DEPARTMENT OF COMMERCE

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

NATIONAL MARINE FISHERIES SERVICE

Letter of Authorization

The Commander, U.S. Pacific Fleet, 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 Northwest Training Range Complex in accordance with 50 CFR Part 218, Subpart M--Taking Marine Mammals Incidental to U.S. Navy Training in the Northwest Training Range Complex (NWTRC) 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 November 12, 2010, through November 11, 2011.
- 2. This Authorization is valid only for the unintentional taking of the species of marine mammals and methods of take identified in 50 CFR § 218.112(c) and Condition (5) of this Authorization incidental to the activities specified in 50 CFR § 218.110(c) and Condition (4)(a) of this Authorization and occurring within the NWTRC, (as depicted in Figure ES-1 in the Navy's Final Environmental Impact Statement for the NWTRC), which is bounded by 48°30' N. lat.; 130°00' W. long.; 40°00' N. lat.; and on the east by 124°00' W. long or by the shoreline where the shoreline extends west of 124°00' W. long (excluding the Strait of Juan de Fuca (east of 124°40' W. long), which is not included in the Offshore area).
- 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 §§ 218.114 & 218.115 and implements the Terms and Conditions of this Authorization.
- 4. (a) This Authorization is valid for the activities identified below within the estimated amounts:
 - (1) The use of the following mid-frequency active sonar (MFAS) and high frequency active sonar (HFAS) sources for U.S. Navy anti-submarine warfare (ASW) training:
 - (i) AN/SQS-53 (hull-mounted sonar) 43 hours
 - (ii) AN/SQS-56 (hull-mounted sonar) 65 hours
 - (iii) AN/BQS-15 (submarine navigational sonar) 42 hours
 - (iv) SSQ-62 (sonobuoys) 886 sonobuoys
 - (v) SSQ-125 (AEER sonobuoy) 149 sonobuoys (total combined with EER/IEER)
 - (vi) MK-48 (heavyweight torpedoes) 2 torpedo events
 - (vii) Range Pingers 180 hours
 - (viii) PUTR Uplink 150 hours

- (2) The detonation of the underwater explosives indicated in (i) conducted as part of the training exercises indicated in (ii):
 - (i) Underwater Explosives (Net Explosive Weight):
 - (A) 5" Naval Gunfire (9.5 lbs)
 - (B) 76 mm rounds (1.6 lbs)
 - (C) Maverick (78.5 lbs)
 - (D) Harpoon (448 lbs)
 - (E) MK-82 (238 lbs)
 - (F)) MK-48 (851 lbs)
 - (G) Demolition Charges (2.5 lbs.)
 - (H) AN/SSQ-110A (EER/IEER explosive sonobuoy 5 lbs)
 - (I) HARM;
 - (J) Hellfire;
 - (K) SLAM; and
 - (L) GBU 10,12, and 16.
 - (ii) Training Events:
 - (A) Surface-to-surface Gunnery Exercises 340 exercises
 - (B) Bombing Exercises 30 exercises
 - (C) Sinking Exercises 2 exercises
 - (D) Extended Echo Ranging and Improved Extended Echo Ranging Systems (EER/IEER) 149 IEER sonobuoy deployments (total combined with EER/IEER).
- (b) This authorization is also valid for the activities and sources listed in 4(a) should the amounts (i.e., hours, dips, number of exercises) 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, above, and § 218.110(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), but with the following allowances for annual variation in activities:
 - (1) 2010 annual take (a post-calculation/estimation of which must be provided in the 2011 LOA application) of any species of marine mammal may not exceed the amount identified in 5 (b) and 5(c), below, for that species by more than 25%
 - (2) 2010 annual take total of all marine mammal species combined may not exceed the estimated total, indicated in 5(b) and 5(c), by more than 10%
 - (3) the total take of any species over the course of five years may not exceed the amounts indicated in 50 CFR 218.112(c)(1), which is 10% above the numbers indicated

in 5(b) and 5(c) below multiplied by 5 for each year of the rule. A running calculation/estimation of takes of each species over the course of the years covered by the rule must be maintained.

