



**DEPARTMENT OF COMMERCE  
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION  
NATIONAL MARINE FISHERIES SERVICE  
LETTER OF AUTHORIZATION**

The U.S. Marine Corps (Marine Corps) is hereby authorized under section 101(a)(5)(A) of the Marine Mammal Protection Act (16 U.S.C. 1371(a)(5)(A)), 50 CFR 216.106, and 50 CFR 218.40 to harass marine mammals incidental to military training exercises at U.S. Marine Corps Air Station Cherry Point Range Complex, North Carolina.

1. This 5-year Letter of Authorization (Authorization) is valid from March 13, 2015 through March 12, 2020.

2. This Authorization is valid only for air-to-surface and surface-to-surface training exercises within the Brant Island Target (BT-9) and Piney Island Bombing Range (BT-11) bombing targets at the Marine Corps Air Station Cherry Point Range Complex located within Pamlico Sound, North Carolina. The BT-9 area is a water-based bombing target and mining exercise area located approximately 52 kilometers (km) (32.3 miles (mi)) northeast of Marine Air Corps Station Cherry Point. The BT-11 area encompasses a total of 50.6 square kilometers (km<sup>2</sup>) (19.5 square miles (mi<sup>2</sup>)) on Piney Island located in Carteret County, North Carolina.

3. This Authorization allows for the take of Atlantic bottlenose dolphins (*Tursiops truncatus*), incidental to the activities specified in condition 2, if it occurs within the level of training activities and annual amounts of ordnance use indicated here:

(a) Surface-to-Surface Exercises – up to 471 vessel-based sorties annually at BT-9 and BT-11; and

(b) Air-to-Surface Exercises – up to 14,586 air-based based sorties annually at BT-9 and BT-11.

(c) The use live ordnance for Marine Corps training activities at BT-9, in the total amounts indicated over the course of the five years:

(i) 30 mm HE – 17,160 rounds;

(ii) 40 mm HE – 52,100 rounds;

(iii) 2.75-inch Rocket – 1,100 rounds;

(iv) 5-inch Rocket – 340 rounds; and

(v) G911 Grenade – 720 rounds.



(d) The use of inert ordnance for Marine Corps training activities at BT-9 and BT-11, in the total amounts indicated over the course of the five years:

- (i) Small arms excluding .50 cal (7.62 mm) – 2,628,050 rounds at BT-9 and 3,054,785 rounds at BT-11;
- (ii) 0.50 Caliber arms – 2,842,575 rounds at BT-9 and 1,833,875 rounds at BT-11;
- (iii) Large arms (up to 25 mm) – 602,025 rounds at BT-9 and 1,201,670 rounds at BT-11;
- (iv) Rockets, inert (2.75-inch rocket, 2.75-inch illumination, 2.75-inch white phosphorus, 2.75-inch red phosphorus; 5-inch rocket, 5-inch illumination, 5-inch white phosphorus, 5-inch red phosphorus) – 4,220 rounds at BT-9 and 27,960 rounds at BT-11;
- (v) Bombs, inert (BDU-45 practice bomb, MK-76 practice bomb, MK-82 practice bomb, MK-83 practice bomb) – 4,055 rounds at BT-9 and 22,114 rounds at BT-11; and
- (vi) Pyrotechnics – 4,496 rounds at BT-9 and 8,912 rounds at BT-11.

#### 4. GENERAL CONDITIONS

A copy of this Authorization must be in the possession of the lead personnel on duty and responsible for compliance with the conditions of this Authorization at the time of specified training exercises.

(a) The incidental taking of marine mammals is limited to the species listed under condition 4(b). The taking by harassment, injury, or death of any other species of marine mammal is prohibited and may result in the modification, suspension, or revocation of this Authorization.

(b) The incidental take of marine mammals under the activities identified in condition 3(a) through (d) and § 218.40(c) is limited to Atlantic bottlenose dolphins (*Tursiops truncatus*) only by the indicated method of take, and the indicated number over a five-year period:

- (i) Level B harassment
  - (A) Atlantic bottlenose dolphin – 1,615.
- (ii) Level A harassment
  - (A) Atlantic bottlenose dolphin – 165.

