

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

12 January 2009

Mr. P. Michael Payne, Chief
Permits, Conservation and Education Division
Office of Protected Resources
National Marine Fisheries Service
1315 East-West Highway
Silver Spring, MD 20910-3225

Dear Mr. Payne:

The Marine Mammal Commission, in consultation with its Committee of Scientific Advisors on Marine Mammals, has reviewed the U.S. Navy's application for authorization to take marine mammals incidental to conducting training activities in the Virginia Capes study area (VACAPES) over a five-year period (<http://www.nmfs.noaa.gov/pr/permits/incidental.htm>). The Commission also has reviewed the National Marine Fisheries Service's proposed rule to issue the authorization (73 Fed. Reg. 75631). The VACAPES study area covers approximately 27,661 square miles of the western North Atlantic Ocean, from the seaward limit of state waters (3 miles offshore) east to a maximum of 184 miles offshore and from the entrance to Delaware Bay south to a latitude 105 nautical miles south of Cape Hatteras, North Carolina. The study area includes a complex of ranges, referred to as OPAREA, used for specific types of training. The application considers vessel movements and explosives use, including mine warfare, missile, gunnery, and bomb exercises. The application does not include use of mid-frequency sonar. The Commission offers the following recommendations and comments on the application and proposed rule.

RECOMMENDATIONS

The Marine Mammal Commission recommends that the National Marine Fisheries Service—

- include in the final rule a requirement that, in all but emergency situations or where the need for realistic training requires greater speed or maneuverability, the Navy abide by the seasonal restrictions applicable to other vessels under the Service's ship-speed regulations (50 C.F.R. § 224.105) to reduce the risk of ship collisions with right whales;
- work with the Navy to design studies to collect and analyze data necessary to characterize the risk of collisions with right whales by Navy vessels;
- work with the Navy to explain and reconcile the differences between the Navy's and the National Marine Fisheries Service's estimates of maximum annual takes for the proposed exercises in the VACAPES range complex;
- include in its authorization the number of lethal takes and takes by Level A harassment requested by the Navy and regularly confer with the Navy to monitor the actual number of such takes to ensure that they do not exceed the authorized number;
- work with the Navy to sponsor a peer review of existing risk analysis procedures and the interpretation and use of survey or other data in those analyses;

- work with the Navy to validate the effectiveness of monitoring and mitigation measures, preferably before beginning or, if that is infeasible, in conjunction with the Navy operations subject to this incidental take authorization; and
- if a serious injury or death should occur and that injury or death could have resulted from the authorized Navy operations, the Service and Navy jointly investigate the circumstances and steps needed to avoid similar occurrences.

RATIONALE

The Commission's rationale for its recommendations is as follows.

Avoiding Collisions with Right Whales

The National Marine Fisheries Service recently published its "Final Rule to Implement Speed Restrictions to Reduce the Threat of Ship Collisions with Northern Right Whales" (73 Fed. Reg. 60173), effective 9 December 2008. Ship strikes are one of the two major human-related causes of North Atlantic right whale injury and mortality and are an important impediment to the species' recovery. In its deliberations regarding this rule, the Service concluded that a 10-knot speed limit is the most effective and practical approach to reducing the threat of ship strikes to right whales and that such a limit was appropriate in certain areas where right whales are known or likely to occur. Some of those areas are within the VACAPES study area subject to this authorization. The Commission concurs with the Service's conclusions stated in the preamble to that rule and believes that the Navy should follow the rule's provisions to the extent possible and consistent with mission-critical training needs. Therefore, the Marine Mammal Commission recommends that the Service include in the final rule a requirement that, in all but emergency situations or where the need for realistic training requires greater speed or maneuverability, the Navy abide by the seasonal restrictions applicable to other vessels under the Service's ship-speed regulations (50 C.F.R. § 224.105) to reduce the risk of ship collisions with right whales. For example, the Navy should adhere to the speed limits applicable to other vessels during all normal vessel transits to and from training locations or when conducting most other at-sea activities.

This precaution, however, may not be sufficient to protect right whales in all situations. Assessing the collision risk from Navy activities is difficult because of the uncertainty about how the level of risk is affected by ship speed, ship location, and season. By documenting and assessing the Navy's operations in relation to observations of right whales, the Navy should be able to estimate the risk its activities pose to right whales under various circumstances. Given the frequency (or infrequency) of documented collisions, considerable data will be needed, and the resulting estimate may not be precise. However, it may be sufficient to characterize the risk with enough clarity to inform decision-makers about risks from various activities in different areas or seasons. Such information could be used to identify more effective mitigation measures. For example, naval exercises could be timed and sited in ways to minimize the chances of encountering right whales. This work also may contribute to efforts at managing collision risks from other types of large vessels that transit right whale habitat. Therefore, the Marine Mammal Commission recommends that the

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Service work with the Navy to design studies to collect and analyze data necessary to characterize the risk of collisions with right whales by Navy vessels. The Marine Mammal Commission would be pleased to work with the Service and the Navy in finding ways to obtain this kind of information with the least possible disruption to Navy training exercises.

Estimating the Number of Takes

The Navy and the National Marine Fisheries Service provide different estimates of the maximum number of marine mammal takes that may result from the proposed activities in the VACAPES study area. The Navy's application includes an estimated maximum annual lethal take of 1 common dolphin and 36 additional takes annually resulting in injury (25 common dolphins, 9 striped dolphins, 1 Atlantic spotted dolphin, and 1 pantropical spotted dolphin). The Service's *Federal Register* notice presents the Navy's request as including a maximum of 1 lethal take of a common dolphin and 25 additional takes resulting in injury. The Marine Mammal Commission recommends that the Service work with the Navy to explain and reconcile the differences between the Navy's and the National Marine Fisheries Service's estimates of maximum annual takes for the proposed exercises in the VACAPES range complex.