(b) Level B Harassment:

(1) Mysticetes:

- (i) Humpback whale (Megaptera novaeangliae) 15
- (ii) Fin whale (Balaenoptera physalus) 40
- (iii) Blue whale (Balaenoptera musculus) 11
- (iv) Minke whale (Balaenoptera acutorostrata) 9
- (v) Gray whale (Eschrichtius robustus) 4
- (vi) Sei whale (Balaenoptera borealis) 1.

(2) Odontocetes:

- (i) Sperm whales (Physeter macrocephalus) 84
- (ii) Killer whale (Orcinus orca) 14;
- (iii) Pygmy or dwarf sperm whales (Kogia breviceps or Kogia sima) 4
- (iv) Mesoplodont beaked whales 15
- (v) Cuvier's beaked whales (Ziphius cavirostris) 14
- (vi) Baird's beaked whales (Berardius bairdii) 13
- (vii) Striped dolphin (Stenella coeruleoalba) 40
- (viii) Risso's dolphin (Grampus griseus) 100
- (ix) Northern right whale dolphin (Lissodelphis borealis) 741
- (x) Pacific white-sided dolphin (Lagenorhynchus obliquidens) 571
- (xi) Short-beaked common dolphin (Delphinus delphis) 1256
- (xii) Short-finned pilot whale (Globicephala macrorynchus) 2
- (xiv) Dall's porpoise (Phocoenoides dalli) 4752
- (xv) Harbor Porpoise (Phocoena phocoena) 119274.

(3) Pinnipeds:

- (i) Pacific harbor seal (Phoca vitulina) 586
- (ii) California sea lion (Zalophus californianus) 286
- (iii) Northern fur seal (Callorhinus ursinus) 1365
- (iv)) Steller sea lion (Eumetopias jubatus) 91

(c) Level A Harassment:

- (1) Fin whale 1;
- (2) Sperm whale 1;
- (3) Dall's Porpoise 3;
- (4) Harbor Porpoise 1
- (5) Northern right whale dolphin 1;

- (6) Short-beaked common dolphin − 2;
- (7) Northern elephant seal -2;
- (8) Pacific harbor seal -1;
- (9) Northern fur seal -1; and
- 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 § 218.110(c) and Condition 4(a) of this Authorization:
 - (1) Navy's General NWTRC Maritime Measures for All Training at Sea:
 - (i) Personnel Training (for all Training Types)
- (A) All commanding officers (COs), executive officers (XOs), lookouts, Officers of the Deck (OODs), junior OODs (JOODs), maritime patrol aircraft aircrews, and Antisubmarine Warfare (ASW)/Mine Warfare (MIW) helicopter crews shall complete the NMFS-approved Marine Species Awareness Training (MSAT) by viewing the U.S. Navy MSAT digital versatile disk (DVD). All bridge lookouts shall complete both parts one and two of the MSAT; part two is optional for other personnel.
- (B) Navy lookouts shall undertake extensive training in order to qualify as a watchstander in accordance with the Lookout Training Handbook (Naval Education and Training Command [NAVEDTRA] 12968-D).
- (C) Lookout training shall include on-the-job instruction under the supervision of a qualified, experienced lookout. 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). Personnel being trained as lookouts can be counted among required lookouts as long as supervisors monitor their progress and performance.
- (D) 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.
 - (ii) Operating Procedures and Collision Avoidance
- (A) Prior to major exercises, a Letter of Instruction, Mitigation Measures Message or Environmental Annex to the Operational Order shall be issued to further disseminate the personnel training requirement and general marine species mitigation measures.
- (B) COs 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.

