

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

12 May 2008

Mr. P. Michael Payne  
Chief, Permits Division  
National Marine Fisheries Service  
Office of Protected Resources  
1315 East-West Highway, Room 13635  
Silver Spring, MD 20910

Dear Mr. Payne:

The Marine Mammal Commission, in consultation with its Committee of Scientific Advisors on Marine Mammals, has reviewed the Department of the Navy's request for a Letter of Authorization to take small numbers of marine mammals incidental to shock-testing the *Mesa Verde* 70 km (38 nmi) off Mayport, Florida. The Commission also has reviewed the Service's 11 April 2008 *Federal Register* notice proposing regulations to authorize and govern the requested taking.

The Service notes that the proposed shock-testing of the *Mesa Verde*, incorporating the mitigation measures described in the Navy's application and in the draft environmental impact statement/overseas environmental impact statement, could result in the lethal take of one bottlenose dolphin, the injury of one bottlenose dolphin and one Risso's dolphin, and the take of 282 small whales and dolphins by Level B harassment. However, based on the latest estimates of abundance and seasonal distribution, the Service has preliminarily determined that the proposed activities would have a negligible impact on the affected marine mammal species and stocks inhabiting waters off the U.S. Atlantic coast. Mitigation measures proposed by the Service include establishing a 6.5-km (3.5-nmi) safety range for marine mammal exclusion, incorporating aerial and shipboard monitoring efforts both before and after detonation of explosives, prohibiting detonations whenever marine mammals are within or about to enter the safety range, and avoiding operations at night or if weather and sea conditions preclude adequate aerial surveillance.

## RECOMMENDATION

The Commission concurs with the Service's finding that the planned shock-testing is unlikely to have more than a negligible, short-term impact on the potentially affected marine mammal species and stocks, provided that the planned mitigation measures are imposed. Accordingly, the Marine Mammal Commission recommends that—

- the National Marine Fisheries Service issue the requested authorization, subject to a requirement that operations be suspended immediately if more than the anticipated number of marine mammals are killed or injured incidental to the operations or if a dead or seriously injured Atlantic right whale is found in the vicinity of the operations and the death or injury could have occurred incidental to the proposed activities; and
- if, for some reason, the proposed shock trial cannot be completed before the end of summer 2008, it be postponed until the spring or summer of 2009 to avoid the seasons when Atlantic right whales are most likely to be present.

## **RATIONALE**

The Commission agrees with the Service and the Navy that (1) the mitigation program as described in the Navy's request and the Service's proposed rule would minimize, to the extent practicable, marine mammal injury and mortality incidental to the shock-testing, and (2) the anticipated disruption of marine mammal behavior beyond that possibly caused by temporary threshold shifts (TTS) in hearing is unlikely to have significant population-level effects on the affected populations (i.e., to affect survival or reproduction) because the potentially disturbing activities will last only a short time and will occur no more than once a week over no more than a four-week period.

The Commission also agrees that the data used to estimate marine mammal density, seasonality of habitat use, and other relevant biological factors appear to be the latest and best data from the Service and other sources. One exception involves the use of data collected jointly by the National Marine Fisheries Service and the Minerals Management Service between 1996 and 2001, which is used instead of more recent data from the Minerals Management Service's sperm whale seismic study (Palka and Johnson 2007). The final report for that program was published in 2007, and several related, peer-reviewed publications of sighting and tagging data also are available. In addition, the Commission is concerned about the possible consequences of staging the shock tests in the DeSoto Canyon area because the canyon appears to support relatively high concentrations of sperm whales, beaked whales, and other deep-diving cetaceans.

The Service is proposing to require that operations be halted and the Service notified immediately if post-detonation monitoring indicates that any marine mammal was killed or injured as a result of the test. The Marine Mammal Commission recommends that the Service also require that operations be suspended immediately if more than the anticipated number of marine mammals are killed or injured incidental to the operations or if a dead or seriously injured Atlantic right whale is found in the vicinity of the operations and the death or injury could have occurred incidental to the proposed activities. Suspension of operations should remain in place until the Service (1) has determined that the death is not related to the shock testing activities, (2) has reviewed the situation and determined that further deaths or serious injuries are unlikely to occur, or (3) has revised the regulations to authorize additional takes under section 101(a)(5)(A) of the Marine Mammal Protection Act. Further, the Marine Mammal Commission recommends that if, for some reason, the proposed shock trial cannot be completed before the end of summer 2008, it be postponed until the spring or summer of 2009 to avoid the seasons when Atlantic right whales are most likely to be present. The Commission notes that the death or injury of even one right whale is significant, given the diminished status of the population.

As it has noted in the past, the Commission questions the Service's view that TTS constitutes Level B harassment under the Marine Mammal Protection Act. The Commission continues to believe that an across-the-board definition of TTS as constituting no more than Level B harassment inappropriately dismisses the possibility that an affected animal may experience injury or biologically significant behavioral changes if its hearing is compromised, even temporarily. The Commission believes this constitutes Level A harassment under both the generally applicable

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definition of this term and that applicable to military readiness activities. The Service should revisit this issue and revise its interpretation of TTS to recognize the potential for Level A harassment due to secondary effects of temporary hearing loss.

If you have questions about our recommendation or comments, please contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "Timothy J. Ragen" followed by a flourish and the word "for".

Timothy J. Ragen, Ph.D.  
Executive Director

Literature Cited

Palka, D., and M. Johnson (eds.). 2007. Cooperative research to study dive patterns of sperm whales in the Atlantic Ocean. U.S. Dept. of the Interior, Minerals Management Service, Gulf of Mexico OCS Region, New Orleans, LA. OCS Study MMS 2007-033. 49 pp.