Commander, U.S. Fleet Forces Command  
1562 Mitscher Avenue, Ste 250  
ATTN: N45  
Norfolk, VA 23551-2457  

Dear Commander:  

Enclosed is the Letters of Authorization (LOA) for the U.S. Navy, issued to the Commander, U.S. Fleet Forces Command, Department of the Navy, under the authority of Section 101(a)(5)(A) of the Marine Mammal Protection Act (16 U.S.C. 1361 et seq.), and the regulations governing the take of marine mammals incidental to the U.S. Navy's training exercises at the Gulf of Mexico (GOMEX) Range Complex. The authorization covers the taking of marine mammals by harassment incidental to training exercises involving underwater explosives at GOMEX Range Complex, for a period of one year, provided the mitigation, monitoring and reporting requirements are undertaken as required by the regulations and the LOA.

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

Sincerely,

[Signature]
James H. Lecky, Director  
Office of Protected Resources

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

Letter of Authorization

The Commander, U.S. Fleet Forces Command, 1562 Mitscher Ave., Suite 250, Norfolk, VA 23551-2487 and persons operating under his authority (i.e., Navy), are authorized to take marine mammals incidental to the U.S. Navy (Navy) training activities conducted in the Gulf of Mexico (GOMEX) Range Complex in the Gulf of Mexico in accordance with 50 CFR Part 218, Subpart D -- Taking Marine Mammals Incidental to U.S. Navy Training in the GOMEX Range Complex 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 March 18, 2011, through March 17, 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 218.31(c) and Condition 5 of this Authorization incidental to the activities specified in 50 CFR 218.30(c) and Condition 4(a) of this Authorization and occurring within the GOMEX Range Complex Operation Area (OPAREA), which is located along the Gulf of Mexico coast of the U.S. described in Figures 1 and 2 of the Letter of Authorization (LOA) application and consist of the BOMBEX Hotbox (surface and subsurface waters), located off the Alabama and Florida coast, south of NAS Pensacola, and underwater detonation (UNDET) Area E3 (surface and subsurface waters), located within the territorial waters off Padre Island, Texas, near Corpus Christi Naval Air Station (NAS).

   (a) The northernmost boundary of the BOMBEX Hotbox is located 23 nm (42.6 km) from the coast of the Florida panhandle at latitude 30° N, the eastern boundary is approximately 200 nm (370.4 km) from the coast of the Florida peninsula at longitude 86°48' W.

   (b) The UNDET Area E3 is a defined surface and subsurface area located in the waters south of Corpus Christi NAS and offshore of Padre Island, Texas. The westernmost boundary is located 7.5 nm (13.9 km) from the coast of Padre Island at 97°9'33" W and 27°24'26" N at the Western most corner. It lies entirely within the territorial waters (0 to 12 nm, or 0 to 22.2 km) of the U.S. and the majority of it lies within Texas state waters (0 to 9 nm, or 0 to 16.7 km).

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 218.33 & 218.34 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 use of explosive detonations associated with Air-to-Surface Bombing Exercises (BOMBEX) and Small Arms Training with MK3A2 anti-swimmer concussion grenades in the amounts indicated below:

(i) Underwater Explosives:

(A) MK-83 (1,000 lb High Explosive bomb);
(B) MK3A2 anti-swimmer concussion grenades (0.5 lbs net explosive weight, or NEW).

(ii) Training Events:

(A) BOMBEX (Air-to-Surface; MK-83) – 1 event with 4 bombs in succession
(B) Small Arms Training (MK3A2 anti-swimmer concussion grenade) – 6 events, with up to 10 live grenades per event, but no more than 20 live grenades total per year

(b) If the number of training events or explosive munitions or detonations indicated in Condition 4(a) are exceeded by the upper limit, subsequent LOAs issued under the GOMEX Range Complex final rule shall ensure that the total over five years does not exceed the amount indicated in 50 CFR 218.30(c) and Condition 4(a) of the Letter of Authorization.

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

(a) Level B Harassment:

(i) Sperm whale (*Physeter macrocephalus*) – 5;
(ii) Beaked whales – 20;
(iii) Bottlenose dolphin (*Tursiops truncatus*) – 30;
(iv) Pantropical spotted dolphin (*Stenella attenuata*) – 26;
(v) Clymene dolphin (*S. clymene*) – 20;
(vi) Atlantic spotted dolphin (*S. frontalis*) – 20;
(vii) Spinner dolphin (*S. longirostris*) – 27;
(viii) Striped dolphin (*S. coeruleoalba*) – 20;
(ix) Risso’s dolphin (*Grampus griseus*) – 30;
(x) Melon-headed whales (*Peponocephala electra*) – 20;
(xi) False killer whale (*Pseudorca crassidens*) – 10;
(xii) Fraser’s dolphin (*Lagenodelphis hosei*) – 20;
(xiii) Pygmy and/or dwarf sperm whales (*Kogia sp.*) – 20;
(xiv) Pygmy killer whale (*Ferresa attenuata*) – 10;
(xv) Rough-toothed dolphin (*Steno bredanensis*) – 20; and
(b) Level A Harassment (injury):
   (i) Pantropical spotted dolphin – 1; and
   (ii) Spinner dolphin – 1.