- (C) While underway, surface vessels shall have at least two lookouts with binoculars; surfaced submarines shall have at least one lookout with binoculars. Lookouts already posted for safety of navigation and man-overboard precautions may be used to fill this requirement. As part of their regular duties, lookouts will watch for and report to the OOD the presence of marine mammals.
- (D) On surface vessels equipped with a multi-function active sensor, pedestal mounted "Big Eye" (20x110) binoculars shall be properly installed and in good working order to assist in the detection of marine mammals in the vicinity of the vessel.
- (E) Personnel on lookout shall employ visual search procedures employing a scanning methodology in accordance with the Lookout Training Handbook (NAVEDTRA 12968-D).
- (F) After sunset and prior to sunrise, lookouts shall employ Night Lookout Techniques in accordance with the Lookout Training Handbook. (NAVEDTRA 12968-D).
- (G) While in transit, naval 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.
- (H) 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).
- (I) Naval vessels shall maneuver to keep at least 1,500 ft (500 yds) away from any observed whale in the vessel's path and avoid approaching whales head-on. These requirements do not apply if a vessel's safety is threatened, such as when change of course will create an imminent and serious threat to a person, vessel, or aircraft, and to the extent vessels are restricted in their ability to maneuver. Restricted maneuverability includes, but is not limited to, situations when vessels are engaged in dredging, submerged activities, launching and recovering aircraft or landing craft, minesweeping activities, replenishment while underway and towing activities that severely restrict a vessel's ability to deviate course. Vessels shall take reasonable steps to alert other vessels in the vicinity of the whale. Given rapid swimming speeds and maneuverability of many dolphin species, naval vessels would maintain normal course and speed on sighting dolphins unless some condition indicated a need for the vessel to maneuver.
- (J) 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. Marine mammal detections shall be immediately reported to assigned Aircraft Control Unit for further dissemination to ships in the vicinity of the marine species as appropriate when 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.

- (K) All vessels shall maintain logs and records documenting training operations should they be required for event reconstruction purposes. Logs and records will be kept for a period of 30 days following completion of a major training exercise.
 - (2) Navy's Measures for MFAS Operations
 - (i) Personnel Training (for MFAS Operations):
- (A) All lookouts onboard platforms involved in ASW training events shall review the NMFS-approved Marine Species Awareness Training material prior to use of mid-frequency active sonar.
- (B) All COs, XOs, and officers standing watch on the bridge shall have reviewed the Marine Species Awareness Training material prior to a training event employing the use of mid-frequency active sonar.
- (C) Navy lookouts shall undertake extensive training in order to qualify as a watchstander in accordance with the Lookout Training Handbook (Naval Educational Training [NAVEDTRA], 12968-D).
- (D) 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). This does not forbid personnel being trained as lookouts from being counted as those listed in previous measures so long as supervisors monitor their progress and performance.
- (E) 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.
 - (ii) Lookout and Watchstander Responsibilities:
- (A) On the bridge of surface ships, there shall always be at least three people on watch whose duties include observing the water surface around the vessel.
- (B) All surface ships participating in ASW training events 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 marine mammal lookouts.

- (C) 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.
- (D) On surface vessels equipped with mid-frequency active sonar, pedestal mounted "Big Eye" (20x110) binoculars shall be present and in good working order to assist in the detection of marine mammals in the vicinity of the vessel.
- (E) Personnel on lookout shall employ visual search procedures employing a scanning methodology in accordance with the Lookout Training Handbook (NAVEDTRA 12968-D).
- (F) After sunset and prior to sunrise, lookouts shall employ Night Lookouts Techniques in accordance with the Lookout Training Handbook.
- (G) 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, since any object or disturbance (e.g., trash, periscope, surface disturbance, discoloration) in the water may be indicative of a threat to the vessel and its crew or indicative of a marine species that may need to be avoided as warranted.

(iii) Operating Procedures:

- (A) Navy will distribute final mitigation measures contained in the LOA and the Incidental take statement of NMFS' biological opinion to the Fleet.
- (B) COs 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.
- (C) 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.
- (D) During mid-frequency active sonar operations, personnel shall utilize all available sensor and optical systems (such as night vision goggles) to aid in the detection of marine mammals.
- (E) Navy aircraft participating in exercises at sea shall conduct and maintain, when operationally feasible and safe, surveillance for marine species of concern as long as it does not violate safety constraints or interfere with the accomplishment of primary operational duties.
- (F) Aircraft with deployed sonobuoys shall use only the passive capability of sonobuoys when marine mammals are detected within 200 yds (183 m) of the sonobuoy.

