



INCIDENTAL HARASSMENT AUTHORIZATION

The U.S. Navy (Navy) is hereby authorized under section 101(a)(5)(D) of the Marine Mammal Protection Act (MMPA; 16 U.S.C. 1371(a)(5)(D)) to harass marine mammals incidental to target and missile launch activities on San Nicolas Island, California at the Naval Air Center Weapons Division, Point Mugu Sea Range, when adhering to the following terms and conditions.

1. This Incidental Harassment Authorization (IHA) is valid from June 12, 2021 to June 11, 2022.
2. This IHA is valid only for target and missile launch activities on San Nicolas Island, California, associated with defensive strategies and other weapons systems testing for the Naval Air Center Weapons Division, Point Mugu Sea Range.
3. General Conditions
 - (a) A copy of this IHA must be in the possession of the Navy, its designees, work crew personnel, and Protected Species Observers (PSOs) operating under the authority of this IHA.
 - (b) The species authorized for taking are California sea lions (*Zalophus californianus*), harbor seals (*Phoca vitulina*), and northern elephant seals (*Mirounga angustirostris*).
 - (c) The taking, by Level B harassment only, is limited to the species listed in condition 3(b). Table 1 (attached) provides the authorized number of takes per species and stock.
 - (d) The taking by Level A harassment (injury), serious injury, or death of any of the species listed in condition 3(b) of this IHA or any taking of any other species of marine mammal is prohibited and may result in the modification, suspension, or revocation of this IHA.
 - (e) The Navy may conduct a maximum of 40 launch events associated with target and missile launch activities.



4. Mitigation Measures

The holder of this IHA is required to implement the following mitigation measures:

- (a) Personnel must not enter pinniped haul-outs. Personnel may be adjacent to pinniped haul-outs below the predicted missile path for two hours prior to a launch only for monitoring purposes.
- (b) Missiles must not cross over pinniped haul-outs at elevations less than 305 meters (m) (1,000 ft).
- (c) The Navy may not conduct more than 10 launch events at night.
- (d) Launches must not occur during February through April, to the maximum extent practicable.
- (e) Launches must be limited during January through February and June through July, to the maximum extent practicable.
- (f) All aircraft and helicopter flight paths must maintain a minimum distance of 305 m from recognized seal haulouts and rookeries, to the maximum extent practicable.
- (g) The Navy must review the launch procedure and monitoring methods, in cooperation with NMFS, if any incidents of injury or mortality of a pinniped are discovered during post-launch surveys, or if surveys indicate possible effects to the distribution, size, or productivity of the affected pinniped populations as a result of the specified activities. If necessary, appropriate changes must be made through modification to this Authorization prior to conducting the next launch of the same vehicle.
- (h) Launch activities must be halted upon observation of either a species for which incidental take is not authorized or a species for which incidental take has been authorized but the authorized number of takes has been met (as shown in Table 1).

5. Monitoring Measures

The Navy must obtain visual, video and audio, and acoustic data from up to three pinniped haulout monitoring sites during each launch event, to the maximum extent practicable. The holder of this IHA is required to abide by the following marine mammal and acoustic monitoring requirements:

- (a) *Visual Monitoring* - Visual monitoring will be conducted during preparations for video and acoustic monitoring, as described in condition 5(b) of this Authorization.
- i. Visual monitoring must be conducted before and after launches, including scanning the affected haulout beaches and counting the number and species of pinnipeds over a 15-30 minute period.
 - ii. Prior to a launch event, Navy personnel must make observations of the monitored pinniped haulout and record the numbers and species of pinnipeds observed on field data sheets.
 - iii. After a launch event, Navy personnel must return to the monitored pinniped haulout and record the numbers and species of pinnipeds that remain on the haul-out sites and any notable changes.
- (b) *Video and Audio Monitoring* – Before each launch, Navy personnel must set up or activate up to three video cameras (either high-definition video cameras, or Forward-Looking Infrared Radiometer (FLIR) thermal imaging cameras for night launch events) such that they overlook the monitoring sites. Each camera will be set to record a focal group of pinnipeds within the haulout for the maximum recording time permitted by the camera capacity. Video and audio monitoring must be conducted by recording continuously from a minimum of 2 hours before the event to approximately 1 hour after the event in order to:
- i. Determine the composition of the focal subgroup of pinnipeds (approximate numbers and sexes of each age class).
 - ii. Describe the launch event, including documenting the occurrence of a launch event, the timing of the event, and duration of audibility.
 - iii. Document movements of pinnipeds, including number and proportion moving, direction and distance moved, and pace of movement (slow or vigorous). In addition, the following variables concerning the circumstances of the observations must also be recorded from the videotape or from direct observations at the site:
 1. Study location
 2. Local time
 3. Weather (including an estimate of wind strength and direction, and presence of precipitation)
 4. Tide state.