Also, the Service indicates that it does not plan to authorize lethal takes or takes by Level A harassment even though such takes were requested by the Navy. We can only assume that the Service's rationale is that the Navy's proposed mitigation measures will reduce the risk of such takes to zero (i.e., will be 100 percent effective). We see no basis for such an assumption. It is inconsistent with all the available evidence, which clearly indicates that current mitigation measures are of limited effectiveness. In our comments on monitoring and mitigation (later in this letter), we point out that the Commission has repeatedly recommended to the Navy that it provide quantitative estimates for the effectiveness of its mitigation measures. Therefore, the Marine Mammal Commission recommends that the Service include in its authorization the number of lethal takes and takes by Level A harassment requested by the Navy and regularly confer with the Navy to monitor the actual number of such takes to ensure that they do not exceed the authorized number.

Expert Peer Review

The Navy's application indicates that the Navy has thoroughly reviewed the existing data on marine mammal occurrence in the VACAPES study area and, in some cases, has supplemented the data by conducting additional surveys. However, the Navy's derivation of animal distribution and abundance data from its literature reviews and data-gathering efforts have not been subjected to transparent peer review and remain a source of uncertainty in the evaluation of risks to marine mammal populations. For its part, the Service must assess the risk by either depending on the estimates provided by the Navy or by generating its own estimates using methods not described in the proposed rule. If the former, the Service should have an interest in having all aspects of the Navy's estimation procedures formally reviewed. If the latter, the Service's estimation procedures also should be subject to such review. Otherwise, decision-makers and other interested parties are faced with an unacceptable, unexplained level of uncertainty regarding the actual risks presented by the proposed activities. Such uncertainty has been apparent in previous, widely varying estimates of

take levels generated for other range complexes. To bring some clarity to this situation, the Marine Mammal Commission recommends that the Service work with the Navy to sponsor a peer review of existing risk analysis procedures and the interpretation and use of survey or other data in those analyses. Clarifying the strengths and shortcomings of those procedures and data and conducting the necessary sensitivity analyses should provide a basis not only for judging how much confidence can be placed in the risk estimates but also for guiding future research to reduce the uncertainty.

Monitoring and Mitigation

The Navy is developing an integrated, comprehensive monitoring plan to structure its monitoring and long-term assessment efforts. If properly implemented, the plan will improve both our understanding of the effects of Navy activities and our ability to monitor and mitigate such effects. The Marine Mammal Commission strongly supports the development and implementation of this plan.

The value of the monitoring plan depends largely on realistic assessment of the efficacy or performance of monitoring methods. At present, however, the Navy's VACAPES application and draft environmental impact statement on those activities do not describe realistic estimates of performance for proposed mitigation measures, nor do they contain a concrete plan to verify and validate the levels of performance of watchstanders or other monitoring tools such as passive acoustics. The Commission continues to believe that the probability of detecting marine mammal encounters, injuries, or deaths using existing monitoring measures, and the subsequent likelihood of implementing source-level reductions and other mitigation measures, are far below the 100 percent effectiveness implicit in the Service's assertion that all potential Level A takes will be mitigated.

The feasibility and cost of verification and validation tests are well within the Navy's capability, and the value of validating mitigation effectiveness should easily justify the relatively small effort and time required for that purpose. If the responsible parties—whether action agencies, consulting agencies, or oversight agencies—are to manage these activities effectively, then we must start with a realistic appraisal of what we do and do not know and what is needed to make the necessary improvements. Collectively, we are capable of evaluating and improving monitoring and mitigation measures but likely will fail to do so if we continue to rely on untested and unjustified assumptions about these measures.

For all these reasons, the Marine Mammal Commission recommends that the Service work with the Navy to validate the effectiveness of monitoring and mitigation measures, preferably before beginning or, if that is infeasible, in conjunction with the Navy operations subject to this incidental take authorization.

Serious Injury or Mortality

If the Service does not authorize any lethal takes or takes by Level A harassment for the Navy's proposed activities in the VACAPES study area and if those activities seriously injure or kill a single marine mammal, the Navy will not be covered for such taking and will be in violation of the

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Marine Mammal Protection Act. This presents the risk that the Navy will be required to halt operations until it can ensure that its activities will not cause additional injuries or deaths or has obtained authorization for such taking.

If Navy operations cause an injury or death, the Navy and the Service may be able to gather valuable information about the potential effects of similar operations, information that may be useful for avoiding future injuries or deaths. Learning from such events is essential for improving mitigation measures and is prudent in any event. This is standard procedure for scientific research permits and is particularly pertinent when the exact cause of a problem and its magnitude are uncertain. For those reasons, the Marine Mammal Commission recommends that if a serious injury or death should occur and that injury or death could have resulted from the authorized Navy operations, the Service and Navy jointly investigate the circumstances and steps needed to avoid similar occurrences. We note that a similar requirement for review is imposed on researchers whose activities result in the incidental serious injury or mortality of a marine mammal.

Please contact me if you have questions about any of our recommendations or comments.

Sincerely,



Timothy J. Ragen, Ph.D.
Executive Director

Cc: Craig Johnson, NOAA/NMFS OPR
RADM Larry Rice, CNO N45
Hon. Donald Schregardus, DASN E