4.19 Section 4(f) Evaluation

4.19.1 Introduction

Section 4(f) of the Department of Transportation Act of 1966, codified in Federal law at 49 U.S. Code § 303, declares that "[i]t is the policy of the United States Government that special effort should be made to preserve the natural beauty of the countryside and public park and recreation lands, wildlife and waterfowl refuges, and historic sites."

Section 4(f) specifies that the Secretary [of Transportation] may approve a transportation program or project requiring the use of publicly owned land of a public park, recreation area, or wildlife and waterfowl refuge of national, State, or local significance, or land of an historic site of national, State, or local significance (as determined by the Federal, State, or local officials having jurisdiction over the park, area, refuge, or site) only if

- 1. "there is no prudent and feasible alternative that would avoid using those resources, and
- 2. the program or project includes all possible planning to minimize harm resulting from the use. (FAA 2007:7-1)"

In general, a Section 4(f) "use" occurs with a Department of Transportation approved project or program when (1) the proposed project or a reasonable alternative would physically occupy a portion of or all of a Section 4(f) resource; (2) the proposed project permanently incorporates the resource for project purposes through acquisition or easement; (3) alteration of structures or facilities located on Section 4(f) properties is necessary, even though the action does not require buying the property; (4) there is a temporary occupancy of Section 4(f) land that is adverse in terms of the Section 4(f) preservation purposes; or (5) when Section 4(f) land is not incorporated into the transportation project, but the project's proximity impacts are so severe that the protected activities, features, or attributes that qualify a resource for protection under Section 4(f) are substantially impaired (constructive use) (Federal Aviation Administration 2007:7-5).

Section 4(f) is considered satisfied with respect to historic sites and parks, recreation areas, and wildlife and waterfowl refuges if the Secretary makes a de minimis impact finding. These requirements apply only to actual physical impacts, not constructive use.

- (1) De minimis findings for historic sites. The Federal Aviation Administration may make this finding on behalf of the Secretary if:
 - (a) under Section 106 of the National Historic Preservation Act, it has determined the project will not adversely affect or not affect historic properties;
 - (b) the Section 106 finding has received written concurrences from the State Historic Preservation Officer or the Tribal Historic Preservation Officer (and the Advisory Council on Historic Preservation, if the Advisory Council on Historic Preservation is participating); and
 - (c) the Section 106 finding was developed in consultation with parties consulting in the Section 106 process.

- (2) De minimis findings for parks, recreation areas, and wildlife or waterfowl refuges. The Federal Aviation Administration may make this finding on behalf of the Secretary if:
 - (a) it has determined, after public notice and opportunity for public review and comment, that the project will not adversely affect the activities, features, and attributes of the eligible Section 4(f) property; and
 - (b) the officials with jurisdiction over the Section 4(f) property have concurred with the Federal Aviation Administration's determination (Federal Aviation Administration 2007:7-1).

If there is no physical use and no temporary occupancy, but there is the possibility of constructive use, the Department of Transportation, or in the case of this project, the Federal Aviation Administration determines if the potential impacts would substantially impair the 4(f) property. Substantial impairment occurs when the protected activities, features, or attributes of the Section 4(f) property are extensively diminished. Generally, this means that the value of the resource, in terms of its Section 4(f) purpose and significance, will be meaningfully reduced or lost.

This Section 4(f) evaluation discusses the Tinian International Airport improvements and use of historic properties, which are the only potential Section 4(f)-protected resources affected by the proposed action in the area where the Department of Transportation is the approval authority. In the case of the proposed alternative, the Federal Aviation Administration is serving as the approval authority.

Section 4(f) protects historic properties (historic or archaeological properties on or eligible for inclusion on the National Register of Historic Places) that warrant preservation in place. If historic properties are determined to warrant preservation in place, then an individual Section 4(f) evaluation is done to analyze whether there is a feasible or prudent alternative that avoids the Section 4(f) property or an alternative that causes the least overall harm to Section 4(f) properties. Historic properties subject to data recovery (excavations and/or documentation) to mitigate impacts due not warrant preservation in place and are not considered 4(f)-protected resources; therefore, Section 4(f) would not apply. The Department of Transportation agency must consult with the State Historic Preservation Officer to determine whether or not they warrant preservation in place.