- (G) 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.
- (H) Safety Zones— When marine mammals are detected by any means (aircraft, shipboard lookout, or acoustically) the Navy shall ensure that sonar transmission levels are limited to at least 6 dB below normal operating levels if any detected marine mammals are within 1000 yards (914 m) of the sonar dome (the bow).
 - (1) Ships and submarines shall continue to limit maximum transmission levels by this 6-dB factor until the animal has been seen to leave the 1000-yd safety zone, has not been detected for 30 minutes, or the vessel has transited more than 2,000 yds (1829 m) beyond the location of the last detection.
 - (2) When marine mammals are detected by any means (aircraft, shipboard lookout, or acoustically) the Navy shall ensure that sonar transmission levels are limited to at least 10 dB below normal operating levels if any detected marine mammals are within 500 yards (457 m) of the sonar dome (the bow). Ships and submarines shall continue to limit maximum ping levels by this 10-dB factor until the animal has been seen to leave the 500-yd safety zone, has not been detected for 30 minutes, or the vessel has transited more than 2,000 yds (1829 m) beyond the location of the last detection.
 - (3) When marine mammals are detected by any means (aircraft, shipboard lookout, or acoustically) the Navy shall ensure that sonar transmission ceases if any detected marine mammals are within 200 yards (183 m) of the sonar dome (the bow). Sonar shall not resume until the animal has been seen to leave the 200-yd safety zone, has not been detected for 30 minutes, or the vessel has transited more than 2,000 yds (1829 m) beyond the location of the last detection.
 - (4) Special conditions applicable for dolphins and porpoises only: If, after conducting an initial maneuver to avoid close quarters with dolphins or porpoises, the OOD 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.
 - (5) If the need for power-down should arise as detailed in "Safety Zones" above, the 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 what level above 235 dB active sonar was being operated).
- (I) Prior to start up or restart of active sonar, operators will check that the Safety Zone radius around the sound source is clear of marine mammals.

- (J) Active sonar levels (generally)—Navy shall operate active sonar at the lowest practicable level, not to exceed 235 dB, except as required to meet tactical training objectives.
- (K) Helicopters shall observe/survey the vicinity of an ASW training event for 10 minutes before the first deployment of active (dipping) sonar in the water.
- (L) Helicopters shall not dip their active sonar within 200 yds (183 m) of a marine mammal and shall cease pinging if a marine mammal closes within 200 yds of the sound source (183 m) after pinging has begun.
- (M) Submarine sonar operators shall review detection indicators of close-aboard marine mammals prior to the commencement of ASW training events involving active mid-frequency sonar.
- (N) Night vision goggles shall be available to all ships and air crews, for use as appropriate.
 - (3) Navy's Measures for Underwater Detonations
 - (i) Surface-to-Surface Gunnery (non-explosive rounds)
- (A) A 200-yd (183 m) radius buffer zone shall be established around the intended target.
- (B) From the intended firing position, trained lookouts shall survey the buffer zone for marine mammals prior to commencement and during the exercise as long as practicable.
- (C) If applicable, target towing vessels shall maintain a lookout. If a marine mammal is sighted in the vicinity of the exercise, the tow vessel shall immediately notify the firing vessel in order to secure gunnery firing until the area is clear.
- (D) The exercise shall be conducted only when the buffer zone is visible and marine mammals are not detected within the target area and the buffer zone.
 - (ii) Surface-to-Air Gunnery (explosive and non-explosive rounds)
- (A) Vessels shall orient the geometry of gunnery exercises in order to prevent debris from falling in the area of sighted marine mammals.
- (B) Vessels will attempt to recover any parachute deploying aerial targets to the extent practicable (and their parachutes if feasible) to reduce the potential for entanglement of marine mammals.
- (C) For exercises using targets towed by a vessel or aircraft, target towing vessel/aircraft shall maintain a lookout. If a marine mammal is sighted in the vicinity of the

exercise, the tow aircraft shall immediately notify the firing vessel in order to secure gunnery firing until the area is clear.

