

harassment, incidental to conducting oceanographic surveys in the Mid-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 October 17, 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: Sarah C. Hagedorn, Office of Protected Resources, NMFS, (301) 713-2322, ext 117.

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."

Subsection 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).

Subsection 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 July 21, 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, two seismic surveys will be conducted in the Mid-Atlantic Ocean. The Trans-Atlantic Geotraverse (TAG) cruise will be centered at 26°N and 45°W in the Mid-Atlantic Ocean during mid- to late-October 2003, for a total of six days of seismic surveying. The Atlantic Deep Western Boundary Current (ADWBC) cruise will occur between 39° and 42°N and between 45° and 52.5°W, and will take place at an, as of yet, unscheduled date (likely in July, 2004) for a total of approximately 20 days of surveying. These operations will take place in international waters.

The seismic survey work conducted during the TAG cruise is part of a multi-disciplinary experiment, taking place in the TAG Active Mound area over a period of nine months. The TAG active mound (26°N on the Mid-Atlantic Ridge), which is one of the largest hydrothermal deposits found to date on the seafloor, is a large, focused mineral deposit on a slow-spreading ridge. The purpose of the TAG cruise is to delineate the nature, position, and size of any heat sources (low-velocity zones) that might drive convection at the TAG active mound, and more generally, to

provide an understanding of crustal architecture in the TAG region. More specifically, the TAG experiment will address key issues at the TAG site: (1) the nature of the heat source driving circulation, (2) the relationship between faulting on the eastern flank and fluid flow at the mound, (3) the possible existence of a low-velocity zone beneath the rise axis, and (4) the hydraulic connectivity of the shallow TAG mound.

The ADWBC cruise will determine the configuration, age, and paleoceanographic significance of the sedimentary sequences on J Anomaly Ridge and Southeast Newfoundland Ridge, which may show evidence for strong boundary currents dating to the early Paleocene. Proposed tracklines for the seismic survey were chosen with four primary objectives in mind: (1) to map the main reflection sequences across the full extent of the ridges and onto the edges of adjacent abyssal plains, (2) to obtain continuity in tracing sequences by profiling around major interruptions (seamounts) and optimizing track crossings, (3) to provide abundant crossing lines in areas where existing seismic and bathymetric data suggest that there are outcrops of pre-Neogene strata, and (4) to take advantage of good-quality seismic data, where they exist (e.g., Conrad 2510 MCS), in order to make loop correlations between tracks.

Description of the Activity

The TAG seismic survey will involve a single vessel which will conduct the seismic work, the *R/V Maurice Ewing*, operated by LDEO under a cooperative agreement with the U.S. National Science Foundation (NSF), owner of the vessel. The *Maurice Ewing* will deploy an array of 20 airguns as an energy source, and will deploy and retrieve Ocean Bottom Hydrophones (OBHs). A hydrophone streamer will not be towed during the TAG cruise. The energy to the airgun array is compressed air supplied by compressors on board the source vessel. As the airgun array is towed along the survey lines, the OBHs and Ocean Bottom Seismometers (OBSs) will receive the reflected signals and transfer the data to the onboard processing system. All planned geophysical data acquisition activities will be conducted by LDEO scientists with onboard assistance by the scientists who proposed the study. The TAG program will consist of 185 km (100 n.mi.) of survey lines. There will be a total of three seismic lines, two along- and one across-axis of the TAG. Water depths in the area will vary from 1500 to 4500 m (4921–14,764 ft).