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 218.30(c) and Condition 4(a) of the Letter of Authorization:

(a) General Maritime Measures:

   (i) Personnel Training – Lookouts

   (A) All bridge personnel, Commanding Officers, Executive Officers, officers standing watch on the bridge, maritime patrol aircraft aircrews, and Mine Warfare (MIW) helicopter crews shall complete Marine Species Awareness Training (MSAT).

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

   (C) 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).

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

   (E) Surface lookouts shall scan the water from the ship to the horizon and be responsible for all contacts in their sector. In searching the assigned sector, the lookout shall always start at the forward part of the sector and search aft (toward the back). To search and scan, the lookout shall hold the binoculars steady so the horizon is in the top third of the field of vision and direct the eyes just below the horizon. The lookout shall scan for approximately five seconds in as many small steps as possible across the field seen through the binoculars. They shall search the entire sector in approximately five-degree steps, pausing between steps for approximately five seconds to scan the field of view. At the end of the sector search, the glasses shall be lowered to allow the eyes to rest for a few seconds, and then the lookout shall search back across the sector with the naked eye.
(F) At night, lookouts shall scan the horizon in a series of movements that would allow their eyes to come to periodic rests as they scan the sector. When visually searching at night, they shall look a little to one side and out of the corners of their eyes, paying attention to the things on the outer edges of their field of vision. Lookouts shall also have night vision devices available for use.

(ii) Operating Procedures & 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) 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.

(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 shall watch for and report to the OOD the presence of marine mammals.

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

(E) After sunset and prior to sunrise, lookouts shall employ Night Lookouts Techniques in accordance with the Lookout Training Handbook (NAVEDTRA 12968-D).

(F) While in transit, naval vessels shall be alert at all times, use extreme caution, and proceed at a "safe speed" (the minimum speed at which mission goals or safety will not be compromised) 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.

(G) When marine mammals have been sighted in the area, Navy vessels shall increase vigilance and implement measures to avoid collisions with marine mammals and avoid activities that might result in close interaction of naval assets and marine mammals. Such measures shall include
changing speed and/or course direction and would be dictated by environmental and other conditions (e.g., safety or weather).

(H) Naval vessels shall maneuver to keep at least 500 yds (460 m) away from any observed whale and avoid approaching whales head-on. This requirement does 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. Vessels shall take reasonable steps to alert other vessels in the vicinity of the whale.

(I) Where feasible and consistent with mission and safety, vessels shall avoid closing to within 200-yd (183 m) of marine mammals other than whales (whales addressed above).

(J) 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. 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 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.

(K) All vessels shall maintain logs and records documenting training operations should they be required for event reconstruction purposes. Logs and records shall be kept for a period of 30 days following completion of a major training exercise.

(b) Coordination and Reporting Requirements:

(i) The Navy shall coordinate with the local NMFS Stranding Coordinator for any unusual marine mammal behavior and any stranding, beached live/dead, or floating marine mammals that may occur at any time during or within 24 hours after completion of training activities.

(ii) The Navy shall follow internal chain of command reporting procedures as promulgated through Navy instructions and orders.

(c) Mitigation Measures for Specific At-sea Training Events - If a marine mammal is injured or killed as a result of the proposed Navy training activities (e.g., instances in which it is clear that munitions explosions caused the death), the Navy shall suspend its activities immediately and report such incident to NMFS.
(i) Air-to-Surface At-Sea Bombing Exercises (1,000-lbs explosive bombs):

(A) This activity shall only occur in W-155A/B (hot box) area of the GOMEX Range Complex OPAREA.

(B) 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 (457 m) altitude 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.

(C) A buffer zone of a 5,100-yard (4,663-m) radius shall be established around the intended target zone. The exercises shall be conducted only if the buffer zone is clear of marine mammals.

(D) At-sea BOMBEXs using live ordnance shall occur during daylight hours only.

(ii) Small Arms Training - Explosive hand grenades (such as the MK3A2 grenades):

(A) Lookouts shall visually survey for marine mammals prior to and during exercise.

(B) A 200-yd (182-m) radius buffer zone shall be established around the intended target. The exercises shall be conducted only if the buffer zone is clear of marine mammals.

7. Monitoring and Reporting – When conducting operations identified in 50 CFR § 218.30(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, Southeast Regional Office, National Marine Fisheries Service, 263 13th Avenue South, Saint Petersburg, Florida, 33701.

(a) The Navy must notify NMFS immediately (or as soon as clearance procedures allow) if the specified activity identified in § 218.30(c) is thought to have resulted in the mortality or serious injury of any marine mammals, or in any take of marine mammals not identified in § 218.31(c).

(b) The Navy must conduct all monitoring and required reporting under the Letter of Authorization, including abiding by the GOMEX 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) Vessel or aerial surveys.