- (iii) Air-to-Surface At-sea Bombing Exercises (explosive and non-explosive):
- (A) If surface vessels are involved, trained lookouts shall survey for floating kelp and marine mammals. Ordnance shall not be targeted to impact within 1,000 yds (914 m) of known or observed floating kelp or marine mammals.
- (B) A 1,000 yd (914 m) radius buffer zone shall be established around the intended target.
- (C) Aircraft shall visually survey the target and buffer zone for marine mammals prior to and during the exercise. The survey of the impact area shall be made by flying at 1,500 ft (152 m) or lower, if safe to do so, and at the slowest safe speed. Release of ordnance through cloud cover is prohibited: aircraft must be able to actually see ordnance impact areas. Survey aircraft should employ most effective search tactics and capabilities.
- (D) The exercise will be conducted only if marine mammals are not visible within the buffer zone.
 - (iv) Air-to-Surface Missile Exercises (explosive and non-explosive):
- (A) Ordnance shall not be targeted to impact within 1,800 yds (1646 m) of known or observed floating kelp.
- (B) Aircraft shall visually survey the target area for marine mammals. Visual inspection of the target area shall be made by flying at 1,500 (457 m) feet or lower, if safe to do so, and at slowest safe speed. Firing or range clearance aircraft must be able to actually see ordnance impact areas. Explosive ordnance shall not be targeted to impact within 1,800 yds (1646 m) of sighted marine mammals.
 - (v) Demolitions, Mine Warfare, and Mine Countermeasures (up to a 2.5-lb NEW charge):
- (A) Exclusion Zones All Demolitions, Mine Warfare and Mine Countermeasures Operations involving the use of explosive charges must include exclusion zones for marine mammals to prevent physical and/or acoustic effects to those species. These exclusion zones shall extend in a 700-yard arc radius around the detonation site.
- (B) Pre-Exercise Surveys For Demolition and Ship Mine Countermeasures Operations, pre-exercise survey shall be conducted 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, and personnel shall be alert to the presence of any marine mammal. Should a marine mammal be present within the survey area, the exercise shall be paused until the animal voluntarily leaves the area. The Navy shall suspend detonation exercises

and ensure the area is clear for a full 30 minutes prior to detonation. Personnel shall record any marine mammal observations during the exercise.

- (C) Post-Exercise Surveys Surveys within the same radius shall also be conducted within 30 minutes after the completion of the explosive event.
- (D) Reporting If there is evidence that a marine mammal may have been stranded, injured or killed by the action, Navy activities shall be immediately suspended and the situation immediately reported by the participating unit to the Officer in Charge of the Exercise (OCE), who will follow Navy procedures for reporting the incident to Commander, Pacific Fleet, Commander, Navy Region Northwest, Environmental Director, and the chain-of-command. The situation shall also be reported to NMFS.

(vi) Sink Exercise:

- (A) All weapons firing shall be conducted during the period 1 hour after official sunrise to 30 minutes before official sunset.
- (B) An exclusion zone with a radius of 1.5 nm shall be established around each target. This 1.5 nm zone includes a buffer of 0.5 nm to account for errors, target drift, and animal movement. In addition to the 1.5 nm exclusion zone, a further safety zone, which extends from the exclusion zone at 1.5 nm out an additional 0.5 nm, shall be surveyed. Together, the zones (exclusion and safety) extend out 2 nm from the target.
- (C) 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 shall be as follows:
 - (1) 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 Tactical Aid, which provides the best search altitude, ground speed, and track spacing for the discovery of small, possibly dark objects in the water based on the environmental conditions of the day. These environmental conditions include the angle of sun inclination, amount of daylight, cloud cover, visibility, and sea state.
 - (2) 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.
 - (3) In addition to the overflights, the exclusion zone shall be monitored by passive acoustic means, when assets are available. This passive acoustic monitoring would be maintained throughout the exercise. Potential assets include sonobuoys, which can be utilized to detect any vocalizing marine mammals (particularly sperm whales) in the vicinity of the exercise. The sonobuoys shall be re-seeded as necessary throughout the

exercise. Additionally, if submarines are present, passive sonar onboard submarines shall be utilized to detect any vocalizing marine mammals in the area. The OCE would 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.

