the regulations, or a document containing the equivalent requirements specified in this Authorization and 50 CFR Subpart P, 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).

10. 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.

  
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Helen M. Golde, Acting Director,  
Office of Protected Resources,  
National Marine Fisheries Service.

1/23/13  
Date