#### 5. COOPERATION AND COORDINATION

The Holder of the Letter of Authorization is required to cooperate with the National Marine Fisheries Service, and any other Federal, state, or local agency monitoring the impacts of the activity on marine mammals.

Unless specified otherwise in the Letter of Authorization, the Holder of the Letter of Authorization must notify the Director, Office of Protected Resources, National Marine Fisheries Service, or designee, by letter or telephone (301-427-8401), at least 2 weeks prior to any modification to the activities identified in condition 2 and § 218.40(c) that has the potential to result in the mortality, serious injury, or Level A or Level B harassment of a marine mammal that was not identified and addressed previously.

## 6. MITIGATION AND MONITORING REQUIREMENTS

(a) The Marine Corps must conduct the activities identified in condition 3 and § 218.40(c) in a manner that minimizes, to the greatest extent practicable, adverse impacts on marine mammals and their habitats. When conducting operations identified in condition 3 and § 218.40(c), the Marine Corps must implement the following mitigation measures.

### (1) Safety Zones:

(i) The Marine Corps shall establish and monitor a safety zone for marine mammals comprising the entire Rattan Bay area at BT-11.

(ii) The Marine Corps shall establish and monitor a safety zone for marine mammals comprising a radius of 914 meters (m) (3,000 feet) around the target area at BT-9.

(2) For training exercises, the Marine Corps shall comply with the monitoring requirements, including pre-mission and post-mission monitoring, set forth in § 218.45(4). The Marine Corps shall designate qualified, on-site individual(s) to record the effects of training exercises on marine mammals that inhabit Pamlico Sound;

### (3) When detonating explosives or delivering ordnance:

(i) If personnel observe any marine mammals within the safety zone prescribed in condition 6(a)(1), or if personnel observe marine mammals that are on a course that will put them within the designated safety zone prior to surface-to-surface or air-to-surface training exercises, the Marine Corps shall delay ordnance delivery and/or explosives detonations until all marine mammals are no longer within the designated safety zone.

(ii) If personnel cannot reacquire marine mammals detected in the safety zone after delaying training missions, the Marine Corps shall not commence activities until the next verified location of the animal is outside of the safety zone and the animal is moving away from the mission area.

(iii) If personnel are unable to monitor the safety zone prescribed in paragraph (b)(1) of this section, then the Marine Corps shall delay training exercises.

(iv) If daytime weather and/or sea conditions preclude adequate surveillance for detecting marine mammals, then the Marine Corps shall postpone training exercises until adequate sea conditions exist for adequate monitoring of the safety zone prescribed in condition 6(a)(1).

### (4) Pre-Mission and Post-Mission Monitoring

(i) Range operators shall conduct or direct visual surveys to monitor BT-9 or BT-11 for marine mammals before and after each exercise. Range operation and control personnel shall monitor the target area through tower-mounted safety and surveillance cameras.

(ii) Range operators shall use the surveillance camera's night vision (i.e., infrared) capabilities to monitor BT-9 or BT-11 for marine mammals during night-time exercises.

(iii) For BT-9, in the event that a marine mammal is sighted within the 914-m (3,000-ft) radius around the target area, personnel shall declare the area as fouled and cease training exercises. Personnel shall commence operations in BT-9 only until the marine mammal moves beyond and on a path away from the 914-m (3,000 ft) radius from the BT-9 target.

(iv) For BT-11, in the event that a marine mammal is sighted anywhere within the confines of Rattan Bay, personnel shall declare the water-based targets within Rattan Bay as fouled and cease training exercises. Personnel shall commence operations in BT-11 only after the animal has moved out of Rattan Bay.

(5) Range Sweeps for Safety Zone Monitoring and Delay of Exercises

(i) The Marine Corps shall conduct a range sweep the morning of each exercise day prior to the commencement of range operations.

