

Final

SUPPLEMENTAL ENVIRONMENTAL ASSESSMENT



Aerial Maneuver Zones for MV-22 and Rotary-Wing
Training at the Marine Air Ground Task Force
Training Command, Marine Corps Air Ground
Combat Center, Twentynine Palms, California



United States Marine Corps

October 2014

**DEPARTMENT OF DEFENSE
UNITED STATES MARINE CORPS
FINDING OF NO SIGNIFICANT IMPACT FOR PROPOSED CHANGES TO THE AERIAL
MANEUVER ZONES FOR MV-22 AND ROTARY-WING TRAINING AT THE MARINE AIR
GROUND TASK FORCE TRAINING COMMAND, MARINE CORPS AIR GROUND COMBAT
CENTER, TWENTYNINE PALMS, CALIFORNIA**

Pursuant to the Council on Environmental Quality regulations (40 Code of Federal Regulations [CFR] Parts 1500-1508) implementing procedural provisions of the National Environmental Policy Act (NEPA) of 1969, as amended (42 United States Code [USC] §§ 4321-4370h); and United States Marine Corps (USMC) procedures for implementing NEPA, as described in Marine Corps Order P5090.2A, Change 3, dated 26 August 2013, *Environmental Compliance and Protection Manual*, the USMC gives notice that a Supplemental Environmental Assessment (SEA) has been prepared and an Environmental Impact Statement (EIS) will not be required for the proposed changes to the Environmental Assessment (EA) Aerial Maneuver Zones for MV-22 and Rotary-Wing Training at the Marine Air Ground Task Force Training Command, Marine Corps Air Ground Combat Center, Twentynine Palms (USMC 2010) hereafter referred to as the Aerial Maneuver Zone (AMZ) EA. Based on the analysis provided in the SEA, I have selected Alternative 1 and find that it will not have a significant impact on the human environment; therefore an EIS is not required.

Background: In 2010, an AMZ EA was completed for the integration of the MV-22 airframe into Combat Center rotary-wing tactical and ground training activities and associated use of AMZs and landing zones (LZs). The EA evaluates two action alternatives and the No-Action Alternative to determine the potential environmental impacts associated with the development and use of AMZs at the Combat Center for MV-22 and rotary-wing aircraft training. The 2010 AMZ EA culminated in a Finding of No Significant Impact (FONSI) in May 2010, and selected 48 new sites aboard the Combat Center for landing of MV-22 and other rotary-wing aircraft.

Purpose of and Need for the Proposed Action: The purpose of the Proposed Action evaluated in this SEA is to support required changes to the original 2010 AMZ EA by establishing two additional helicopter landing zones (HLZs) in the Gays Pass Training Area (TA). The two new HLZs are needed to support the Airborne Assault Course that takes place in the Gays Pass TA. The Airborne Assault Course has undergone recent scenario changes so as to increase training flexibility and variety in an effort to improve the value of such training. The HLZs are needed to support such training for up to 200 Marines up to four times per year.

Proposed Action: The Proposed Action would establish two new HLZs in the Gays Pass TA for company level units to conduct day/night aerial troop insertion operations. These new HLZs would have a 200-meter radius so as to permit the landing of three aircraft at the same time in 3 to 4 waves. The HLZs would be designated areas that would not require any grading or other construction activities.

Alternatives: The SEA evaluates one action alternative and the No-Action Alternative. Alternative 1 (Preferred Alternative) establishes two new HLZs in the Gays Pass TA of the Combat Center. Under the No-Action Alternative, the proposed AMZ training activities for MV-22 and rotary-wing aircrews would not occur. Originally, a second action alternative establishing three HLZs in the Gays Pass TA was considered.

Based on the results of desert tortoise surveys, a determination was made to not use three HLZs because this alternative would use up more of the Combat Center's 150-acre, annual allotment for

disturbing desert tortoise habitat without added training benefit. Consequently, Alternative 2 was not carried forward.

Summary of Environmental Effects: The SEA analyzes the potential environmental impacts associated with implementation of Alternative 1 and the No-Action Alternative. The resources most likely to be affected by this action are biological resources and cultural resources. Conversely, impacts to the following resources that were reviewed in the AMZ EA were considered to be negligible or non-existent, and were not analyzed further in the SEA: geological resources; water resources; utilities; community services; land use; visual resources; transportation and circulation; public health and safety; and socioeconomics and environmental justice. Implementation of the selected alternative (Alternative 1) will not result in significant environmental impacts. The selected alternative will have negligible direct, indirect, or cumulative impacts on the quality of the local environment and will comply with all regulatory requirements. There will be no disproportionately high and adverse human health or environmental effects from the proposed action on minority and low-income populations. There will be no impacts on the protection of children from environmental health and safety risks.