- (4) On each day of the exercise, aerial surveillance of the exclusion and safety zones shall commence 2 hours prior to the first firing.
- (5) The results of all visual, aerial, and acoustic searches shall be reported immediately to the OCE. No weapons launches or firing may commence until the OCE declares the safety and exclusion zones free of marine mammals.
- (6) If a marine mammal is observed within the exclusion zone is diving, firing shall be delayed until the animal is re-sighted outside the exclusion zone, or 30 minutes have elapsed. After 30 minutes, if the animal has not been re-sighted it would be assumed to have left the exclusion zone.
- (7) During breaks in the exercise of 30 minutes or more, the exclusion zone shall again be surveyed for any protected species. If marine mammals are sighted within the exclusion zone, the OCE shall be notified, and the procedure described above would be followed.
- (8) Upon sinking of the vessel, a final surveillance of the exclusion zone shall be monitored for 2 hours, or until sunset, to verify that no marine mammals were injured.
- (D) Aerial surveillance shall be conducted using helicopters or other aircraft based on necessity and availability.
- (E) 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 4 or above, survey efforts shall be increased within the zones. This shall be accomplished through the use of an additional aircraft, if available, and conducting tight search patterns.
- (F) The exercise shall not be conducted unless the exclusion zone can be adequately monitored visually.
- (G) In the event that any marine mammals are observed to be harmed in the area, NMFS shall by be notified as soon as feasible following the stranding communication protocol. A detailed description of the animal shall be taken, the location noted, and if possible, photos taken. This information shall be provided as soon as practicable to NMFS via the Navy's regional environmental coordinator for purposes of identification.

- (H) An after action report detailing the exercise's time line, the time the surveys commenced and terminated, amount, and types of all ordnance expended, and the results of survey efforts for each event shall be submitted to NMFS.
- (vii) Extended Echo Ranging/Improved Extended Echo Ranging and Advanced Extended Echo-ranging (EER/IEER/AEER):
- (A) Crews shall conduct visual reconnaissance of the drop area prior to laying their intended sonobuoy pattern. This search shall be conducted at an altitude below 457 m (500 yd) at a slow speed, if operationally feasible and weather conditions permit. In dual aircraft operations, crews are allowed to conduct area clearances utilizing more than one aircraft.
 - (B) For IEER (AN/SSQ-110A), crews shall conduct a minimum of 30 minutes of visual and aural monitoring of the search area prior to commanding the first post detonation. This 30-minute observation period may include pattern deployment time.
- (C) For any part of the intended sonobuoy pattern where a post (source/receiver sonobuoy pair) will be deployed within 914 m (1,000 yd) 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 914 m (1,000 yd) of the intended post position, the source sonobuoy (AN/SSQ-110A/SSQ-125) will be co-located with the receiver.
- (D) When operationally feasible, Navy crews shall conduct continuous visual and aural monitoring of marine mammal activity. This shall include monitoring of own-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.
- (E) Aural Detection If the presence of marine mammals is detected aurally, then that shall cue the Navy aircrew to increase the diligence of their visual surveillance. Subsequently, if no marine mammals are visually detected, then the crew may continue multistatic active search.
- (F) Visual Detection If marine mammals are visually detected within 914 m (1,000 yd) of the explosive source sonobuoy (AN/SSQ-110A/SSQ-125) intended for use, then that payload shall not be detonated. 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 914 m (1,000 yd) safety buffer. Aircrews may shift their multi-static active search to another post, where marine mammals are outside the 914 m (1,000 yd) safety buffer.
- (G) For IEER (AN/SSQ-110A), aircrews shall make every attempt to manually detonate the unexploded charges at each post in the pattern prior to departing the operations area by using the "Payload 1 Release" command followed by the "Payload 2 Release" command. Aircrews shall refrain from using the "Scuttle" command when two payloads remain at a given

post. Aircrews will ensure that a 914 m (1,000 yd) safety buffer, visually clear of marine mammals, is maintained around each post as is done during active search operations.

