Mr. Stephen M. Seiber Chief, Natural Resources Section 501 De Leon Street, Suite 101 Eglin AFB, FL 32542-5133

Mr. Shane Guan NOAA Fisheries Office of Protected Resources Permits, Conservation and Education Division 1315 East-West Highway SSMC-3, Room 13756 Silver Spring, MD 20910

Dear Mr. Guan

The following information is being submitted to fulfill your request to have a cumulative environmental impacts section included with the supplemental environmental assessment (SEA). This is for submission to your attorney at the General Council in order to have the LOA issued. This letter includes the cumulative environmental impacts in the area where Eglin AFB has conducted, is conducting, and will be conducting any type of mission activities associated with the Eglin Air Force Base *Santa Rosa Island Mission Utilization Plan*.

# **Cumulative Impacts**

# **Precision Strikes Weapon (PSW) Testing**

PSW missions involve air-to-surface impacts of two weapons (the Joint Air-to-Surface Stand-off Missile (JASSM) AGM-158 A and B and the small-diameter bomb (SDB) GBU-39/B) and result in underwater detonations (up to approximately 300 pounds of net explosive weight). As many as two live and four inert JASSM missiles per year are launched from an aircraft above the Gulf of Mexico (GOM) at a target located approximately 15 to 24 nautical miles offshore of Eglin AFB and as many as six live and 12 inert SDBs are dropped on a target per year. There are two possible targets to be used for the PSW mission tests in the EGTTR. The first is a Container Express (CONEX) target that consists of five containers strapped, braced, and welded together to form a single structure. The other possible target is a water barge.

Compliance with respect to the Marine Mammal Protection Act (MMPA) has been accomplished by securing a marine mammal take permit (a Letter of Authorization). In accordance with provisions of the Marine Mammal Protection Act (MMPA), as amended, notification was given that a letter of authorization (LOA) to take four species of marine mammals (Atlantic bottlenose dolphins (*Tursiops truncatus*), Atlantic spotted dolphins (*Stenella frontalis*), dwarf sperm whales (*Kogia simus*), and pygmy sperm whales (*Kogia breviceps*)) by harassment, incidental to testing and training during Precision Strike Weapons (PSW) tests in the Gulf of Mexico (GOM), a military readiness activity, has

been issued to Eglin Air Force Base (AFB) effective from February 20, 2007, through February 19, 2008.

### Navy Explosive Ordnance Disposal School NEODS Missions

NEODS missions are intended to train students in Mine Countermeasures techniques. Students are taught established mine neutralization techniques by diving and hand-placing charges next to inert mines, which are located by hand-held sonars. Each mission will involve up to five live detonations of the charges (approximately five pounds of net explosive weight each) in water approximately 60 feet deep and 1 to 3 nautical miles offshore. The charges are detonated individually with a maximum separation time of 20 minutes between each detonation. This training will occur up to six times annually, with varying times within the year.

To comply with the Marine Mammal Protection Act of 1972 an IHA (incidental harassment authorization) was secured on October 5, 2006 and will be good until October 4, 2007 to harass Atlantic bottlenose dolphins and Atlantic spotted dolphins incidental to the Navy Explosive Ordnance Disposal School training at Eglin Air Force Base.

## Marine Expeditionary Unit (MEU) Readiness Training

The proposed action involves the development of a training capability for MEU (Marine Expeditionary Unit) training at Eglin AFB in order to maximize training opportunities for the U.S. Marine Corps prior to deployment. The proposed action is, therefore, to conduct MEU readiness training at Eglin AFB. The training is anticipated to occur twice per year with each training event having a total duration of 10 days, or less if only a portion of the activities is conducted. It is possible that the training could only occur once during some years and possibly not at all in others.

There are 17 proposed training activities including Insertion of Forward Command Element, Insertion of Reconnaissance and Surveillance (R&S) Teams, MEU Aviation Operations, Helicopter Raids, Rapid Ground Refueling, Small Boat Raids, Amphibious Landing Rehearsal, Mechanized Raid (Wet), Mechanized Raid (Dry), MEU Landing, Major Highway Crossing, Supporting Arms Coordinating Exercise (SACEX), Live Fire and/or Maneuver, Non-combatant Evacuation Operation, Direct Action, Tactical Exercise Control Group/Opposing Force (TECG/OPFOR) Requirements, and Withdrawal.

