



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

MAY 17 2011

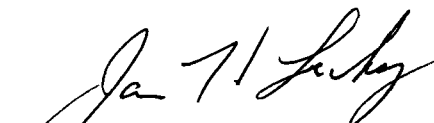
The Commander
U.S. Pacific Fleet
250 Makalapa Drive
Pearl Harbor, HI 96860-7000

To Whom It May Concern:

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's research, development, test and evaluation (RDT&E) activities at the NAVSEA NUWC Keyport Range Complex and extension Study Area. This authorization is effective for one year and covers the taking of marine mammals incidental to the Navy RDT&E activities identified in the IHA, which include the use of sonar and other underwater active acoustic devices, provided the mitigation, monitoring and reporting requirements are undertaken as required by LOA.

If you have any questions concerning the LOA or its requirements, please contact Shane Guan, Office of Protected Resources, National Marine Fisheries Service at 301-713-2289.

Sincerely,


James H. Lecky, Director
Office of Protected Resources

Enclosure



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

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

Letter of Authorization

Commanding Officer, U.S. Naval Undersea Warfare Center Division, Keyport, 610 Dowell Street, B. 1003T, Keyport, Washington 98345-7610, and persons operating under his authority (i.e., Navy), are authorized to take marine mammals incidental to the U.S. Navy (Navy) Research, Development, Test, and Evaluation (RDT&E) activities conducted in the NAVSEA NUWC Keyport Range Complex and extension Study Area in the State of Washington and coastal waters off Washington State in accordance with 50 CFR Part 218, Subpart R -- Taking Marine Mammals Incidental to U.S. Navy Research, Development, Test, and Evaluation Activities in the Naval Sea System Command Naval Undersea Warfare Center Keyport Range Complex and the Associated Proposed Extensions Study Area 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 May 17, 2011, through May 16, 2012.

2. This Authorization is valid only for the unintentional taking of the species of marine mammals and methods of take identified in 50 CFR § 218.181(b) and Condition 5 of this Authorization incidental to the activities specified in 50 CFR § 218.180(c) and Condition 4(a) of this Authorization and occurring within the NAVSEA NUWC Keyport Range Complex Study Area, which includes the extended Keyport Range Site, the extended Dabob Bay Range Complex (DBRC) Site, and the extended Quinault Underwater Tracking Range (QUTR) Site, as described in Figures 1-2, 1-3, and 1-4 of the Navy's application for the Letter of Authorization (LOA). The NAVSEA NUWC Keyport Range Complex is divided into the following open ocean/offshore areas and in-shore areas:

(a) Open Ocean Area – air, surface, and subsurface areas of the NAVSEA NUWC Keyport Range Complex Extension that lie outside of 12 nautical miles (nm) from land.

(b) Offshore Area – air, surface, and subsurface ocean areas within 12 nm of the Pacific Coast.

(c) In-shore – air, surface, and subsurface areas within the Puget Sound, Port Orchard Reach, Hood Canal, and Dabob Bay.

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 § 218.173 & 218.174 and implements the terms and conditions of this Authorization.



4. (a) The taking of marine mammals by the Navy is only authorized if it occurs incidental to the following activities within the designated amounts of use:

(i) Range Activities Using Active Acoustic Devices:

(A) General range tracking: Narrow frequency output between 10 to 100 kHz with source levels (SL) between 195-203 dB re 1 microPa @ 1 m – up to 504.5 hours per year.

(B) UUV Payloads: Operating frequency of 10 to 100 kHz with SLs less than 195 dB re 1 microPa @ 1 m at all range sites – up to 166 hours per year.

(C) Torpedo Sonars: Operating frequency from 10 to 100 kHz with SL under 233 dB re 1 microPa @ 1 m – up to 21 hours per year.

(D) Range Targets and Special Test Systems: 5 to 100 kHz frequency range with a SL less than 195 dB re 1 microPa @ 1 m at the Keyport Range Site and SL less than 238 dB re microPa @ 1 m at the DBRC and QUTR sites – up to 9 hours per year.

(E) Special Sonars (non-Navy, shore/pire static testing, diver activities) and Fleet Aircraft (active sonobuoys and dipping sonars): Frequencies vary from 100 to 2,500 kHz with SL less than 235 dB re 1 microPa @ 1 m – up to 321 hours per year.