Typical airport actions that may cause Section 4(f) impacts include airside/landside expansion (new or expanded terminal and hangar facilities, new or extended runways and taxiways, navigational aids); land acquisition for aviation-related use, new or relocated access roadways, remote parking facilities, and rental car lots; substantial amounts of construction or demolition activity; and a significant change in aircraft operations that results in new or changed flight tracks and accompanying noise impacts.

The Department of Transportation has no approval authority for 4(f) resources on Pagan. Therefore, this section only evaluates 4(f) resources on Tinian.

As consultation is in process and no definitive mitigations (data recovery or preservation) have been determined for impacts to historic properties, the following discussion will outline the main elements of a 4(f) evaluation in the event that consultation determines that these historic properties warrant preservation in place and are 4(f)-protected resources. If it is determined through consultation with the CNMI Historic Preservation Officer and other consulting parties that impacts to historic properties at the Tinian International Airport area will be mitigated through data recovery, then they will not be considered 4(f)-protected resources and no 4(f) evaluation will be needed. If it is determined through

consultation that preservation in place is appropriate, then a more detailed Section 4(f) evaluation will be completed prior to the publication of the Final EIS/OEIS.

Public Law 105-85, div A, title X § 1079, Nov 18 1977, 111 Stat. 1916, Treatment of Military Flight Operations, provides that "no military flight operation (including a military training flight), or designation of airspace for such an operation, may be treated as a transportation program or project for purposes of section 303(c) of 49 U.S. Code. Therefore, impacts related to noise resulting from an increase in military aircraft activity is not included in this evaluation.

4.19.2 Description of the Proposed Action

As described in Chapter 2, the proposed action is to establish a series of live-fire ranges, training courses, and maneuver areas within the CNMI to reduce existing joint service training deficiencies and meet the U.S. Pacific Command Service Components' unfilled unit level and combined level training requirements in the Western Pacific. Under the proposed action, unit level training would occur on the island of Tinian and combined level training would occur on the island of Pagan. The proposed action includes construction and operations on an area north of the Tinian International Airport runways. The following discussion presents the need for the project and the project description.

4.19.2.1 Need for Project

The purpose of the proposed action is to reduce joint training deficiencies for military services in the Western Pacific (see Section 1.3). Existing U.S. military live-fire, unit and combined level training ranges, training areas, and support facilities are insufficient to support U.S. Pacific Command Service Components' training requirements in the Western Pacific, specifically in the Mariana Islands. The proposed action is needed to enable U.S. Pacific Command forces to meet their U.S. Code Title 10 requirements to maintain, equip, and train combat and humanitarian forces in the Western Pacific. The proposed action assists in correcting these training deficiencies by establishing live-fire unit and combined level RTAs in the CNMI. Establishing unit and combined level RTAs in the CNMI would support ongoing operational requirements, changes to U.S. force structure, geographic repositioning of forces, and support U.S. training relationships with allied nations.

4.19.2.2 Description of Alternatives

Selection of the project location included careful planning and full consideration of the existing airport environment and project locations were determined early in the planning process. The proposed airport improvement construction projects on Tinian International Airport are included under all action alternatives for Tinian. In addition to Tinian Alternatives 1, 2, and 3, this evaluation analyzes the no-action alternative. For a more detailed description of the operational siting criteria and alternatives refer to Chapter 2.

4.19.2.2.1 No-Action Alternative

As described in Chapter 2, the no-action alternative would continue current training activities on Tinian, including those contained in other Department of Defense documents such as the Mariana Islands Range Complex EIS/OEIS (July 2010 Record of Decision), and would complete construction of four live-fire ranges on Tinian contained in the September 2010 Record of Decision in the Guam and CNMI

Military Relocation EIS/OEIS (DoN and Department of the Army 2010). Under the no-action alternative, no improvements would be made to the area north of the Tinian International Airport runways. Thus no approval by an agency of the U.S. is associated with the no-action alternative and Section 4(f) would not apply.

