UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Silver Spring, MD 20910

Finding of No Significant Impact on Issuance of an Incidental Harassment Authorization to the U.S. Air Force Eglin Air Force Base, Florida

Supported by: Eglin Air Force Base Environmental Assessment Maritime Strike Operations Tactical Development and Evaluation Eglin Air Force Base, Florida

In accordance with the National Environmental Policy Act (NEPA), its implementing regulations, and the National Oceanic and Atmospheric Administration's (NOAA's) Administrative Order 216-6 (Environmental Review Procedures for Implementing NEPA), this document comprises the National Marine Fisheries Service's (NMFS) Finding of No Significant Impact (FONSI) for issuance of a Incidental Harassment Authorization (IHA), pursuant to section 101(a)(5)(D) of the Marine Mammal Protection Act (MMPA; §§ 16 U.S.C. 1361 *et seq.*), to Eglin Air Force Base (AFB) for the taking of marine mammals incidental to maritime strike operations in the Eglin Gulf Testing and Training Range (EGTTR), Florida.

After independent review of the Eglin AFB EA, NMFS determined that the EA is sufficient for purposes of properly identifying, evaluating, and disclosing the impacts on the human environment from issuing the IHA and; therefore, adopted the EA. The Eglin AFB EA and NMFS adoption memorandum are incorporated here by reference.

Background

In May 2013, Eglin AFB released an EA entitled "*Maritime Strike Operations Tactical Development and Evaluation Eglin Air Force Base, Florida.*" The Eglin AFB's EA contains a thorough analysis of the environmental consequences of their proposed action (with specific sections for explosive ordnance, underwater detonations, vessel movements, weapons firing, and aircraft overflights on water ranges) on the human environment, including a specific section on marine mammals. The Eglin AFB has completed an analysis to determine if the action would result in incidental harassment of individual marine mammals (mortality or Level A or B harassment, as defined by the MMPA) or if the action would have a significant impact on marine mammal populations. The EA analyses support NMFS' MMPA assessment of whether the proposed activities might incidentally take marine mammals and if the proposed activity might have more than a negligible impact on marine mammal species or stocks. NMFS therefore considered information in the EA as well as the Eglin AFB's application when determining whether or not to issue the IHA.

On January 22, 2013, NMFS received a complete application from Eglin AFB requesting

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an IHA for the take of bottlenose dolphins (*Tursiops truncatus*) and Atlantic spotted dolphins (*Stenella frontalis*) incidental to maritime strike activities within the EGTTR. These training activities may incidentally take marine mammals present within the EGTTR by exposing them to noise and detonations at levels that NMFS associates with the take of marine mammals. NMFS did not prepare a separate EA for issuance of the IHA and was not a cooperating agency on the Eglin AFB's EA. Therefore, NMFS made the EA available for public review and comment for 30 days during the MMPA comment period (78 FR 33357, June 4, 2013). NMFS received comments from the Marine Mammal Commission, which were solicited, and one from the public.

NMFS' Proposed Action

NMFS proposes to issue an IHA to Eglin AFB for the take of marine mammals, by Level A and Level B harassment, incidental to maritime strike operations conducted within the EGTTR. The Eglin AFB's model for estimating acoustic exposures of marine mammals indicated that the proposed activities, which are classified as military readiness activities, may incidentally take marine mammals present in the EGTTR by potentially exposing them to noise from live ordinance exercises at levels that NMFS associates with the take of marine mammals. Mortality was calculated as approximately one-half an animal for bottlenose dolphins and about 0.1 animals for spotted dolphins. It is expected that, with implementation of the mitigation and monitoring, potential impacts would be mitigated to the point that there would be no mortality takes. Based on the low mortality exposure estimates calculated by the acoustic model combined with the implementation of mitigation measures, zero marine mammals are expected to be affected by pressure levels associated with mortality. Therefore, in the EA, the Eglin AFB considers that the training activities may result in serious injury, mortality, Level A or Level B harassment of marine mammals; however the former types (serious injury and mortality) have very low probability considering mitigation and monitoring measures described in the EA.

Upon receipt of the MMPA IHA application, which included the models and take calculations contained within the EA, NMFS worked with the Eglin AFB to develop a more stringent monitoring and mitigation plan which alleviates the potential for mortality and serious injury. Accordingly, Eglin AFB requests an authorization to take bottlenose dolphins and spotted dolphins by Level A and Level B harassment. Due to the proposed mitigation and monitoring measures developed during the MMPA process, NMFS does not expect the proposed action would result in any marine mammal mortality or serious injury.

NMFS' issuance of a MMPA IHA to the Eglin AFB governing the incidental take of marine mammals is a Federal action for which NMFS is responsible for analyzing the effects on the human environment pursuant to NMFS' NEPA procedures.

NOAA Administrative Order 216-6 (May 20, 1999) 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 finding of no significant impact and has been considered individually, as well as in combination with the others. The significance of this action is analyzed based on the NAO 216-6 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 Act and identified in Fishery Management Plans?