(ii) The Marine Corps shall also conduct a range sweep after each exercise following the conclusion of range operations.

(iii) Marine Corps Air Station personnel shall conduct the sweeps by aircraft at an altitude of 100 to 300 m (328 to 984 ft) above the water surface, at airspeeds between 60 to 100 knots.

(iv) The path of the sweeps shall run down the western side of BT-11, circle around BT-9, and then continue down the eastern side of BT-9 before leaving the area.

(v) The maximum number of days that shall elapse between pre- and post-exercise monitoring events shall be approximately 3 days, and will normally occur on weekends.

(6) Cold Pass by Aircraft

(i) For waterborne targets, the pilot must perform a low-altitude visual check immediately prior to ordnance delivery at the bombing targets both day and night to ensure the target area is clear of marine mammals. This is referred to as a “cold” or clearing pass.

(ii) Pilots shall conduct the cold pass with the aircraft (helicopter or fixed-winged) flying straight and level at altitudes of 61 to 914 m (200 to 3,000 ft) over the target area.

(iii) If marine mammals are present in the target area during a range sweep, cold pass, or visual surveillance with the camera, the Range Controller shall deny ordnance delivery to the target as conditions warrant. If marine mammals are not present in the target area, the Range Controller may grant clearance to the pilot as conditions warrant.

(7) Vessel Operations

(i) All vessels used during training operations shall abide by NMFS’ Southeast Regional Viewing Guidelines designed to prevent harassment to marine mammals (<http://www.nmfs.noaa.gov/pr/education/southeast/>).

(8) Weekly and Post-Exercise Monitoring

(i) Post-exercise monitoring shall be conducted the morning following an exercise, unless an exercise occurs on a Friday, in which case the post-exercise sweep would take place the following Monday.

(ii) Weekly monitoring events shall include a maximum of five pre-exercise and four post-exercise sweeps. The maximum number of days that will elapse between pre- and post-exercise monitoring events shall be approximately three days, which would occur only on weekends. If the Marine Corps observe marine mammals during the monitoring period, they shall record and log sight data identical to data collected by the PEDRO crew.

(b) Marine Species Awareness Training improves the effectiveness of visual observations for marine resources, including marine mammals. The training provides information on sighting cues, visual observation tools and techniques, and sighting notification procedures.

(1) Operators of small boats, and other personnel monitoring for marine mammals from watercraft shall be required to take the Department of the Navy's Marine Species Awareness Training. The Marine Corps shall instruct those pilots conducting range sweeps on marine mammal observation techniques during routine Range Management Department briefings. This training would make personnel knowledgeable of marine mammals, protected species, and visual cues related to the presence of marine mammals and protected species.

(2) Instruct pilots conducting range sweeps on marine mammal observation techniques during routine Range Management Department briefings. This training would make personnel knowledgeable of marine mammals, protected species, and visual cues related to the presence of marine mammals and protected species.

(d) The Marine Corps shall continue the Long-Term Monitoring Program to obtain abundance, group dynamics (e.g., group size, age census), behavior, habitat use, and acoustic data on the bottlenose dolphins which inhabit Pamlico Sound, specifically those around BT-9 and BT-11.

(1) Continue the Passive Acoustic Monitoring (PAM) Program to provide additional insight into how dolphins use BT-9 and BT-11 and to monitor for vocalizations.

(2) Continue to refine the real-time passive acoustic monitoring system at BT-9 to allow automated detection of bottlenose dolphin whistles.

