

**DEPARTMENT OF COMMERCE****National Oceanic and Atmospheric Administration**

[I.D. 092203D]

**Small Takes of Marine Mammals Incidental to Specified Activities; Oceanographic Surveys in the Southeast Caribbean Sea and Adjacent Atlantic Ocean**

**AGENCY:** National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), Commerce.

**ACTION:** Notice of receipt of application and proposed incidental take authorization; request for comments.

**SUMMARY:** NMFS has received an application from the Lamont-Doherty Earth Observatory (LDEO), a part of Columbia University, for an Incidental Harassment Authorization (IHA) to take small numbers of marine mammals, by harassment, incidental to conducting oceanographic surveys in the Southeast Caribbean Sea and adjacent Atlantic Ocean. Under the Marine Mammal Protection Act (MMPA), NMFS is requesting comments on its proposal to issue an authorization to LDEO to incidentally take, by harassment, small numbers of several species of cetaceans and pinnipeds for a limited period of time within the next year.

**DATES:** Comments and information must be received no later than November 20, 2003.

**ADDRESSES:** Comments on the application should be addressed to the Acting Chief, Marine Mammal Conservation Division, Office of Protected Resources, National Marine Fisheries Service, 1315 East-West Highway, Silver Spring, MD 20910-3225, or by telephoning the contact listed here. A copy of the application containing a list of the references used in this document may be obtained by writing to this address or by telephoning the contact listed here. Comments cannot be accepted if submitted via e-mail or the Internet.

**FOR FURTHER INFORMATION CONTACT:** Kimberly Skrupky, Office of Protected Resources, NMFS, (301) 713-2322, ext 163.

**SUPPLEMENTARY INFORMATION:****Background**

Sections 101(a)(5)(A) and (D) of the MMPA (16 U.S.C. 1361 *et seq.*) direct the Secretary of Commerce to allow, upon request, the incidental, but not intentional, taking of marine mammals by U.S. citizens who engage in a

specified activity (other than commercial fishing) within a specified geographical region if certain findings are made and either regulations are issued or, if the taking is limited to harassment, a notice of a proposed authorization is provided to the public for review.

Permission may be granted if NMFS finds that the taking will have a negligible impact on the species or stock(s) and will not have an unmitigable adverse impact on the availability of the species or stock(s) for subsistence uses and that the permissible methods of taking and requirements pertaining to the monitoring and reporting of such takings are set forth. NMFS has defined "negligible impact" in 50 CFR 216.103 as "...an impact resulting from the specified activity that cannot be reasonably expected to, and is not reasonably likely to, adversely affect the species or stock through effects on annual rates of recruitment or survival."

Section 101(a)(5)(D) of the MMPA established an expedited process by which citizens of the United States can apply for an authorization to incidentally take small numbers of marine mammals by harassment. Under section 3(18)(A), the MMPA defines "harassment" as:

any act of pursuit, torment, or annoyance which (i) has the potential to injure a marine mammal or marine mammal stock in the wild; or (ii) has the potential to disturb a marine mammal or marine mammal stock in the wild by causing disruption of behavioral patterns, including, but not limited to, migration, breathing, nursing, breeding, feeding, or sheltering.

The term "Level A harassment" means harassment described in subparagraph (A)(i). The term "Level B harassment" means harassment described in subparagraph (A)(ii).

Section 101(a)(5)(D) establishes a 45-day time limit for NMFS review of an application followed by a 30-day public notice and comment period on any proposed authorizations for the incidental harassment of marine mammals. Within 45 days of the close of the comment period, NMFS must either issue or deny issuance of the authorization.

**Summary of Request**

On August 7, 2003, NMFS received an application from LDEO for the taking, by harassment, of several species of marine mammals incidental to conducting a seismic survey program. As presently scheduled, a seismic survey will be conducted in the Southeast Caribbean Sea and Adjacent Atlantic Ocean. The Southeast Caribbean Sea and Atlantic Ocean

cruise will be off the coast of Venezuela in an area extending from 59° to 71° W and 10° to 15° N from January 11, 2004 to February 21, 2004. The operations will partly take place in the Exclusive Economic Zones (EEZ) of several nations in the Southeast Caribbean (including Venezuela, Aruba, Bonaire, Curacao, Trinidad, and Tobago) as well as in international waters.

The purpose of the project is to obtain information on island arc movements and geometry which can be used to better understand the history and mechanical processes by which island arcs accrete to continents, deeply buried rocks are exhumed, and folded belts and different types of sedimentary basins form along oblique collision zones. The interplay of the crust and subcrustal lithosphere during arc accretion and metamorphic belt exhumation and subduction polarity reverses will be examined. In addition, the flow patterns of the sublithospheric mantle beneath the plate boundary and northern South America as a whole and beneath the right lateral shear zone between them will be examined.

**Description of the Activity**

The seismic survey will involve two vessels which will conduct the seismic work. The source vessel, the *R/V Maurice Ewing*, will deploy an array of 20 airguns as an energy source, plus a 6-km (3.2 n.mi.) towed hydrophone streamer. A second vessel, the *R/V Seward Johnson*, will deploy and retrieve Ocean Bottom Seismometers (OBSs). As the airgun array is towed along the survey line, the towed hydrophone streamer or OBSs will receive the returning acoustic signals and transfer the data to the on-board processing system. Water depths within the study area range from approximately 15-6,000 m (49-19,685 ft). Most of the survey effort will take place in waters greater than 1,000 m (3,281 ft) deep, 2,031 km (1,097 n.mi.) will be surveyed in water depth ranging from 100-1,000 m (328-3,281 ft) deep, and a small portion of the survey effort will occur in shallow water less than 100 m (328 ft) deep.

The procedures to be used for the seismic study will be similar to those used during previous seismic surveys by LDEO in the equatorial Pacific Ocean (Carbotte *et al.*, 1998, 2000). The proposed seismic surveys will use conventional seismic methodology with a towed airgun array as the energy source, and a towed hydrophone streamer and/or OBSs as the receiver system. The OBSs will be deployed by the *Seward Johnson*. The energy to the airgun array is compressed air supplied