(A) The Holder of this Authorization shall visually survey a minimum of 1 explosive event per year. One of the vessel or aerial surveys should involve NMFS-approved marine mammal observers (MMOs). If it is impossible to conduct the required surveys due to lack of training exercises, the missed annual survey requirement shall roll into the subsequent year to ensure that the appropriate number of surveys (i.e., total of five) occurs over the 5-year period of effectiveness of this subject.

(B) When operationally feasible, for specified training events, aerial or vessel surveys shall be used 1-2 days prior to, during (if reasonably safe), and 1-5 days post detonation.

(C) Surveys shall include any specified exclusion zone around a particular detonation point plus 2,000 yards beyond the border of the exclusion zone (i.e., the circumference of the area from the border of the exclusion zone extending 2,000 yards outwards). For vessel-based surveys a passive acoustic system (hydrophone or towed array) could be used to determine if marine mammals are in the area before and/or after a detonation event.

(D) When conducting a particular survey, the survey team shall collect:

(1) Location of sighting;

(2) Species (if not possible, indicate whale, dolphin or pinniped);

(3) Number of individuals;

(4) Whether calves were observed;

(5) Initial detection sensor;

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

(7) Wave height;

(8) Visibility;

(9) Whether sighting was before, during, or after detonations/exercise, and how many minutes before or after;
(10) Distance of marine mammal from actual detonations (or target spot if not yet detonated);

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

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

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

(ii) Passive acoustic monitoring – the Navy shall conduct passive acoustic monitoring when operationally feasible.

(A) Any time a towed hydrophone array is employed during shipboard surveys the towed array shall be deployed during daylight hours for each of the days the ship is at sea.

(B) The towed hydrophone array shall be used to supplement the ship-based systematic line-transect surveys (particularly for species such as beaked whales that are rarely seen).

(C) The array should have the capability of detecting low frequency vocalizations (<1,000 Hz) for baleen whales and relatively high frequency (up to 30 kHz) for odontocetes. The use of two simultaneously deployed arrays can also allow more accurate localization and determination of diving patterns.

(iii) Marine mammal observers on Navy platforms:

(A) As required in § 218.34(c)(1) and Condition 7(b)(i) of the Letter of Authorization, MMOs who are selected for aerial or vessel surveys shall, to the extent practicable, be placed on a Navy platform during the exercises being monitored.

(B) The MMO must possess expertise in species identification of regional marine mammal species and experience collecting behavioral data.
(C) MMOs shall not be placed aboard Navy platforms for every Navy training event or major exercise. Instead, MMOs should be employed during specifically identified opportunities deemed appropriate for data collection efforts. The events selected for MMO participation shall take into account safety, logistics, and operational concerns.

(D) MMOs shall observe from the same height above water as the lookouts.

(E) The MMOs shall not be part of the Navy's formal reporting chain of command during their data collection efforts; Navy lookouts shall continue to serve as the primary reporting means within the Navy chain of command for marine mammal sightings. The only exception is that if an animal is observed within the shutdown zone that has not been observed by the lookout, the MMO shall inform the lookout of the sighting and the lookout shall take the appropriate action through the chain of command.

(F) The MMOs shall collect species identification, behavior, direction of travel relative to the Navy platform, and distance first observed.

Information collected by MMOs should be the same as those collected by the survey team described in § 218.34(c)(1)(iv) and Condition 7(b)(i)(D) of the Letter of Authorization.

(c) 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 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).

(d) Annual GOMEX Range Complex Monitoring Plan Report - The Navy shall submit a report annually on March 1 describing the implementation and results (through January 1 of the same year) of the GOMEX Range Complex Monitoring Plan. Data collection methods shall be standardized across range complexes to allow for comparison in different geographic locations. Although additional information will also be gathered, the MMOs collecting marine mammal data pursuant to the GOMEX Range Complex Monitoring Plan shall, at a minimum, provide the same marine mammal observation data required in § 218.34(c)(1)(iv) and Condition 7(b)(i)(D) of the Letter of Authorization. The GOMEX Range Complex Monitoring Plan Report may be provided to NMFS within a larger report that includes the required Monitoring Plan Reports from GOMEX Range Complex and multiple range complexes.
(e) Annual GOMEX Range Complex Exercise Report - The Navy shall provide the information described below for all of their explosive exercises. Until the Navy is able to report in full the information below, they shall 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 exercise (of those identified as part of the “specified activity” in this LOA) conducted in the GOMEX Range Complex.

(ii) Total annual expended/detonated rounds (missiles, bombs, etc.) for each explosive type.

(f) The Navy shall respond to NMFS comments and requests for additional information or clarification on the GOMEX Range Complex Comprehensive Report, the Annual GOMEX Range Complex Exercise Report, or the Annual GOMEX 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.

8. Prohibitions - Notwithstanding takings identified in 50 CFR § 218.31 and authorized in Condition 5 of this Letter of Authorization, no person in connection with the activities described in 50 CFR § 218.30 and Condition 4(a) may violate, or fail to comply with, the terms, conditions, and requirements of 50 CFR Subpart D 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 D of the regulations, or a document containing the equivalent requirements specified in this Authorization or 50 CFR Subpart D, 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).

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

MAR 17 2011
Date