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

## **7. REPORTING REQUIREMENTS**

(a) The Holder of the Letter of Authorization shall conduct all of the monitoring and reporting required under the LOA and shall submit an annual and comprehensive report to the Director, Office of Protected Resources, National Marine Fisheries Service. The report shall summarize the type and amount of training exercises conducted, all marine mammal observations made during monitoring, and if mitigation measures were implemented. The report shall also address

the effectiveness of the monitoring plan in detecting marine mammals. This report must include the following information:

- (1) Date and time of each training exercise;
  - (2) A complete description of the pre-exercise and post-exercise activities related to mitigating and monitoring the effects of the training exercises on marine mammal populations.
  - (3) Results of the Marine Corps monitoring, including the number of marine mammals (by species, if possible) that may have been harassed due to presence within the applicable safety zone;
    - (i) If a marine mammal is sighted during a range sweep or from range cameras, sighting data shall be collected and entered into the Marine Corps sighting database, web-interface, or report generator and this information shall be relayed to the training Commander.
    - (ii) Sighting data includes the following (collected to the extent possible): species identification; group size; the behavior of marine mammals (*e.g.*, milling, travel, social, foraging); location and relative distance from the BT; date, time and visual conditions (*e.g.*, Beaufort sea state, weather) associated with each observation; direction of travel relative to the BT; and duration of the observation.
  - (4) A detailed assessment of the effectiveness of the sensor based monitoring in detecting marine mammals in the area of the training exercises; and
  - (5) Results of coordination with coastal marine mammal stranding networks.
- (b) The Marine Corps will submit an annual report to NMFS by June 1st of each year starting in 2016. The first report will cover the time period from issuance of the March 2015 Letter of Authorization through March 12, 2016. Each annual report after that time will cover the time period from March 13 through March 12, annually.
- (c) The Marine Corps shall submit a draft comprehensive report on all marine mammal monitoring and research conducted during the period of these regulations to the Director, Office of Protected Resources, NMFS at least 180 days prior to expiration of these regulations or 180 days after the expiration of these regulations if the Marine Corps will not request new regulations.
- (1) The draft comprehensive report will be subject to review and comment by NMFS. Prior to acceptance by NMFS, the Marine Corps must address any recommendations made by NMFS, within 60 days of its receipt, in the final comprehensive report.
- (d) General Notification of Dead or Seriously Injured Marine Mammals:
- (1) The Marine Corps shall systematically observe training operations for injured or disabled marine mammals. In addition, the Marine Corps shall monitor the principal marine mammal stranding networks and other media to correlate analysis of any dolphin strandings that could potentially be associated with BT-9 or BT-11 training operations.

(2) In the unanticipated event that a specified activity at either BT-9 or one of the water-borne target within BT-11 clearly causes the take of a marine mammal in a manner prohibited by this Authorization, such as serious injury or mortality, the Marine Corps shall immediately report the incident to the Chief of the Permits and Conservation Division, Office of Protected Resources, NMFS, at 301-427-8401 and/or by email to [Jolie.Harrison@noaa.gov](mailto:Jolie.Harrison@noaa.gov) and the Southeast Regional Stranding Coordinator at (305) 361-4586 immediately or as soon as clearance procedures allow. NMFS shall work with the Marine Corps to determine what is necessary to minimize the likelihood of further prohibited take and ensure MMPA compliance.

(i) The report must include the following information: the 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).

(3) In the event that an injured, stranded, or dead marine mammal is found by Marine Corps personnel that is not in the vicinity of, or found during or shortly after operations, the Marine Corps personnel will report the same information listed above as soon as operationally feasible and clearance procedures allow.

(e) General Notification of a Ship Strike:

(1) In the event of a vessel strike, at any time or place, the Marine Corps shall do the following:

(i) 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);

(ii) Report to NMFS as soon as operationally feasible the size and length of the animal, an estimate of the injury status (*e.g.*, dead, injured but alive, injured and moving, unknown, etc.), vessel class/type, and operational status;

(iii) Report to NMFS the vessel length, speed, and heading as soon as feasible; and

(iv) Provide NMFS with a photo or video, if equipment is available.

8. Failure to comply with the terms and conditions contained in Subpart E—Taking Marine Mammals Incidental to U.S. Marine Corps Training Exercises at Brant Island Bombing Target and Piney Island Bombing Range, Pamlico Sound, North Carolina (50 CFR 218.40-218.49) may result in the modification, suspension, or revocation of this Authorization.



MAR 13 2015

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Director, Office of Protected Resources  
National Marine Fisheries Service

Date