US Army Corps of Engineers

DRAFT

ENVIRONMENTAL ASSESSMENT FOR AVIATION AND MISSILE COMMAND USE OF THREE LEASED PARCELS

Prepared for:
U.S. Army Corps of Engineers
Fort Worth District
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AUGUST 2011

DRAFT FINDING OF NO SIGNIFICANT IMPACT
RENEWAL OF THREE LEASES FOR HELICOPTER REPAIR AND MAINTENANCE
KILLEEN, TEMPLE, AND SAN ANGELO, TEXAS

1.0 Introduction. The United States (U.S.) Army Aviation and Missile Command (AMCOM) operates three distinct rotary-wing aircraft repair and maintenance facilities in Killeen, San Angelo, and Temple, Texas, which are leased from private entities and affected cities. AMCOM proposes renewal of the lease agreements and to construct ancillary facilities at the Killeen site and consolidate some operations into a newly leased hangar at the Temple site. This Environmental Assessment (EA) assesses the potential impacts on the human and natural environment as a result of the proposed actions.

2.0 Proposed Action and Alternatives. The EA evaluated the proposed action and one alternative. Three other alternatives were initially considered but were eliminated from further analyses. The Proposed Action Alternative is the renewal of the three leases and implementation of improvements at the Killeen and Temple sites. Construction of new facilities are proposed only at the Killeen site and would occur within developed areas. The No Action Alternative would allow the 5-year leases at all three facilities to expire, and repair and maintenance at these sites would cease. The lease for the avionics building supply warehouse at the Temple site would continue until 2015.

3.0 Environmental Consequences. The EA indentified no effects on airspace, geology, soils, waters of the U.S. (including wetlands), vegetation communities, noise, threatened or endangered species, cultural resources, land use or utilities and transportation. Minor, temporary impacts on air quality and hazardous materials conditions would occur during the construction of the new facility at the Killeen site. Ambient conditions would return immediately upon completion of the construction activities. Long-term benefits to the socioeconomic conditions within the three cities would result, as the current employment of the staff at each facility would continue.

4.0 Conclusion. I have reviewed the EA and have determined that the Proposed Action would not have a significant impact on the natural or human environment and no further environmental review is required. It is my decision to implement the Proposed Action.

_____ _____

Donald Nitti
Colonel, U.S. Army
Aviation and Missile Command
Aviation Field Directorate

Date

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SECTION 1.0
INTRODUCTION

1.0 INTRODUCTION

The United States (U.S.) Army Aviation and Missile Command (AMCOM) operates three distinct rotary-wing aircraft repair and maintenance facilities in Killeen (Bell County), San Angelo (Tom Green County), and Temple (Bell County), Texas (Figure 1). These facilities are located at regional airports and are leased to AMCOM. AMCOM requests renewal of the lease agreements and proposes to construct ancillary facilities at the Killeen site and consolidate some operations into a newly leased hangar at the Temple site. This constitutes a Federal action and requires compliance with the National Environmental Policy Act (NEPA). Section 2.0 of this Environmental Assessment (EA) describes the Proposed Action and other alternatives considered, including the No Action Alternative. Section 3.0 describes the affected environment and the environmental consequences of the Proposed Action and alternatives.

1.1 BACKGROUND AND LOCATION

Fort Hood was established in 1942 near Killeen, Texas, for testing and training of World War II tank destroyers, and is now the largest active duty armored post in the U.S. After a 1989 tornado damaged the AH-64A Apache helicopter fleet at Fort Hood, it was determined that indoor storage and repair facilities for rotary-wing aircraft were needed. Consequently, AMCOM, through the U.S. Army Corps of Engineers (USACE), leased the former Rio Airways maintenance facility adjacent to Fort Hood and the Killeen Airport from a private owner. In subsequent years, as the need for additional space was realized, facilities were leased from the City of San Angelo. In 2002, the City of Temple constructed and leased a hangar and related facilities at Draughon-Miller Central Texas Regional Airport to AMCOM and in 2006 added a second hangar for AMCOM use.

All three locations are actively used for helicopter repair, reset, and modification. The sites include parking areas for staff, aircraft hangars, administrative offices, workshops, and storage spaces, and have access to runways and taxiways.

The Killeen site (Figure 2) hosts approximately 36 aircraft per year and employs approximately 238 contractors and five government employees. Approximately 950 helicopter blades are repaired each year at the Killeen site, including those shipped from the San Angelo and Temple sites. The San Angelo site (Figure 3) employs approximately 73 contractors and four government employees, and hosts approximately 24 aircraft each year. The Temple site (Figure 4) employs approximately 267 contractors and six government employees, and hosts approximately 88 aircraft per year.