The SEA and FONSI addressing this action are on file, and interested parties may obtain a copy from: NREA Division, Building 1418, Box 788110, MAGTFTC, MCAGCC, Twentynine Palms, California, 92278. Direct telephone inquiries to Mr. Scott Kerr at (760) 830-8190. A limited number of copies of the SEA are available to fill single-copy requests.

2014-10-14
Date



LEWIS A. CRAPAROTTA
Major General, United States Marine Corps

CHAPTER 1.

PURPOSE OF AND NEED FOR THE PROPOSED ACTION

1.1 Introduction

This Supplemental Environmental Assessment (SEA) supplements the May 2010 Environmental Assessment (EA) addressing *Aerial Maneuver Zones for MV-22 and Rotary-Wing Training at the Marine Air Ground Task Force Training Command, Marine Corps Air Ground Combat Center, Twentynine Palms* (USMC 2010) – hereafter referred to as the Aerial Maneuver Zone (AMZ) EA. The AMZ EA evaluated the integration of the MV-22 airframe into Combat Center rotary-wing tactical and ground training activities and associated use of AMZs and landing zones (LZs). The AMZ EA can be downloaded from the Combat Center website at <http://www.29palms.marines.mil/Staff/G4InstallationsandLogistics/NREA.aspx>. Per (National Environmental Policy Act (NEPA) regulations (Title 40 Code of Federal Regulations [CFR] 1502.21) and guidance (77 Federal Register 14479) on preparing timely and efficient NEPA reviews, this SEA incorporates the AMZ EA by reference.

The AMZ EA resulted in a Finding of No Significant Impact (FONSI) that selected 48 new sites aboard the Combat Center for landing of MV-22 and other rotary-wing aircraft. This was in addition to 16 existing LZs that were reviewed in the 2009 MV-22 West Coast Basing Environmental Impact Statement (EIS)(DON 2009). This EIS can be downloaded at <http://www.29palms.marines.mil/Staff/G4InstallationsandLogistics/NREA.aspx> and is incorporated by reference in this SEA. The Combat Center is now proposing the addition of two new LZs (not previously analyzed in either the Basing EIS or the AMZ EA) in the Gays Pass Training Area for use by MV-22 and other rotary-wing aircraft.

1.2 Purpose

The purpose of the proposed action is to establish two new helicopter landing zones (HLZs) in the Gays Pass Training Area of the Combat Center so as to provide an environment within the Gays Pass Training Area for company level units to conduct day/night aerial troop insertion operations. These new HLZs would have a 200-meter radius so as to permit the landing of three aircraft at the same time in 3 to 4 waves. The HLZs would be designated areas that would not require any grading or other construction activities.

1.3 Need

The two new HLZs are needed to support the Airborne Assault Course that takes place in the Gays Pass Training Area. The Airborne Assault Course has undergone recent scenario changes to increase training flexibility and variety in an effort to improve the value of such training. The HLZs are needed to support such training for up to 200 Marines up to four times per year.

CHAPTER 2.

PROPOSED ACTION AND ALTERNATIVES

2.1 Overview of the Proposed Action

The proposed action consists of establishing two new HLZs in the Gays Pass Training Area at the following locations:

HLZ-1: Center Grid-NU 5630-2343, plus 200-meter radius.

HLZ-2: Center Grid-NU 5715-2260, plus 200-meter radius.

Neither of these two sites was analyzed in the original AMZ EA. The same screening criteria used in the AMZ EA were used in selecting these two new sites. This included the ability of each site to meet the tactical and support requirements of the training design. This factor directly led to the size of the proposed HLZs to accommodate the landing of 3 to 4 aircraft simultaneously. In particular, the heavier downdraft of the MV-22 requires a larger landing space than do other rotary-wing aircraft.

There would be no construction or site modifications, including the use of soil stabilizers, and the existing Special Use Airspace would not be expanded or modified. Further, the total number of sorties would remain unchanged from the existing baseline (see the AMZ EA).

2.2 Proposed Training

The two proposed HLZs would be located within the Gays Pass Training Area and would be used primarily for conducting up to company-level, day/night aerial troop insertion operations using both rotary wing and MV-22 aircraft. This includes landing up to 12 aircraft in 3 to 4 waves for each exercise. Such exercises would typically be conducted on a quarterly basis, depending on the training scenario and operational tempo of the installation.

The primary activity of aerial troop insertions could include fast rope, rappelling, helo-casting, and parachute operations. For these operations, aircraft would typically land on the surface for 2 to 8 minutes, load/unload ground personnel and equipment, and then depart.

2.3 Wind Patterns Beneath Hovering Aircraft

Helicopters and the MV-22 produce downdraft and outwash (collectively known as rotor wash) during take-offs, landings, and near-surface hovering. Within 100 feet above ground level, wind velocity at the ground can average 60 knots with gusts to 90 knots. For a complete discussion of wind patterns beneath hovering aircraft, see the Basing EIS Appendix G and the AMZ EA Section 2.2.2.4.