The proposed activities listed above involve one or more of five basic elements that are the building blocks of training: amphibious landings, ground movement, aviation operations, munitions use, and pyrotechnics. Amphibious landings are ship-to-shore movement of landing crafts (landing craft air cushion [LCAC] and landing craft utility [LCU]), amphibious assault vehicles, and small boats (Zodiacs). The landing crafts are used to transport all nonamphibious vehicles along with other equipment and troops. Ground movement is the movement of tracked and wheeled vehicles and troops on foot from landing sites to objective areas, from objective area to objective area, and from objective areas back to amphibious shipping (during withdrawal). Aviation operations

include the delivery of troops and equipment from ship to shore via a variety of helicopters that will land at designated landing zones scattered throughout the Eglin reservation and may include a fixed-wing escort. Aviation operations also occur during live fire exercises and can include weapons delivery from F/A-18 and A/V-8A aircraft. Munitions use includes live fire from ground-based troops and vehicles as well as airdelivery of larger munitions. This also includes the use of blank munitions during raids. Pyrotechnics involve raids on objective sites with opposing forces acting as resistance involves the use of pyrotechnics (smokes and flares). Additionally, the AAVs also use deploy smoke when traveling from ship to shore.

# Santa Rosa Island (SRI) Programmatic Biological Assessment (PBA)

This PBA addresses potential impacts from the preferred alternative described in the SRI Mission Utilization Plan Programmatic Environmental Assessment (PEA) to federally listed threatened and endangered (T&E) species and Essential Fish Habitat present on and within the near shore Gulf of Mexico waters of SRI at Eglin Air Force Base (AFB), Florida. The objectives of this PBA are to document all federally listed threatened and endangered species and Essential Fish Habitat that occur, or may potentially occur, on SRI and adjacent near shore Gulf of Mexico waters, identify the activities that have the potential to impact, either beneficially or adversely, those documented species and habitats, and to determine and quantify to the extent possible what effects these activities would likely have on federally listed species and Essential Fish Habitat. This PBA is meant to fulfill the requirements of the federal Endangered Species Act (ESA) and the National Environmental Policy Act (NEPA) for assessing potential impacts to federally listed species and the Magnuson-Stevens Fishery Conservation and Management Act (MSA) for impacts to Essential Fish Habitat. This PBA initiated the formal consultation process with the U.S. Fish and Wildlife Service (USFWS) pursuant to Section 7 of the ESA and the National Marine Fisheries Service (NMFS) pursuant to the MSA and Section 7 of the ESA. This PBA is a tiered document, utilizing the SRI PEA (programmatic environmental assessment) as a reference for pertinent information.

# Eglin Gulf Test and Training Range (EGTTR) Programmatic Environmental Assessment (PEA)

The primary purpose of this document is to support the consultation process for the Endangered Species Act (ESA) for the preferred alternative of the EGTTR PEA. The preferred alternative authorizes a baseline level of Air Force mission activity captured during the fiscal year (FY) 95–99 time frame, with the addition of limited daytime gunnery operations with a full explosive round and nighttime gunnery training with 105-millimeter (mm) training rounds. By authorizing the level of activity in the preferred alternative, similar mission requests may be quickly and efficiently approved. The FY 95–99 baseline encompasses mission activities over several years in order to capture infrequent, yet repetitive, mission events conducted within the EGTTR and represents the most current data available. Complete detailed analyses for the baseline level of mission activities are presented in the EGTTR Final PEA document (U.S. Air Force, 2002). The secondary purpose of this document is to support the preliminary evaluation of compliance with respect to the Marine Mammal Protection Act (MMPA). Although

the consultation process for ESA compliance is the role and responsibility of the Southeast Regional Office (SERO) of the National Marine Fisheries Service (NMFS), the Office of Protected Resources of NMFS headquarters (National Oceanographic and Atmospheric Administration [NOAA] Fisheries;) has the overall coordination role for the protection of marine mammal species who are provided protection both under ESA as well as MMPA.

Two mission categories generally contain all missions conducted by the Air Force within the EGTTR: air operations and ordnance testing and training. Air operations include all aircraft flights through the EGTTR. The potential impacts from air operations include aircraft noise, fuel releases, gunnery noise, and direct physical impacts.

