

MARINE MAMMAL COMMISSION
4340 East-West Highway, Room 700
Bethesda, MD 20814-4447

7 August 2008

Mr. P. Michael Payne
Chief, Permits Division
Office of Protected Resources
National Marine Fisheries Service
1315 East-West Highway
Silver Spring, MD 20910-3226

Dear Mr. Payne:

The Marine Mammal Commission, in consultation with its Committee of Scientific Advisors on Marine Mammals, has reviewed the application submitted by the U.S. Navy under section 101(a)(5)(A) of the Marine Mammal Protection Act. The applicant is seeking a Letter of Authorization to take marine mammals incidental to military readiness training operations in the Cherry Point Range Complex off the coast of North and South Carolina from 29 May 2009 through 28 May 2014. The Commission also has reviewed the National Marine Fisheries Service's 8 July 2008 *Federal Register* notice announcing receipt of the application and inviting comments on its proposal to promulgate regulations to authorize and govern the requested taking.

The planned training operations would expose various species of marine mammals within the Cherry Point Range Complex to pressures from underwater detonations and to taking incidental to the development, testing, and evaluation of weapons systems, vessels, and aircraft. The types of ordnance to be used include Hellfire and tube-launched, optically tracked, wire-guided missiles (net explosive weights of 8 lbs and 15.33 lbs, respectively), 20-lb net explosive weight charges, and 5-in guns.

RECOMMENDATION

The Marine Mammal Commission recommends that the National Marine Fisheries Service and the Navy ensure that the contemplated rule and any Letter of Authorization issued under that rule cover all marine mammal species that may be taken by Level A or Level B harassment as a result of the proposed activities. Further, the Marine Mammal Commission recommends that, if the National Marine Fisheries Service proceeds with publication of a proposed rule to authorize the taking of small numbers of marine mammals incidental to the proposed military training operations, the Navy be required to—

- perform an external peer review of its marine mammal density estimates for the southeast operating area to ensure their accuracy;
- revise its explosive ordnance exposure analysis to provide a more realistic assessment of potential occurrences and outcomes;
- provide additional details concerning its integrated comprehensive monitoring program, including an estimated timeframe for its implementation;

- develop and implement a plan to calibrate and verify the performance of monitoring and mitigation measures being proposed to enable the Navy, the Service, and other interested parties to evaluate their effectiveness;
- suspend an activity if a marine mammal is seriously injured or killed and the injury or death could be associated with the activity. The injury or death should be investigated to determine the cause, assess the full impact of the activity (e.g., the total number of animals involved), and determine how the activity should be modified to avoid future injuries or deaths; and
- submit annual reports providing full documentation of methods, results, and interpretation pertaining to all monitoring tasks and the dates and locations of operations, marine mammal sightings, and estimates of the amount and nature of potential takes of marine mammals by harassment or in other ways.

RATIONALE

The Navy is requesting authorization to take by Level B harassment bottlenose dolphins and Atlantic spotted dolphins incidental to the proposed operations. However, the application (p. 3-1) indicates that 30 other cetacean species (including six species listed as endangered under the Endangered Species Act) and one pinniped species occur regularly in the operating area. The Navy is not requesting authorization to take these species based on density estimates for them in the area where it proposes to use explosive ordnance. The Navy states that a consultation under the Endangered Species Act has been initiated in support of its request. The Marine Mammal Commission recommends that the Service and the Navy ensure that the contemplated rule and any Letter of Authorization issued under that rule cover all marine mammal species that may be taken by Level A or Level B harassment as a result of the proposed activities.

Density Estimation

The Navy's application states that the density estimates provided are derived from its report on marine mammal density estimates for the southeast operating area. Because the risk analysis and take estimates depend on the accuracy of the analyses in the report, the Marine Mammal Commission recommends that the Navy be required to perform an external peer review of its marine mammal density estimates for the southeast operating area to ensure their accuracy.

Explosive Ordnance Exposure Analysis

The application analyzes the effects of infrequent explosive events by assuming the events and their effects will be distributed evenly over four seasons, resulting in fractional annual totals. The Commission does not believe that assessing the effect of 0.25 or 0.5 event per season provides a realistic range of likely outcomes because neither the events nor the densities of marine mammals may be evenly distributed over those seasons. For example, if only two events are conducted per year, each event could be conducted in a different season or both could be conducted in the same season. But in no case would a fractional number of events occur in a given season. Similarly, animal densities may vary as a function of movement and migration patterns. The Navy should be able to

provide a more realistic range of likely outcomes when the number of events is so low. The Marine Mammal Commission therefore recommends that the Navy revise its explosive ordnance exposure analysis to provide a more realistic assessment of potential occurrences and outcomes.

Monitoring and Mitigation

The Commission notes that the Navy is developing an integrated comprehensive monitoring program to facilitate the collection and synthesis of data from range-specific monitoring efforts and research and development studies that are fully or partially funded by the Navy. The program will help to coordinate the most efficient use of limited resources to address monitoring concerns for a range of Navy activities. As noted in our previous letters regarding the Navy's requests for authorization to take marine mammals incidental to other military readiness activities, the Commission supports this effort. The Marine Mammal Commission recommends that the Navy provide additional details concerning its integrated comprehensive monitoring program, including an estimated timeframe for its implementation.

In previous letters on the Navy's military readiness operations, the Commission also has expressed its concern that the performance of the Navy's monitoring and mitigation efforts have yet to be thoroughly evaluated. The existing scientific data all indicate that efforts to monitor the presence or absence of marine mammals often are of limited effectiveness, which raises questions about their utility and reliability. The methods for conducting such performance testing are available and well within the scope of the Navy's capabilities. The Commission believes that the Navy should develop and implement a plan for obtaining performance data to justify its confidence in critical monitoring and mitigation measures such as watchstander training, the probability of detecting various marine species of concern, and the use of night vision and passive acoustic technology in the Cherry Point Range and other range complexes where military readiness exercises are planned. The Marine Mammal Commission therefore reiterates its recommendation that the Navy develop and implement a plan to calibrate and verify the performance of monitoring and mitigation measures being proposed to enable the Navy, the Service, and other interested parties to evaluate their effectiveness.

Lethal Taking/Serious Injury

Authorization to take marine mammals by serious injury or mortality is not being requested. The Marine Mammal Commission recommends that the rule, if issued, require suspension of the associated Navy activity if a marine mammal is seriously injured or killed and the injury or death could be associated with the activity. The injury or death should be investigated to determine the cause, assess the full impact of the activity (e.g., the total number of animals involved), and determine how the activity should be modified to avoid future injuries or deaths. It should be clear to all interested parties that more information is required to understand the potential effects of sound on marine mammals, and full investigation of such incidents is essential to provide more complete information on potential effects.


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Reporting

The Commission notes that post-event reports have great potential value to the Navy and the Service. The Marine Mammal Commission therefore recommends that the National Marine Fisheries Service require that the applicant submit annual reports providing full documentation of methods, results, and interpretation pertaining to all monitoring tasks and the dates and locations of operations, marine mammal sightings, and estimates of the amount and nature of potential takes of marine mammals by harassment or in other ways.

Please contact me if you or your staff has questions about any of our comments or recommendations.

Sincerely,



Timothy J. Ragen, Ph.D.
Executive Director