4.19.2.2.2 Tinian Airport Improvements (all Tinian Alternatives)

Each of the three Tinian action alternatives has common elements. These include: (1) Land Use Agreements; (2) Construction and Improvements, (3) Training Operations, (4) Operations and Management; (5) Transportation; (6) Munitions; (7) Danger Zones; (8) Amphibious Operations; (9) Airspace Requirements; and (10) Sea Space Requirements. Included within these common elements are construction and operations associated with improvements at the Tinian International Airport.

To accommodate the anticipated aircraft training tempo and equipment/cargo needs, taxiways, directly north and adjacent to the runway of Tinian International Airport, would be constructed. Airport improvements are depicted on Figure 2.4-4 and would include: (1) tactical aircraft parking ramp; (2) cargo aircraft parking ramp; (3) connecting taxiways; (4) ordnance arming and de-arming pads; (5) hot cargo (i.e., munitions) pad/combat aircraft loading area; (6) expeditionary/temporary refueling area; (7) arresting gear pads; (8) munitions holding pads; (9) and access roads connecting to the airfield Ground disturbance associated with construction of the airfield improvements would be approximately 228 acres (93 hectares) with approximately 41 acres (17 hectares) of that being newly created impervious surface.

Use of the Tinian International Airport and adjacent range and training areas allows for the integration of air and ground force training at the unit level. Use of the airport also supports military training throughout the Pacific. The proposed Airport Layout Plan would require approval from the Commonwealth Ports Authority and Federal Aviation Administration. The Commonwealth Ports Authority manages and operates the airports and seaports throughout the CNMI. The U.S. military has been working with the Commonwealth Ports Authority to develop an Airport Layout Plan for the proposed improvements at Tinian International Airport. The Airport Layout Plan shows the existing airport layout and planned future development. The Commonwealth Ports Authority, as the airport sponsor, maintains the Airport Layout Plan and is required to submit any proposed changes on the Airport Layout Plan to the Federal Aviation Administration for review and approval to confirm that the proposed changes meet Federal Aviation Administration airport standards and requirements. The proposed new military development at Tinian International Airport, which is the subject of this EIS/OEIS, is shown on the Airport Layout Plan in Appendix S.

4.19.3 Description of Section 4(f) Properties

Two Section 4(f) resources have been identified within the potential footprint for the proposed improvements to the Tinian International Airport. These include 1) a Japanese Third Farm District (IV) archaeological site (-5043) and 2) a World War II American military site (West Field). These resources are located on public lands under the jurisdiction and control of the Commonwealth Ports Authority. Under the proposed action, the Department of Defense would lease the area north of Tinian International Airport (460 acres [186 hectares]) and construct parking ramps, taxiways, and other facilities described

above. No public parks, wildlife refuges, or public recreation area is located within or adjacent to the airport property.

Consistent with federal law, certain types of information related to cultural resources are protected from general distribution. National Historic Preservation Act and Archaeological Resources Protection Act each contain confidentiality restrictions to prevent inappropriate general releases of locational data for archaeological sites. In keeping with these restrictions, this section does not contain detailed locational descriptions or figures showing the specific locations of archaeological sites.

4.19.3.1 Japanese Third Farm District (IV) (Site SC-5043)

Site SC-5043, the Japanese Third Farm District (IV), contains the remnants of a Japanese sugarcane farm. It is located on the west side of 8th Avenue at the northwest corner of Tinian International Airport. The site is located on lands within a portion of the Military Lease Area and within the Tinian International Airport boundaries.

