

**Finding of No Significant Impact for the Issuance of an
Incidental Harassment Authorization to Eglin Air Force Base to
Take Marine Mammals Incidental to Conducting Air-to-Surface
Gunnery Exercises in the Northern Gulf of Mexico**

National Marine Fisheries Service

The National Marine Fisheries Service (NMFS) received an application from the U.S. Air Force (USAF) Eglin Air Force Base (Eglin AFB) for the issuance of an incidental harassment authorization (IHA) pursuant to its responsibility to authorize the taking of marine mammals incidental to an otherwise lawful activity other than commercial fishing, provided that NMFS determines that the action will have a negligible impact on the affected species or stocks of marine mammals, will not have an unmitigable adverse impact on the availability of those species or stocks of marine mammals intended for subsistence uses, and that the permissible methods of taking and requirements pertaining to the mitigation, monitoring, and reporting of such takings are set forth. NMFS has satisfied those requirements and has authorized the take of 21 cetacean species, by Level B Harassment only, incidental to the USAF's programmatic mission activities in the Eglin Gulf Test and Training Range (EGTTR) in the northern Gulf of Mexico (Gulf or GOM).

In November 2002, Eglin AFB prepared the *Eglin Gulf Test and Training Range Final Programmatic Environmental Assessment* (USAF 2002 PEA) and issued a Finding of No Significant Impact (FONSI) on August 18, 2003. In accordance with NOAA Administrative Order (NAO) 216-6 (Environmental Review Procedures for Implementing the National Environmental Policy Act, May 20, 1999), NMFS reviewed the information contained in the USAF 2002 PEA, and, on May 1, 2006, determined that it accurately and completely described the proposed action, the alternatives to the proposed action, and the potential impacts on marine mammals, endangered species, and other marine life that could be impacted by the preferred alternative and the other alternatives. Accordingly, NMFS adopted the USAF 2002 PEA under 40 CFR 1506.3 and made its own FONSI determination on May 16, 2006, to support the USAF's EGTTR 2006 IHA. The NMFS FONSI also took into consideration updated data and information contained in NMFS' *Federal Register* document noting issuance of an IHA to Eglin AFB for this activity (71 FR 27695, May 12, 2006) and previous notices (71 FR 3474, January 23, 2006; 70 FR 48675, August 19, 2005).

On January 22, 2007, Eglin AFB requested a new annual IHA and in that regard, requested certain modifications to the mitigation measures included in its 2006 IHA. These modifications relate to: (1) protected species surveys; (2) ramp-up procedures; and (3) sea state restrictions. As the issuance of a new IHA to Eglin AFB amends three of the mitigation measures for reasons of practicality and safety, NMFS reviewed Eglin AFB's 2002 Final PEA and determined that a new EA was warranted to address (1) the proposed modifications to the mitigation and monitoring measures, (2) the use of 23 pounds/square inch (psi) as a change in the criterion for estimating potential impacts on marine

mammals from explosives, and (3) a cumulative effects analysis of potential environmental impacts from all GOM activities (including Eglin mission activities).

NAO 216-6 contains criteria for determining the significance of the impacts of a proposed action. In addition, the Council on Environmental Quality (CEQ) regulations at 40 CFR 1508.27 state that the significance of an action should be analyzed both in terms of "context" and "intensity." Each criterion listed below is relevant to making a FONSI and has been considered individually, as well as in combination with others. The significance of this action is analyzed based on NOAA's criteria and CEQ's context and intensity criteria. These include:

1) Can the proposed action reasonably be expected to cause substantial damage to the ocean and coastal habitats and/or essential fish habitat as defined under the Magnuson-Stevens Fishery Conservation and Management Act (MSFCMA) and identified in fishery management plans?