- (H) Aircrews shall only leave posts with unexploded charges in the event of a sonobuoy malfunction, an aircraft system malfunction, or when an aircraft must immediately depart the area due to issues such as fuel constraints, inclement weather, and in-flight emergencies. In these cases, the sonobuoy will self-scuttle using the secondary or tertiary method.
- (I) The Navy shall ensure all payloads are accounted for. Explosive source sonobuoys (AN/SSQ-110A) that can not be scuttled shall be reported as unexploded ordnance via voice communications while airborne, then upon landing via naval message.
- (J) Marine mammal monitoring shall continue until out of own-aircraft sensor range.
- 7. Monitoring and Reporting When conducting operations identified in 50 CFR § 218.110(c) and Condtion 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, Northwest Regional Office, National Marine Fisheries Service, 7600 Sand Point Way NE, Seattle, WA 98115-0070.
- (a)) General Notification of Injured or Dead Marine Mammals Navy personnel shall ensure that NMFS is notified immediately ((see Communication Plan) or as soon as clearance procedures allow) if an injured, stranded, 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 will provide NMFS with the name of 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). In the event that an injured, stranded, or dead marine mammal is found by the Navy that is not in the vicinity of, or during or shortly after, MFAS, HFAS, or underwater explosive detonations, the Navy will report the same information as listed above as soon as operationally feasible and clearance procedures allow.
- (b) General Notification of Ship Strike In the event of a ship strike by any Navy vessel, at any time or place, the Navy shall do the following:
- (1) Immediately report to NMFS the species identification (if known), location (lat/long) of the animal (or the strike if the animal has disappeared), and whether the animal is alive or dead (or unknown).
- (2) Report to NMFS as soon as operationally feasible the size and length of animal, an estimate of the injury status (ex., dead, injured but alive, injured and moving, unknown, etc.),

vessel class/type and operational status.

- (3) Report to NMFS the vessel length, speed, and heading as soon as feasible.
- (4) Provide NMFS a photo or video, if equipment is available
- (c) Event Communication Plan The Navy shall develop a communication plan that will include all of the communication protocols (phone trees, etc.) and associated contact information required for NMFS and the Navy to carry out the necessary expeditious communication required in the event of a stranding or ship strike, including as described in the proposed notification measures above.
- (d) The Navy must conduct all monitoring and required reporting under the Letter of Authorization, including abiding by NWTRC Monitoring Plan.
- (e) The Navy shall comply with the 2009 Integrated Comprehensive Monitoring Program (ICMP) Plan and continue to improve the program in consultation with NMFS. Changes and improvements to the program made during 2010 (as prescribed in the 2009 ICMP and otherwise deemed appropriate by the Navy and NMFS) will be described in an updated 2010 ICMP and submitted to NMFS by October 31, 2010 for review. An updated 2010 ICMP will be finalized by December 31, 2010.
- (f) Annual NWTRC Monitoring Plan Report The Navy shall submit a report on July 1, 2011 describing the implementation and results (through May 1, 2011 of the same year) of the NWTRC Monitoring Plan. Data collection methods will be standardized across range complexes to allow for comparison in different geographic locations. Although additional information will also be gathered, the marine mammal observers (MMOs) collecting marine mammal data pursuant to the NWTRC Monitoring Plan shall, at a minimum, provide the same marine mammal observation data required in 50 CFR § 218.115(g)(1). The NWTRC Monitoring Plan Report may be provided to NMFS within a larger report that includes the required Monitoring Plan Reports from multiple Range Complexes.
- (g) Annual NWTRC Exercise Report The Navy shall submit an Annual NWTRC Exercise Report on July 1, 2011 (covering data gathered through May 1, 2011). This report shall contain information identified in 50 CFR § 218.115(g)(1) through (5).
- (1) ASW Summary This section shall include the following information as summarized from non-major training exercises (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) 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 MTEs) 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 NWTRC. The Navy shall include (in the NWTRC annual report) a brief annual progress update on the status of the development of an effective and unclassified method to report this information until an agreed-upon (with NMFS) method has been developed and implemented.