- iv. Identify and document any change in behavior or movements of pinnipeds that occurs at the time of the launch event;
 - v. Compare received levels of launch sound with pinniped responses, based on acoustic and behavioral data from up to three monitoring sites at different distances from the launch site and missile path during each launch; from the data accumulated across a series of launches, to attempt to establish the “dose-response” relationship for launch sounds under different launch conditions if possible;
 - vi. Ascertain periods or launch conditions when pinnipeds are most and least responsive to launch activities, and
 - vii. Document take by harassment
 - 1. Pinnipeds that are exposed to launch sounds strong enough to cause TTS; or
 - 2. Pinnipeds that leave the haulout site, or exhibit prolonged movement (greater than 10 m) or prolonged behavioral changes (such as pups separated from mothers) relative to their behavior immediately prior to the launch..
- (c) *Acoustic Monitoring* - The Navy must use up to four autonomous audio recorders to make acoustical measurements. During each launch, these must be located as close as practicable to pinniped haulout monitoring sites and near the launch pad itself. The monitored pinniped haulout sites must typically include one site as close as possible to the missile’s planned flight path and one or two locations farther from the flight path within the area of potential impact with pinnipeds present. Autonomous Terrestrial Acoustic Recorders must be deployed at the recording locations on the launch day well before the launch time, and must be retrieved later the same day.
- (d) Marine mammal monitoring must be conducted by qualified, biologically-trained, Navy personnel.
6. Reporting
- The holder of this IHA is required to:
- (a) Submit a draft report on all monitoring conducted under the IHA within ninety calendar days of the completion of marine mammal and acoustic monitoring or sixty days prior to the issuance of any subsequent IHA or incidental take regulations for this project, whichever comes first. A final report must be prepared and submitted within thirty days following resolution of comments on

the draft report from NMFS. This report must contain the informational elements described in Section 5 of this Authorization.

- (b) Reporting injured or dead marine mammals:
- i. In the unanticipated event that the specified activity clearly causes the take of a marine mammal in a manner prohibited by this IHA, such as serious injury, or mortality, the Navy must immediately cease the specified activities and report the incident to the NMFS Office of Protected Resources (301-427-8401) and the West Coast Stranding Coordinator (562-980-3230). The report must include the following information:
 1. Time and date of the incident;
 2. Description of the incident;
 3. Environmental conditions (e.g., wind speed and direction, cloud cover, and visibility);
 4. Description of all marine mammal observations and active sound source use in the 24 hours preceding the incident;
 5. Species identification or description of the animal(s) involved;
 6. Fate of the animal(s); and
 7. Photographs or video footage of the animal(s).

Activities must not resume until NMFS is able to review the circumstances of the prohibited take. NMFS will work with the Navy to determine what measures are necessary to minimize the likelihood of further prohibited take and ensure MMPA compliance. The Navy may not resume their activities until notified by NMFS.
 - ii. In the event the Navy discovers an injured or dead marine mammal, and the lead observer determines that the cause of the injury or death is unknown and the death is relatively recent (e.g., in less than a moderate state of decomposition), the Navy must immediately report the incident to the Office of Protected Resources, NMFS, and the West Coast Region Stranding Coordinator, NMFS. The report must include the same information identified in 6(b)(i) of this IHA. Activities may continue while NMFS reviews the circumstances of the incident. NMFS will work with the Navy to determine whether additional mitigation measures or modifications to the activities are appropriate.

- iii. In the event that the Navy discovers an injured or dead large whales or other cetaceans, and the lead observer determines that the injury or death is not associated with or related to the specified activities (e.g., previously wounded animal, carcass with moderate to advanced decomposition, or scavenger damage), the Navy must report the incident to the Office of Protected Resources, NMFS, and the West Coast Region Stranding Coordinator, NMFS, within 24 hours of the discovery.
7. This Authorization may be modified, suspended or withdrawn if the holder fails to abide by the conditions prescribed herein (including, but not limited to, failure to comply with monitoring or reporting requirements), or if NMFS determines: 1) the authorized taking is having more than a negligible impact on the species or stock of affected marine mammals, or 2) the prescribed measures are likely not or are not effecting the least practicable adverse impact on the affected species or stocks and their habitat.

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Catherine Marzin,
Acting Director, Office of Protected Resources
National Marine Fisheries Service

Date

Attachment

Table 1. Authorized Take by Level B harassment.

Species	Authorized Level B harassment
California sea lion	11,000
Harbor seal	120
Northern elephant seal	40