(F) Side Scan Sonar: Multiple frequencies typically at 100 to 700 kHz with SLs less than 235 dB re 1 microPa @ 1 m – up to 166 hours per year.

(G) Other Acoustic Sources:

(1) Acoustic Modems: Emit pulses at frequencies from 10 to 300 kHz with SLs less than 210 dB re 1 microPa @ 1 m – up to 166 hours per year.

(2) Sub-bottom Profilers: Operate at 2 to 7 kHz at SLs less than 210 dB re 1 microPa @ 1 m, and 35 to 45 kHz at SLs less than 220 dB re 1 microPa @ 1 m – up to 192 hours per year.

(3) Target simulator (surface vessels, submarines, torpedoes, and UUV engine noise): Acoustic energy from engines usually from 50 Hz to 10 kHz at SLs less than 170 dB re 1 microPa @ 1 m – up to 24.5 hours per year.

(ii) Increased Tempo and Activities due to Range Extension: Annual range activities and operations are listed in the following table:

Range Activity	Platform/System Used	Proposed Number of Activities/Year*		
		Keyport Range Site	DBRC Site	QUTR Site
Test Vehicle Propulsion	Thermal propulsion systems	5	130	30
	Electric/Chemical propulsion systems	55	140	30
Other Testing Systems and Activities	Submarine testing	0	45	15
	Inert mine detection, classification and localization	5	20	10
	Non-Navy testing	5	5	5
	Acoustic & non-acoustic sensors (magnetic array, oxygen)	20	10	5
	Countermeasure test	5	50	5
	Impact testing	0	10	5
	Static in-water testing	10	10	6
	UUV test	45	120	40
	Unmanned Aerial System (UAS) test	0	2	2
Fleet Activities** (excluding RDT&E)	Surface Ship activities	1	10	10
	Aircraft activities	0	10	10
	Submarine activities	0	30	30
	Diver activities	45	5	15
Deployment Systems (RDT&E)	Range support vessels:			
	Surface launch craft	35	180	30
	Special purpose barges	25	75	0
	Fleet vessels***	15	20	20
	Aircraft (rotary and fixed wing)	0	10	20
	Shore and pier	45	30	30

* There may be several activities in 1 day. These numbers provide an estimate of types of range activities over the year.

** Fleet activities in the NAVSEA NUWC Keyport Range Complex do not include the use of surface ship and submarine hull-mounted active sonars.

*** As previously noted, Fleet vessels can include very small craft such as SEAL Delivery Vehicles.

(b) If the number of sonar operating hours and activity tempos during the period of this Authorization exceed the upper limits indicated in Condition 4(a), subsequent LOAs issued under the NAVSEA NUWC Keyport Range Complex RDT&E final rule shall ensure that the total over five years does not exceed the amount indicated in 50 CFR § 218.170(c) and Condition 4(a) of the Letter of Authorization.

5. This authorization is valid only for the incidental take by Level B harassment of the following marine mammal species, and only by the indicated method and amount of take:

- (a) Harbor porpoise (*Phocoena phocoena*) – 11,283;
- (b) Northern fur seal (*Callorhinus ursinus*) - 44;
- (c) California sea lion (*Zalophus californianus*) - 114;
- (d) Northern elephant seal (*Mirounga angustirostris*) – 14;
- (e) Harbor seal (*Phoca vitulina richardsi*) (Washington Inland Waters stock) –5,468; and

(f) Harbor seal (*P. v. richardsi*) (Oregon/Washington Coastal stock) – 101.

6. Mitigation - The Holder of this Authorization, and any person(s) operating under his authority, must implement the following mitigation measures when conducting activities identified in 50 CFR § 218.170(c) and Condition 4(a) of the Letter of Authorization:

- (a) Marine mammal observers training:
 - (i) All range personnel shall be trained in marine mammal recognition.
 - (ii) Marine mammal observer training shall be conducted by qualified organizations approved by NMFS.
- (b) Lookouts onboard vessels:
 - (i) Vessels on a range shall use lookouts during all hours of range activities.
 - (ii) Lookout duties include looking for marine mammals.
 - (iii) All sightings of marine mammals shall be reported to the Range Officer in charge of overseeing the activity.
- (c) Visual surveillance shall be conducted just prior to all in-water exercises.
 - (i) Surveillance shall include, as a minimum, monitoring from all participating surface craft and, where available, adjacent shore sites.
 - (ii) When cetaceans have been sighted in the vicinity of the operation, all range participants increase vigilance and take reasonable and practicable actions to avoid collisions and activities that may result in close interaction of naval assets and marine mammals.
 - (iii) Actions may include changing speed and/or direction, subject to environmental and other conditions (e.g., safety, weather).
- (d) An “exclusion zone” shall be established and surveillance will be conducted to ensure that there are no marine mammals within this exclusion zone prior to the commencement of each in-water exercise.
 - (i) For cetaceans, the exclusion zone shall extend out 1,000 yards (914.4 m) from the intended track of the test unit.
 - (ii) For pinnipeds, the exclusion zone shall extend out 100 yards (91 m) from the intended track of the test unit.

(e) Range craft shall not approach within 100 yards (91 m) of marine mammals, to the extent practicable considering human and vessel safety priorities. This includes marine mammals “hailed-out” on islands, rocks, and other areas such as buoys.

(f) In the event of a collision between a Navy vessel and a marine mammal, NUWC Keyport activities shall notify immediately the Navy chain of Command, which shall notify NMFS immediately.

(g) Passive acoustic monitoring for cetaceans will be implemented throughout the NUWC Keyport Range Complex during RDT&E testing activities involving active sonar transmissions when passive acoustic monitoring capabilities are being operated during the testing activity.

(h) Procedures for reporting marine mammal sightings on the NAVSEA NUWC Keyport Range Complex shall be promulgated, and sightings shall be entered into the Range Operating System and forwarded to NOAA/NMML Platforms of Opportunity Program.

(i) If there is clear evidence that a marine mammal is injured or killed as a result of the proposed Navy RDT&E activities, the Naval activities shall be immediately suspended and the situation immediately reported by personnel involved in the activity to the Ranger Officer, who will follow Navy procedures for reporting the incident to NMFS through the Navy’s chain-of-command.

(j) For nighttime RDT&E activities of active acoustic transmissions in the Keyport Range proposed extension area, the Navy shall conduct passive acoustic monitoring within the Agate Pass and south of University Point in southern Port Orchard Reach. If Southern Resident killer whales are detected in the vicinity of the Keyport Range Site, the Range Office shall be notified immediately and the active acoustic sources must be shutdown if killer whales are confirmed to approach at 1,000 yards from the source in accordance with 6(d).

7. Monitoring and Reporting – When conducting operations identified in 50 CFR § 218.170(c) and Condition 4(a) of the Letter of Authorization, the Holder of the Authorization and any person(s) operating under his authority must implement the following monitoring and reporting measures. All reports should be submitted to the Director, Office of Protected Resources, National Marine Fisheries Service, 1315 East-West Highway, Silver Spring MD 20910 and copies 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) The Holder of the Letter of Authorization issued pursuant to § 216.106 of this chapter and § 218.176 for activities described in § 218.170(c) and Condition 4(a) of this Authorization is required to cooperate with the NMFS when monitoring the impacts of the activity on marine mammals.

(b) The Holder of the Authorization must notify NMFS immediately (or as soon as clearance procedures allow) if the specified activity identified in § 218.170(c) and Condition 4(a) of this Authorization is thought to have resulted in the mortality or injury of any marine mammals, or in any take of marine mammals not identified or authorized in § 218.171(c).

(c) The Navy must conduct all monitoring and required reporting under the Letter of Authorization, including abiding by the NAVSEA NUWC Keyport Range Complex Monitoring Plan, which is incorporated herein by reference, and which requires the Navy to implement, at a minimum, the monitoring activities summarized below:

(i) Visual Surveys:

(A) The Holder of this Authorization shall conduct a minimum of 2 special visual surveys per year to monitor HFAS and MFAS respectively at the DBRC Range site.

(B) For specified events, shore-based and vessel surveys shall be used 1 day prior to and 1-2 days post activity.

(1) Shore-based Surveys:

(a) Shore-based monitors shall observe test events that are planned in advance to occur adjacent to near shore areas where there are elevated topography or coastal structures, and shall use binoculars or theodolite to augment other visual survey methods.

(b) Shore-based surveys of the test area and nearby beaches shall be conducted for stranded marine animals following nearshore events. If any distressed, injured or stranded animals are observed, an assessment of the animal's condition (alive, injured, dead, or degree of decomposition) shall be reported immediately to the Navy and the information shall be transmitted immediately to NMFS through the appropriate chain of command.