- (2) 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 (1 nm for SINKEX in the NWTRC Range Complex); 2) the required exclusion zone (2 nm for SINKEX in the NWTRC Range Complex); (3) the required observation distance (if different than the exclusion zone (2 nm for SINKEX in the NWTRC Range Complex); and (4) greater than the required observed distance. For example, in this case, the observer would indicate if < 662 m, from 662TBD 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 of a marine mammal occurs while explosives are detonating in the water, indicate munition type in use at time of marine mammal detection.
- (3) IEER Summary This section shall include an annual summary of the following IEER information:
 - (i) Total number of IEER events conducted in the NWTRC
 - (ii) Total expended/detonated rounds (buoys)
 - (iii) Total number of self-scuttled IEER rounds
- (4) 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 (of those identified as part of the "specified activity" in this final rule) conducted in the NWTRC Range Complex.
 - (ii) Total annual expended/detonated rounds (missiles, bombs, etc.) for each explosive type.
- (h) NWTRC 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 NWTRC Exercise Reports and NWTRC Monitoring Plan Reports). This report will be submitted at the end of the fourth year of the rule (July 2014), covering activities that have occurred through February1, 2014.
- (i) Comprehensive National ASW Report By June, 2014, the Navy shall submit a draft National Report that analyzes, compares, and summarizes the active sonar data gathered (through January 1, 2014) from the watchstanders and pursuant to the implementation of the Monitoring Plans for the Southern California Range Complex, the Atlantic Fleet Active Sonar Training, the Hawaii Range Complex, the Mariana Islands Range Complex, the NWTRC, and the Gulf of Alaska.
- (j) The Navy shall respond to NMFS comments and requests for additional information or clarification on the NWTRC Range Complex Comprehensive Report, the Comprehensive National ASW report, the Annual NWTRC Range Complex Exercise Report, or the Annual

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

- (k) In 2011, the Navy shall convene a Monitoring Workshop in which the Monitoring Workshop participants will be asked to review the Navy's Monitoring Plans and monitoring results and make individual recommendations (to the Navy and NMFS) of ways of improving the Monitoring Plans. The recommendations shall be reviewed by the Navy, in consultation with NMFS, and modifications to the Monitoring Plan shall be made, as appropriate.
- 8. Prohibitions Notwithstanding takings contemplated in § 218.112 and authorized by a Letter of Authorization issued under §§ 216.106 and 218.117, no person in connection with the activities described in § 218.110 may violate, or fail to comply with, the terms, conditions, and requirements of these regulations or a Letter of Authorization issued under §§ 216.106 and 218.117.
- 9. This Authorization may be modified, suspended or withdrawn (pursuant to 50 CFR § 216.106(e)(1 or 2) if the Holder or any person operating under his authority fails to abide by the conditions prescribed herein or if the authorized taking is having more than a negligible impact on the species or stock of affected marine mammals.
- 10. A copy of this Authorization and the attached Subpart M of the regulations, or or a document containing the equivalent requirements specified in this Authorization or 50 CFR Subpart M, must be in the possession of the on-site Commanding Officer in order to take marine mammals under the authority of this Letter of Authorization while conducting the specified activity(ies).
- 11. The Holder of this Authorization and any person operating under his authority is required to comply with the Terms and Conditions of the Incidental Take Statement corresponding to NMFS' Biological Opinion as they pertain to listed marine mammals.

James H. Lecky, Director

Office of Protected Resources National Marine Fisheries Service NOV 12 2010

Date