Response: The proposed action will not have a substantial impact on the ocean or its resources. Short-term exposure to detonations is unlikely to have significant impacts on northern GOM marine life, although some deleterious effects may occur within the small, localized gunnery impact areas. Also, the mitigation measures implemented for marine mammals will also be applied, as described in the Preferred Alternative, by Eglin AFB to protect sea turtles from the blasts and resultant short-term sounds. Fish can be affected by the blasts and some limited mortality is likely to result, however, a mitigation measure not to conduct the exercises if *Sargassum* mats or large fish schools are present will minimize impacts to fish to the greatest extent practicable. All these mitigation measures will reduce potential environmental impacts to an insignificant level. Additionally, the exercises usually last five to six hours at a time with only 90 to 120 minutes of live fire.

2) Can the proposed action be expected to have a substantial impact on biodiversity and/or ecosystem function within the affected area (e.g., benthic productivity, predator-prey relationships, etc.)?

Response: Because of the small zones of impact and the small amounts of explosives used in the air-to-surface (A-S) gunnery exercises, NMFS believes that there will not be a substantial impact on marine life biodiversity or on the normal functioning of the nearshore or offshore Gulf ecosystems.

3) Can the proposed action reasonably be expected to have a substantial adverse impact on public health or safety?

Response: NMFS does not expect this action to have a substantial impact on public health or safety. Mitigation measures incorporated by Eglin AFB will ensure that no recreational boaters or commercial shippers are within a radius of 5 nautical miles of the detonation site. Additionally, activities are usually performed at least 15 miles offshore. The extensive monitoring that is required for detecting the presence of marine

mammals in the proposed action area will alert Eglin AFB to the presence of humans in the action area as well. However, due to safety concerns, other activities conducted by the public (e.g., commercial shipping) do not occur within the EGTTR.

4) Can the proposed action reasonably be expected to adversely affect endangered or threatened species, their critical habitat, marine mammals, or other non-target species?

Response: This action may adversely affect, but will not jeopardize the continued existence of, species listed under the Endangered Species Act (ESA). Listed species that might be affected include the loggerhead, green, hawksbill, Kemp's ridley, and leatherback sea turtles and the sperm whale. Adverse effects will be limited to short-term behavioral disturbances that may constitute harassment. No critical habitat is present within the action area, so none will be affected. NMFS' Biological Opinion (issued October 20, 2004) for this action supports this determination.

The ESA-listed West Indian manatee is under the jurisdiction of the U.S. Fish and Wildlife Service (USFWS). However, the USFWS did not issue a Biological Opinion, as the West Indian manatee is not expected to be present in the offshore waters of the EGTTR. Therefore, the species will not be affected by the A-S gunnery exercises or by the issuance of an IHA to conduct such activities.

Several cetacean species may be present in the action area; however, with strict mitigation and monitoring measures implemented for the proposed action, NMFS has determined that the proposed actions are unlikely to result in the mortality or serious injury of marine mammals and, would result in, at worst, a temporary modification in behavior by marine mammals. Some non-target fish and invertebrate species may be killed or injured by gunnery activities with live munitions; however, since the proposed impact area is small, NMFS has determined the adverse effects to fish and invertebrate species would be insignificant.

5) Are significant social or economic impacts interrelated with natural or physical environmental effects?

Response: The primary impacts to the natural and physical environment are expected to be acoustic and temporary in nature (and not significant), and not interrelated with significant social or economic impacts. Additionally, this action will not have a significant social or economic impact as the action is confined to military personnel and would be conducted in a limited geographic area. Therefore the USAF activity will not significantly displace other resource users.

6) Are the effects on the quality of the human environment likely to be highly controversial?

Response: The effects of explosions and resultant sounds on the marine environment are not fully known. However, there is no substantial dispute about the size, nature, or effect of this particular action, which includes the required mitigation and

monitoring. NMFS has taken a conservative approach in determining impact thresholds and imposing mitigation and monitoring measures to reduce any potential harm to marine mammals and other marine species. Therefore, this action is not expected to be highly controversial. Additionally, the activity would occur in a limited area.