Although SC-5043 has been modified by World War II and modern farming, the fields and some concrete structures remain. In addition, a Japanese railroad berm segment crosses the site; there is also a Pre-Contact component consisting of ceramic sherds on the surface (Athens 2009:232). The Japanese Third Farm District is divided into various sites based on divisions created by World War II modifications or other factors. The "Third Farm District" was populated with tenant farmers cultivating sugarcane in the 1930s. In 1939 the Third Farm District contained 255 families (Tuggle 2009:51,231). Site SC-5043 was recommended eligible for listing on the National Register of Historic Places under Criterion A for its association with pre-war Japanese agriculture and under Criterion D for its potential to provide information on Japanese agricultural practices and Pre-Contact settlement on Tinian.

4.19.3.2 West Field (Site TN-6-0030)

Site TN-6-0030 (West Field) was originally constructed as an airfield by the Japanese. In 1945, following the 1944 American capture of Tinian, West Field was expanded to provide a base, together with the North Field, for B-29 operations against Japan (see Section 3.11, *Cultural Resources*). The site is located on lands within a portion of the Military Lease Area and within the Tinian International Airport boundaries. West Field measures approximately 1870 acres (757 hectares).

The West Field airfield originally included 3 airstrips, 18 miles of taxiways, 4 service aprons, 361 hardstands, and more than 675 buildings. The 444th, 462nd, and 468th Bomb Groups, under the 58th Bomb Wing, utilized this airfield after its completion. All three bomb groups received Distinguished Unit Citations for their missions against Japan (Crowl 1960: 572).

In 1994, West Field, site TN-6-0030, included three runways and taxiways and coral gravel hardstands. Runway #3 was used for Tinian's airport, and a new airport building, access road, parking lots, and aircraft parking apron were constructed at the southeast comer. The other two runways and the taxiways had not been maintained, as they were no longer in use. Concrete building foundations are still extant in the northwest corner of the Army Air Corps area and the southeast corner of the Naval Air Base area. Currently, the area north of the airport runways contains historic taxiways, hardstands, and concrete pads associated with West Field.

Features associated with West Field between the central taxiway and the Tinian International Airport were recorded during an archaeological survey of the West Tinian Airport Improvement Area (Dixon and Tuggle 2002:A-5). These features include two complexes (N-8 and N-10). Feature Complex N-8 consists of three concrete pads and coral foundations. Feature Complex N-10 consists of a paved taxiway, 22 hardstands (paved areas for parking and maintenance of B-29 bombers), a Flack Tower, and a coral fill quarry (Dixon and Welch 2002:A-5, A-6). The site was recommended eligible for listing in the National Register of Historic Places:

The site is associated with WWII and the bombing of Japan prior to the war's end with General Curtis Lemay of the 21st Bomber Command and Brigadier General Ramey of the 58th Bomb Wing, is an excellent architectural example of a B-29 bomber base and has information pertinent to our understanding of WWII American military history (Dixon and Tuggle 2002:A-6).

4.19.4 Impacts on the Section 4(f) Properties by the Project

Potential impacts of the project are discussed below as they relate to the Section 4(f) use of Site SC-5043 (Japanese Third Farm District [IV]), Site TN-6-0030 (West Field) on Tinian.

4.19.4.1 Japanese Third Farm District (IV) (Site SC-5043)

Potential adverse impacts to site SC-5043 include ground disturbance due to the construction of a new paved road and gravel shoulder, and erection of fences along the perimeter of the airport. The road would be comprised of two 10.0-foot (3.0-meter) wide paved lanes (one lane in each direction) with 4.0-foot (1.2-meter) wide graded gravel shoulders on both sides. Associated construction activities would include clearing overgrown vegetation, resurfacing existing paved roads, and reconstructing/upgrading existing dirt/gravel roads to paved roads. The total site size is 55.4 acres (22.4 hectares). Approximately 1.2 acres (0.48 hectare) or 2.2% of the site would be disturbed by construction and would be direct taking and a permanent use of the site. Although a small portion of the overall site, the site is considered important for its contribution to World War II history and research potential. As discussed in Section 4.11, ground disturbance within the boundaries of a historic property would be a significant direct impact under NEPA. The area would be fenced and, although no longer accessible to the public, this minimal loss of access to 2% of the site area would not be a significant impact to the site.