(2) Vessel-based Surveys:

(a) Vessel-based surveys shall be designed to maximize detections of marine mammals near mission activity event.

(b) Post-analysis shall focus on how the location, speed and vector of the range craft and the location and direction

of the sonar source (e.g. Navy surface vessel) relates to the animal.

(c) Any other vessels or aircraft observed in the area shall also be documented.

(C) Surveys shall include the range site with special emphasis given to the particular path of the test run. When conducting a particular survey, the survey team shall collect the following information.

- (1) Species identification and group size;
- (2) Location and relative distance from the acoustic source(s);
- (3) The behavior of marine mammals including standard environmental and oceanographic parameters;
- (4) Date, time and visual conditions associated with each observation;
- (5) Direction of travel relative to the active acoustic source; and
- (6) Duration of the observation.

(D) Animal sightings and relative distance from a particular active acoustic source shall be used post-survey to determine potential received energy (dB re 1 micro Pa-sec). This data shall be used, post-survey, to estimate the number of marine mammals exposed to different received levels (energy based on distance to the source, bathymetry, oceanographic conditions and the type and power of the acoustic source) and their corresponding behavior.

(ii) Passive Acoustic Monitoring (PAM):

(A) The Navy shall deploy a hydrophone array in the Keyport Range Complex Study Area for PAM.

(B) The array shall be utilized during the two special monitoring surveys in DBRC as described in § 218.174(c)(1)(i).

(C) The array shall have the capability of detecting low frequency vocalizations (<1,000 Hz) for baleen whales and relatively high frequency (up to 30 kHz) for odontocetes.

(D) Acoustic data collected from the PAM shall be used to detect acoustically active marine mammals as appropriate.

(iii) Marine Mammal Observers on range craft or Navy vessels:

(A) Navy Marine mammal observers (NMMOs) may be placed on a range craft or Navy platform during the event being monitored.

(B) The NMMO must possess expertise in species identification of regional marine mammal species and experience collecting behavioral data.

(C) NMMOs may be placed alongside existing lookouts during the two specified monitoring events as described in § 218.174(c)(1)(i).

(D) NMMOs shall inform the lookouts of any marine mammal sighting so that appropriate action may be taken by the chain of command. NMMOs shall schedule their daily observations to duplicate the lookouts' schedule.

(E) NMMOs shall observe from the same height above water as the lookouts, and they shall collect the same data collected by lookouts listed in § 218.174(c)(1)(iii).

(d) 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 activities utilizing sonar. 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).

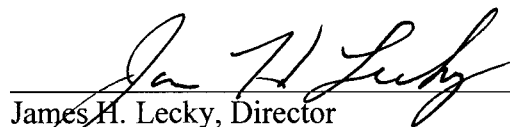
(e) Annual Keyport Range Complex Monitoring Plan Report - The Navy shall submit a report annually by December 1 describing the implementation and results (through September 1 of the same year) of the Keyport Range Complex Monitoring Plan. Data collection methods will be standardized across range complexes to allow for comparison in different geographic locations. Although additional information will also be gathered, the NMMOs collecting marine mammal data pursuant to the Keyport Range Complex Monitoring Plan shall, at a minimum, provide the same marine mammal observation data required in § 218.174(c) and Condition 7(c) of this Authorization. The Keyport Range Complex Monitoring Plan Report may be provided to NMFS within a larger report that includes the required Monitoring Plan Reports from Keyport Range Complex and multiple range complexes.

8. Prohibitions - Notwithstanding takings identified in 50 CFR § 218.171 and authorized in Condition 5 of this Letter of Authorization, no person in connection with the activities described in 50 CFR § 218.170 and Condition 4(a) may violate, or fail to comply with, the terms, conditions, and requirements of 50 CFR Subpart R or this Letter of Authorization.

9. This Authorization may be modified, suspended or withdrawn (pursuant to 50 CFR § 216.106(e)(1 or 2)) if the Holder or any person operating under his authority fails to abide by the

conditions prescribed herein or if the authorized taking is having more than a negligible impact on the species or stock of affected marine mammals.

10. A copy of this Authorization and the attached Subpart R of the regulations, or a document containing the equivalent requirements specified in this Authorization or 50 CFR Subpart R, 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).



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

MAY 17 2011

Date