2.4 No Action Alternative

Under the No Action Alternative, establishment of the two proposed HLZs in the Gays Pass Training Area for use by MV-22 and other rotary wing aircraft would not occur, thus constraining the ability of the Marine Corps to conduct realistic airborne assault training. The No Action Alternative would therefore

fail to meet the purpose of and need for the proposed action; however the No Action Alternative provides a baseline against which the impacts of the Proposed Action can be compared.

2.5 Alternatives Considered but Eliminated

A third HLZ was initially proposed as part of this project. This site, also in the Gays Pass Training Area, is located at Center Grid-NU 5592-2289, plus 200-meter radius. A Desert Tortoise survey of this site found 13 sign of this threatened species, including a live tortoise, and that this site was good tortoise habitat. This was similarly true for the two sites carried forward in this SEA as well. The Combat Center has an annual allotment for disturbing desert tortoise habitat of 150 acres (USFWS 2002). Using two of the sites would use 62.2 acres of that annual amount. Rather than use up more of that allotment, and strain the effort to minimize impacts on the desert tortoise, it was determined that two new HLZs would meet operational requirements. The two proposed sites carried forward provide better cover and concealment to units assaulting through the objective sites. For these reasons, the third HLZ site was eliminated from further consideration.

2.6 Special Conservation Measures

The AMZ EA included eight Special Conservation Measures to avoid or minimize any potential impact to biological resources, particularly the threatened desert tortoise. The Special Conservation Measures are based on the Base-wide Biological Opinion (BO) (1-8-99F-41; U.S. Fish and Wildlife Service [USFWS] 2002). All of those Special Conservation Measures would apply to the two new proposed HLZs in the Gays Pass Training Area.

CHAPTER 3.

AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES

This chapter describes the existing environmental conditions in the Gays Pass Training Area and the two proposed HLZs, and evaluates the potential direct, indirect, and cumulative impacts on resources potentially affected by implementation of either the Proposed Action or the No Action Alternative. Per CEQ regulations and USMC procedures for implementing NEPA, this SEA analyzes only those environmental resource areas potentially subject to impacts at the two proposed HLZs: biological and cultural resources. Impacts to other resource areas would not differ from that analyzed in the AMZ EA.

No site improvements, construction or site modification, including vegetation clearing in the approach-departure clear zones, would occur at either of the two proposed HLZs. Also, the Proposed Action does not involve an increase in personnel at the Combat Center, training operations, or changes to the existing Special Use Airspace. Proposed training activities at the HLZs would be similar to existing training activities at other Training Areas aboard the Combat Center. Transit of aircraft to the Combat Center is addressed in the West Coast Basing EIS (DON 2009).

To support the cumulative effects analysis, in addition to the reasonably foreseeable projects described in the AMZ EA the USMC recently completed an EIS and signed a Record of Decision (ROD) on the Land Acquisition/Airspace Establishment in Support of Large-Scale MAGTF Live-Fire and Maneuver Training, at the Marine Corps Air Ground Combat Center (MCAGCC), Twentynine Palms, CA. Marine Expeditionary Brigade (MEB) building block training and biennial Final Exercise training could occur in the vicinity of the two proposed Gay's Pass LZs. The EIS, ROD, and other project documents can be accessed at: www.29palms.marines.mil/Staff/G4InstallationsandLogistics/LandAcquisition.aspx.

3.1 Biological Resources

3.1.1 Existing Conditions

3.1.1.1 Vegetation

The Combat Center is in the south-central region of the Mojave Desert and vegetation on the Combat Center is typical of the arid, upland desert climate of the region. The Gays Pass Training Area is composed primarily of the *Mojave Yucca* and *Creosote Scrub* vegetation series (see the AMZ EA for a description of these vegetation series). The two proposed sites are located in *Mojave Yucca* dominated vegetation on rocky and gravelly soil. There are no federally or state-listed plant species on either of the proposed sites.

3.1.1.2 Wildlife

Wildlife species found at the Combat Center are typical of Mojave Desert fauna. Birds are among the most commonly seen species, though due to a lack of perennial seeps or springs on the Combat Center, they are mostly seen in the Mainside area. The desert tortoise (*Gopherus agassizii*) is the only resident

wildlife species protected under the Endangered Species Act that has been documented on the Combat Center. There is no critical habitat on the installation.

Tortoise surveys were conducted in September 2014 of the two proposed sites (MCAGCC 2014a). These surveys found sign of desert tortoise at both locations, indicating that both sites are good habitat for desert tortoises.