NMFS published a Notice of Receipt in the *Federal Register* on May 30, 2007 (72 FR 29974), which allowed the public to submit comments for up to 30 days from the date of publication of the notice. The only comments received for this action were sent by the Marine Mammal Commission (Commission) and one private citizen. NMFS' responses to these comments will be addressed in the *Federal Register* Notice of Issuance. In its comment letter, the Commission recommended that NMFS issue the requested authorization, provided that the applicant is required to conduct all practicable monitoring and mitigation measures that reasonably can be expected to protect the potentially affected marine mammal species from serious injury. The comment from the private citizen indicated that the authorization should be denied because it is not "incidental at all to kill whales, dolphins, and other marine life by firing flares and bombs at them." The commenter then goes on to discuss the "awful aim" of the military. No supporting information was provided for these assertions by the private citizen comment, and NMFS believes that the analyses presented in the EA and Federal Register Notice remain correct.

7) Can the proposed action reasonably be expected to result in substantial impacts to unique areas, such as historic or cultural resources, park land, prime farmlands, wetlands, wild and scenic rivers, essential fish habitat, or ecologically critical areas?

Response: This action will not affect terrestrial ecosystems or nearshore and estuarine habitats. The location of the testing/training area is the Eglin Gulf Test and Training Range (EGTTR) in the northern GOM. Exercise areas would be located on continental shelf waters. No substantial or adverse impacts to essential fish habitat (EFH) are anticipated as a result of implementing the proposed action or any of the alternatives. Items and materials expended into the EGTTR would not result in any adverse impacts to the chemical or biological environments that would reduce the quality and/or quantity of EFH. The proposed testing and training activities would occasionally introduce small quantities of chemical compounds into the marine waters of the eastern Gulf, which would rapidly disperse. These additions would be too small to adversely impact any of the EFH of the Gulf waters.

8) Are the effects on the human environment likely to be highly uncertain or involve unique or unknown risks?

Response: As indicated in a previous response, the effects of small explosions and resultant sounds on marine mammals and other species are not fully known. NMFS' judgments on impact thresholds are based on limited data, yet enough is known for NMFS and the regulated entity (here Eglin AFB) to develop precautionary measures to minimize the potential for significant impacts on biological resources. The multiple mitigation and monitoring requirements required of Eglin AFB are designed to ensure the

least practicable impact on the affected species or stocks of marine mammals and also to gather additional data. The revised mitigation measures are not likely to result in increased risk to affected marine mammal stocks. For military readiness activities (as described in the National Defense Authorization Act), a determination of least practicable adverse impacts on a species or stock includes consideration, in consultation with the Department of Defense, of personnel safety, practicality of implementation, and impact on the effectiveness of the military readiness activity. The changes to the protected species surveys, the ramp-up procedures, and the sea state restrictions will help reduce highly uncertain and unique and unknown risks to human life while still effecting the least practicable adverse impact on the affected species or stocks in the proposed action area.

9) Is the proposed action related to other actions with individually insignificant, but cumulatively significant impacts?

Response: There are other military activities in the northern Gulf that result in detonations that may result in the harassment, injury, or mortality of marine mammals. However, these activities, which are described in the EA, (e.g., Precision Strike Weapons exercises and Naval Explosive Ordnance Disposal School activities) are separated both geographically and temporally; all are infrequent in occurrence and short-term in nature. In addition, all currently use mitigation and monitoring procedures to ensure that no marine mammals or ESA-listed species are killed or seriously injured, and measures are taken to minimize impacts to the lowest level practicable. As a result, the A-S testing activities of Eglin AFB in the proposed action area are not likely to have a significant cumulative effect on the marine environment when considered with these other actions.