#### **Future Foreseeable Events**

There are a few missions that will be occurring in the near future on the island. The first is the testing of the Navy Offshore Petroleum Distribution System (OPDS) at Eglin SRI Test Site (TS) A-15 that Eglin Air Force Base (AFB) proposes to support. The OPDS provides for the delivery of fuels from an offshore source up to a beach combat fuel depot via a flexible 8-inch diameter pipe. The primary objective of this project would be to test the OPDS pipe deployment and recovery procedures as well as to test water pumping capabilities using saltwater (preferred option) or freshwater. Fuel would not be pumped at anytime during this test. The OPDS testing would be conducted over a 25 day period beginning on July 27, 2007 (approximately). The testing would consist of a practice period (20 days) and an acceptance test period (5 days).

The second foreseeable mission would involve the collection of both passive and active multi-spectral seeker/sensor signature data of obstacles and simulated mines in littoral waters and inland environments from several potential systems using an airborne platform. Tests would occur at Test Site A-15 on the Eglin AFB portion of Santa Rosa Island (SRI). Tests would utilize a wide field of view diode laser illuminator array flown in an aircraft 500 to 3000 ft above the targets. The ALRT team would utilize three areas of A-15: the Gulf coast beach area (out to three meter depths), the bay side coastal area, and an intermediate area between the two coastal areas. To create a realistic threat scenario, the target area would include mines and obstacles on the island and in the water. Personnel would install the targets at A-15 over a 3- to 4-day period in a fashion to simulate actual mine layouts. After installation, mission flights would commence, during which a laser array would scan the minefields. Testing could occur at any time of the year, day or night. Upon test completion, personnel would remove targets from the test site over a 2- to 3-day period. The mines and obstacles would be on the island and in the water for no longer than two weeks.

The third foreseeable mission would be for Eglin AFB to install a fiber optic cable in conduits to repair the communications infrastructure on Santa Rosa Island that was destroyed during hurricanes Ivan and Dennis. The initiation fiber optic cable was run along the primary beach line to a depth of 6 feet which was completely destroyed during the hurricanes. This will allow all communication between Eglin and Santa Rosa Island

to continue without interruption. If the fiber optic cable is not replaced, the 46TW mission will be unable to continue on Santa Rosa Island. Contractors would use a directional boring method for the entire length of Santa Rosa Island and install 8 inch diameter pipe pulling in two 288 strand fiber cables. They will drop counts of those cables off at 29 total facilities including: the entry control gate; Test Sites A-6 building 8550; A-10 building 9207; A-11 buildings 9277, 9261, 9271, 9273, and E25; A-12 building E278; A-13 buildings 9297, 9292, 9285, 9287, 9289, 9289, and 9289; A-15 buildings 12514, 12512, 12521, 12522, 12523, 12550, 12550, 12549, and 12555; A-17 buildings 12597 and 12597; and A-18 building 12604. The contractors would also bore under the sound from A-15 to Windhaven to complete the fiber loop to A-20 (building 12730). They would dig well points to tie the 8 inch pipe together at the end of each bore. The depth of the bore and tie in points would be a minimum of 20ft.

The fourth foreseeable mission would be the Santa Rosa Island dune and beach restoration project. The U.S. Air Force (USAF) Air Armament Center (AAC) seeks a long-term solution to preserve mission capabilities on Santa Rosa Island (SRI) by protecting facilities at risk of damage from storm surge and wave action. Some facilities have undermined foundations and are unsafe for occupation. Others are at risk of collapsing into the Gulf of Mexico if action is not taken. The AAC proposes to preserve mission capabilities on SRI by restoring eroded shoreline and dune land mass. Seventeen miles of shoreline require restoration. The AAC has placed priority around five miles of shoreline at a few "priority" test sites. The AAC would restore dunes at 23 general locations along Air Force-owned SRI. The U.S. Army Corps of Engineers (USACE) would oversee contractors to dredge sand from an offshore location and pump it onto the SRI Range Complex beach area. USACE contractors would then bulldoze the sand in place for either shoreline restoration or dune reconstruction.

If you have any questions regarding this letter please contact either Mr. Bob Miller (850) 883-1153 or Stephen Seiber at (850) 882-8391.

Sincerely,

STEPHEN M. SEIBER, YD-2 Chief, Natural Resources Section