3.1.2 Environmental Consequences

3.1.2.1 Vegetation

Vegetation would be directly affected by downdraft and outwash during take-offs, landings, and near-surface hovering. High velocity downdraft and outwash is unlikely to affect established perennial vegetation. The redistribution of loose materials and fine sediments would locally alter microhabitat conditions, possibly affecting the distribution of annual species and recruitment of perennial species on a small scale. However, substantial changes in vegetation communities on the sites would not be expected. Since there would be no site improvements, construction or site modification, including vegetation clearing in the approach-departure clear zones, there would be no significant direct impacts from either the Proposed Action or the No Action Alternative. Given the sparseness of vegetation at the proposed sites, and planned level of use, there would be no significant indirect impacts from either the Proposed Action or the No Action Alternative. As such, there would also be no significant cumulative impacts from the implementation of either alternative.

3.1.2.2 Wildlife

Wildlife could be directly affected by being crushed under a landing aircraft, heat from the exhaust, noise, and downdraft and outwash during take-offs, landings, and near-surface hoverings. No construction or modification of the proposed sites would occur. While desert tortoises are present at both proposed sites, as indicated in the AMZ EA, the likelihood of an MV-22 or other rotary-wing aircraft striking an individual tortoise during take-offs and landings would be extremely low. The likelihood of exhaust-heat related injuries during landings would also be extremely low, as high temperatures would only occur directly beneath aircraft and quickly dissipate outward; no significant impact is anticipated. Noise and downdraft would result in a "startle reflex." Due to the low density of species and limited number of operations the intensity of the potential effects would be low and not significant. Each site encompasses approximately 31.1 acres (a circle with a radius of 200m). Thus, up to 62.2 acres of tortoise habitat could be impacted by the use of the two proposed sites. The Combat Center, through an existing Biological Opinion from the Fish and Wildlife Service, is allotted 150 acres per year for tortoise habitat disturbance. Since the impacted acreage would fall within this annual allotment amount, there would be no significant impacts, direct, indirect, or cumulative, to desert tortoises from either the Proposed Action or the No Action Alternative.

3.2 Cultural Resources

3.2.1 Existing Conditions

The proposed sites for the two HLZs were surveyed by the cultural resources staff of the Natural Resources and Environmental Affairs (NREA) Division, MAGTFTC, MCAGCC in August 2014 (Hale, J. P. 2014). A records review found that HLZ1 had previously been surveyed and that HLZ2 had previously been partially surveyed. The unsurveyed portion of HLZ2 was the subject of the August 2014 survey.

Previous survey results showed one site, CA-SBR-11667, lies approximately half a mile southwest of HLZ1. A second site, CA-SBR-11670, lies approximately one mile southeast of HLZ2. Both sites have been recommended ineligible for inclusion in the National Register of Historic Places. No historic properties of any kind were identified within the boundaries of the proposed LZs. In addition, no archeological sites or other historic properties were observed during the 2014 survey.

Consultation has been conducted with the California State Office of Historic Preservation (SHPO) and concerned tribal groups requesting concurrence with the Marine Corps' finding of no historic properties affected as a result of this undertaking. The SHPO has concurred (Letter Reference USMC_2014_0915_001) and the tribes have no objections.

3.2.2 Environmental Consequences

Since there are no National Register-eligible archaeological sites or historic properties at either proposed site, or within one-half mile of either site, there would be no direct, indirect, or cumulative impacts from either the Proposed Action or the No Action Alternative.

CHAPTER 4.

AGENCIES AND PERSONS CONSULTED [required by 40 CFR 1508.9(b)]

The Marine Corps initiated consultation with the California Office of Historic Preservation on the two proposed LZs and requested concurrence that no historic properties would be affected. The Marine Corps also sent information letters on the proposed action to representatives of the Agua Caliente Band of Cahuilla Indians, Chemehuevi Indian Tribe, Colorado River Indian Tribes, Fort Mojave Indian Tribe, Morongo Band of Mission Indians, San Manuel Band of Serrano Mission Indians, and Twentynine Palms Band of Mission Indians.

CHAPTER 5

REFERENCES

- DON. 2009. Final Environmental Impact Statement for the West Coast Basing of the MV-22. October.
- Hale, J. P. 2014. Archeological Resources Survey Report: Rotary Wing Aircraft and MV-22 Landing Zones, Noble Pass Training Area, Marine Corps Air Ground Combat Center, Twentynine Palms, San Bernardino County, California. Copy on file at Natural Resources and Environmental Affairs Division, MCAGCC, Twentynine Palms, California (ABR123).
- MCAGCC. 2014a. Tortoise Surveys of HLZ Sites in Gays Pass, September 2014, at the Marine Corps Air Ground Combat Center, Twentynine Palms, California. 16 September 2014.
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- USFWS. 2002. Biological Opinion for the base-Wide Training Operations and Routine maintenance Program at the United States Marine Corps Air Ground Combat Center, Twentynine Palms, San Bernardino County, California (I-8-99-F-41).
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CHAPTER 6

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