This area is not known for heavy ship or recreational boat traffic but is subject to some oil and gas exploration, development, and production. The area may also be subject to localized effects from the explosive removal of offshore structures. Additionally, marine mammal research and geophysical seismic survey cruises operate within the GOM. Monitoring reports from scientists conducting research on marine mammals in the Gulf indicate that their activities do not have more than a minimal, short-term interruption of the animals' behavior prior to the presence of the researchers. The monitoring report for a recent seismic survey in the GOM indicated that far fewer marine mammals were sighted during the study than originally anticipated. Additionally, all takes of marine mammals during the cruise were by Level B behavioral harassment. For example, the two dolphin groups that were sighted during seismic operations did not demonstrate detectable differences in observed movement or behavior from those observed during periods with no seismic activity. No deaths or detectable injuries of marine mammals were observed during the seismic program. The activities noted here are all subject to implementing mitigation and monitoring measures to reduce impacts to marine life to the greatest extent practicable. Therefore, NMFS believes that this action is not likely to result in cumulatively significant impacts.

10) Is the proposed action likely to adversely affect districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places or may cause loss or destruction of significant scientific, cultural or historical resources?

Response: No. The proposed action and associated A-S gunnery activities and other programmatic mission activities within the EGTRR would not take place in any areas listed or eligible for listing in the National Register of Historic Places and would not cause loss or destruction of any significant cultural or historic resources.

11) Can the proposed action reasonably be expected to result in the introduction or spread of a non-indigenous species?

Response: No. The proposed action would not remove nor introduce any species out of or into the environment. Therefore, it would not result in the introduction or spread of non-indigenous species.

12) Is the proposed action likely to establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration?

Response: This action will not set a precedent for future actions with significant effects or represent a decision in principle. NMFS' actions under sections 101(a)(5)(A) and (D) of the MMPA must be based on the best available information, which is continuously evolving. Moreover, each action for which an incidental take authorization is sought must be considered in light of the specific circumstances surrounding the action. Mitigation and monitoring may vary depending on those circumstances.

13) Can the proposed action reasonably be expected to threaten a violation of Federal, State, or local law or requirements imposed for the protection of the environment?

Response: No. The proposed Eglin mission activities and IHA would not result in any violation of Federal, State, or local laws for environmental protection.

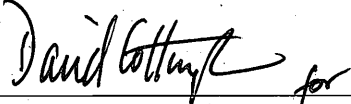
14) Can the proposed action reasonably be expected to result in cumulative adverse effects that could have a substantial effect on the target species or non-target species?

Response: No. NMFS conducted an analysis for the potential of cumulative adverse effects as a result of the Eglin AFB's A-S gunnery mission activities in the EA. The proposed action does not target any marine mammal species, and NMFS has determined that it is not expected to result in any significant cumulative adverse effects on the species incidentally taken by harassment due to programmatic mission activities within the EGTRR. NMFS has also determined that there is no significant cumulative adverse effect on marine mammals as a result of all military mission activities from past, present, and reasonably foreseeable future actions in the proposed action area. Past monitoring reports for research seismic activities in the northern Gulf have concluded that no marine mammals were taken beyond authorized Level B behavioral harassment nor were significantly affected by these activities. Although Eglin AFB currently holds

several MMPA authorizations for military mission activities in the EGTTR, to date, none of these activities have been conducted. The IHA would authorize no more than short-term Level B harassment of marine mammals. Any harassment of these marine mammal species that may potentially occur would be short-term and minimal. Moreover, because of the monitoring and mitigation measures that will be required in the IHA, no injury or mortality is expected of any marine mammals in the proposed action area. Therefore, no cumulative adverse effects that could have a substantial effect on any species would be expected.

DETERMINATION

In view of the information presented in this document and the analyses contained in the supporting Eglin Gulf Test and Training Range Final Programmatic Environmental Assessment (PEA) prepared by the U.S. Air Force and the Environmental Assessment (EA) prepared by the National Marine Fisheries Service on the effects of the issuance of an IHA, it is hereby determined that the issuance of the IHA to the Eglin Air Force Base for the taking of marine mammals incidental to conducting A-S gunnery mission activities and other programmatic activities within the EGTTR, will not significantly impact the quality of the human environment as described above and in the USAF PEA and NMFS EA. In addition, all beneficial and adverse impacts of the proposed action have been addressed to reach the conclusion of no significant impacts. Accordingly, NMFS has determined that the preparation of an Environmental Impact Statement for this action is not necessary.



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12/9/08
Date