4.19.4.2 West Field (Site TN-6-0030)

Potential adverse impacts to site TN-6-0030 include ground disturbance (grading, excavating, digging, clearing, leveling, trenching, and drilling) during construction of proposed support facilities, roads, utilities, and training facilities. Ground disturbance associated with construction of the airfield improvements would be approximately 228 acres (93 hectares) with approximately 41 acres (17 hectares) of that being newly created impervious surface, most occurring within the boundary of Site TN-6-0030. Construction would affect a total of 12% of the site and would be direct taking and a permanent use of the site. Although the construction of support facilities, roads, utilities, and training facilities is consistent with the current use of the site, the new construction would impact a substantial portion of the site that is considered important for its association with World War II and its research potential. As discussed in Section 4.11, ground disturbance within the boundaries of this historic

property would result in significant impacts to the airstrips, taxiways, service aprons, and hardstands and would be a significant direct impact under NEPA. As this area of the site is already not accessible to the public, there would be no loss of access from the proposed action.

4.19.5 Avoidance Alternatives

This section considers potential alternatives that were considered but eliminated from detailed analysis as they would not meet the purpose or need of the proposed action.

4.19.5.1 No-Action Alternative

Under the no-action alternative the proposed action would not take place. Additionally, the proposed Tinian RTA, including support facilities on the north side of the Tinian International Airport, would not be constructed. The identified training deficit would persist, and the existing Western Pacific RTAs would remain insufficient to support U.S. Pacific Command Service Components' Title 10 training requirements for the region. Therefore, it has been determined that the no-action alternative is not feasible and prudent.

4.19.5.2 Alternative 1. Locate Outside of the CNMI

The 2012 Training Needs Assessment: An Assessment of Current Training Ranges and Supporting Facilities in the U.S. Pacific Command Area of Responsibility (DoN 2013b), examined the unmet training requirements of four areas that make up the majority of the Pacific region force structure: Hawaii, Japan, Korea, and the Mariana Islands. The Assessment concluded that the Mariana Islands region has significantly more unmet training requirements than the other areas (i.e., Hawaii, Japan, and Korea) (see Section 1.3.5, Training Needs Assessment). The 2013 CNMI Joint Military Training Requirements and Siting Study (DoN 2013a), concluded that within the Mariana Islands, Guam training opportunities are limited to the existing activities plus future individual skills training for the Marine forces and that there is no additional capacity to address the U.S. Pacific Command's unmet training requirements. Therefore, land, sea, and airspace on and around Guam were excluded from further consideration as it does not meet the purpose and need, and would not provide adequate training facilities. As such it is not a feasible and prudent alternative.

4.19.5.3 Alternative 2. Locate at Single Location within the CNMI

Both unit level and combined level training must be included in the proposed action to meet unfilled training requirements in the Mariana Islands. Combined level training brings several units (U.S. and allied nations) together working as a team towards a single objective. Combined level training also involves maneuvering and use of live-fire ranges and training areas; however, because of the greater number of troops and tasks, this training requires larger areas. Separate range complexes are required to support each type of training because of the nature of unit and combined training along with the frequency of this training. Neither Tinian nor Pagan alone can support both levels of training identified as unfilled training requirements. Therefore, use of only one island (Pagan) does not meet the purpose and need, and the fundamental purpose of locating at two separate sites would not be served by this avoidance alternative. As such it is not a feasible and prudent alternative.

4.19.5.4 Alternative 3. Locate Airport Improvements at North Field

While training and support facilities would be located on Tinian, the airport improvements would occur at North Field rather than adjacent to existing runways at the Tinian International Airport. Location at North Field would require more extensive construction of a new runway in addition to the proposed support facilities and would be a significant impact to a National Historic Landmark. It also would create constraints on proposed live-fire training activities in the northern portion of Tinian. As such it is not a feasible and prudent alternative.