Response: No. EFH-Habitat and Areas of Particular Concern for a number of invertebrate and fish species managed under Fishery Management Plans occur within the project area. The Eglin AFB has determined in its EA that maritime strike operations within the EGTTR would not reduce EFH quality and/or quantity. Explosions would not occur on the seafloor and, therefore, ordnance expenditures would not result in impacts to the substrate. Underwater detonations using the larger Net Explosive Weight (NEW) bombs (945 lbs) would not result in substantial sediment displacement to the seafloor. If minor displacement occurs, water currents would redistribute sediments so that habitat alteration would be short term. Furthermore, as described in the EA, these impacts are not expected to be significant or cause substantial damage to these habitats.

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: No. Because of the small zones of impact and the short duration of the maritime strike operations, 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: No, 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 9.5 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 endangered or threatened species, marine mammals, and other non-target species, but such effects cannot reasonably be

expected to be significant. No critical habitat is present within the action area, so none will be affected. The proposed action will not jeopardize the continued existence of any 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. Adverse effects will be limited to short-term behavioral disturbances that may constitute harassment. NMFS' Biological Opinion (issued May 6, 2013) 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 maritime strike operations 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 maritime strike operations; 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: No. 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: No, the effects of the proposed action on the quality of the human environment are not expected to be highly controversial. Although the effects of explosions and resultant sounds on the marine environment are not fully known, 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. Additionally, the activity would occur in a limited area for a short period of time.

NMFS published a Notice in the *Federal Register* on June 4, 2013 (78 FR 33357), 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 the citizen was generally opposed to the nature of the proposed action.

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 Gulf of Mexico (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 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 underwater 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. These 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 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: No, NMFS believes that the proposed action is not related to other actions with individually insignificant, but cumulatively significant impacts. 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 and Air-to-Surface Gunnery 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.

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.

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 maritime strike operations and other programmatic mission activities within the EGTTR 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: No, this action will not set a precedent for future actions with significant effects or represent a decision in principle about a future consideration. To ensure compliance with statutory and regulatory standards, NMFS' actions under section 101(a)(5)(D) of the MMPA must be considered individually and be based on the best available science, 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, and mitigation and monitoring may vary depending on those circumstances. For these reasons, NMFS does not believe that issuance of an IHA to Eglin AFB to conduct military training operations within the EGTTR is precedent setting.

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: NMFS does not expect this action to violate any Federal, State, or local law or requirements imposed for the protection of the environment. Through the MMPA process, NMFS may only issue an authorization for harassment from an activity that is otherwise lawful. In addition, NMFS and Eglin AFB are responsible for complying with Section 7 of the ESA. NMFS concluded section 7 consultation with Eglin AFB on its proposed action on May 6, 2013, for sea turtles. No ESA-listed marine mammals under NMFS jurisdiction are known to occur within the action area; therefore, there is no requirement for NMFS to consult under Section 7 of the ESA on the issuance of an IHA under section 101(a)(5)(D) of the MMPA. The proposed action itself would result in issuance of an IHA in compliance with all standards required in the MMPA.

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, the proposed action is not reasonably expected to result in cumulative adverse effects that could have a substantial effect on target or non-target species. The proposed action will not target any species, but will affect bottlenose dolphins and spotted dolphins (non-target species) by allowing Eglin AFB to harass individuals of this population. The proposed action may result in the following adverse impacts, which are described in the Eglin AFB EA: Permanent Threshold Shift (PTS), Temporary Threshold Shift (TTS), avoidance of the area during training, alteration of behavior at time of exposure, communication masking, and changes to vocalization characteristics. All impacts are expected to be short term and have a negligible impact on the bottlenose dolphin and spotted dolphin populations in the EGTTR. Eglin AFB would implement a series of mitigation and monitoring measures to avoid serious injury and

mortality. As discussed in response to question 9 above, Eglin AFB has identified that their proposed action is not related to other actions with individually insignificant, but cumulatively significant impacts. Although NMFS has issued incidental take authorizations to Eglin AFB for other military readiness activities affecting bottlenose dolphins and spotted dolphins within the EGTTR, NMFS does not anticipate that the proposed action (issuance of an IHA) will result in cumulative adverse effects that could have a substantial effect on marine mammals.

DETERMINATION

In view of the information presented in this document and the analysis contained in the Environmental Assessment (EA) prepared by Eglin AFB for Maritime Strike Operations and adopted the EA, pursuant to NEPA, it is hereby determined that the issuance of an IHA, pursuant to the MMPA, will not significantly impact the quality of the human environment as described above and in the EA. In addition, all beneficial and adverse impacts of the proposed action have been addressed to reach the conclusion of no significant impacts. Accordingly, preparation of an Environment Impact Statement for this action is not necessary.

JUL 13 2013

Donna S. Wieting
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Date