4.19.5.5 Alternative 4. Alternative Options at Tinian International Airport

In addition to proposed airport improvements is the proposed base camp. The base camp needs to be situated away from proposed training areas. Given space constraints within the Military Lease Area, the southern boundary of the Military Lease Area creates the largest separation between the base camp and proposed training activities. Location of the base camp east or west of Tinian International Airport would place it within airport safety zones, so these options were not considered feasible. A central location north of the airport is necessary to avoid interfering with proposed military approach, departure, and closed loop patterns that would occur at the ends of the runway. Therefore, locations of the base camp toward the western or eastern ends of the runway is not a feasible and prudent alternative.

Reducing the disturbance footprint to avoid the potential 4(f) resources was also considered. As part of the planning process, ground disturbance was minimized to the degree possible. However, as the West Field site (Site TN-6-0030) is very large and encompasses the entire airport area, it is not possible to avoid disturbing this historic property.

4.19.6 Measures to Minimize or Mitigate Harm

To the degree possible, historic properties were avoided when planning initial construction and operations areas for the proposed action. These efforts included siting ranges and support facilities in proximity to each other and to existing roads to minimize impacts to historic resources in the area. A constraints analysis was conducted in April, 2013 that examined the locations of ranges and support facilities in relation to historic properties and final siting decisions were made at that time. However, as discussed above, there is no alternative, except the no-action alternative, that would avoid all impacts to 4(f) resources. Avoidance alternatives would either have an impact on historic properties or not meet the purpose and need of the proposed action. Measures, however, can be taken to mitigate harm to the identified 4(f) resources.

4.19.6.1 No-Action Alternative

No action would be taken under this alternative. There would be no impacts to Section 4(f) properties under this alternative. No measures to minimize harm are proposed for this alternative.

4.19.6.2 Tinian Airport Improvements (All Tinian Alternatives)

Consultation with the CNMI Historic Preservation Officer, Advisory Council on Historic Preservation, and other interested parties for the entire proposed action is ongoing with the intent to identify measures to mitigate the significant impacts to historic properties. These potential mitigation measures would be formalized in an agreement document between the Department of Defense and various stakeholders representing the interests of the local government and the public. They may include data recovery excavations, archaeological monitoring, documentation, public education, and/or other appropriate measures. Once completed, the Programmatic Agreement would be signed by the State Historic Preservation Officer, the Advisory Council on Historic Preservation, the Department of Defense as well as consulting parties such as representatives of the CNMI agencies. Interested parties such as preservation groups, historical societies, and traditional groups have been invited to contribute to the process of developing these measures. A copy of the executed programmatic agreement will be included in the Final EIS/OEIS. Under the requirements of the Transportation Act, the Federal Aviation Administration would consult with the CNMI State Historic Preservation Officer and other parties to determine if the two historic properties, the Japanese Third Farm District (IV) (SC-5043) and West Field (TN-6-0030, warrant preservation and place and are considered 4(f) protected properties or if other forms of mitigation are sufficient. At that point, Section 4(f) analysis may be completed.

4.19.7 Coordination

Compliance with Section 106 of the National Historic Preservation Act and its implementing regulations is being achieved through coordination among the Department of Defense, the Federal Aviation Administration, the State Historic Preservation Officer, and the Advisory Council on Historic Preservation.

Representatives of the Department of Defense have met with the CNMI officials, the Tinian Mayor's office, and public interest groups at public meetings in 2013 and at other informal meetings in 2013 and 2014. Several individuals are also participating as consulting parties in the Section 106 consultation process.

4.19.8 Concluding Statement

If the historic properties are considered to be 4(f) protected resources, based on the above considerations, there is no feasible and prudent alternative to the use of land from Japanese Third farm District (IV) and West Field. However, the proposed action includes planning to minimize harm to the Japanese Third Farm District (IV) and West Field resulting from such use; however, no other alternative would meet the project's stated purpose and need.