The operations at the Killeen site include the blade repair program, the crash battle program, OH-58D Kiowa Warrior reset, as well as other resets and training device fabrication (Photograph 1). The San Angelo site performs modifications and repairs on AH-64D Apache and OH-58D helicopters and strips aircraft of paint (Photograph 2). Aircraft are painted off-site, except for small spot applications. The Temple facility accepts aircraft returning from combat theatres, and predominantly focuses on resets to AH-64D Apache and UH-60A/L Blackhawk helicopters (Photograph 3). Aircraft may be flown or trucked to the sites.

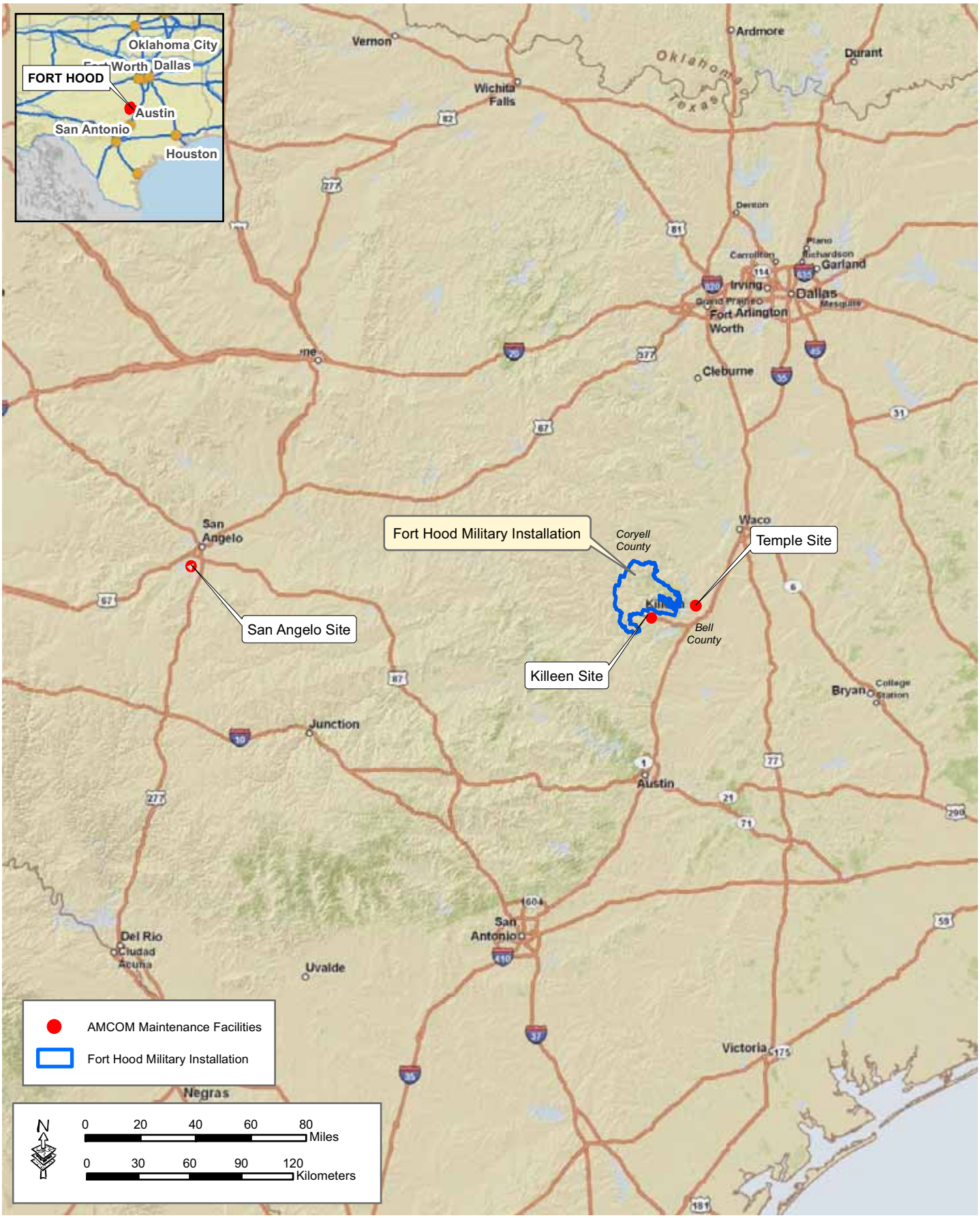

Figure 1: Project Vicinity Map

GSRC

August 2011

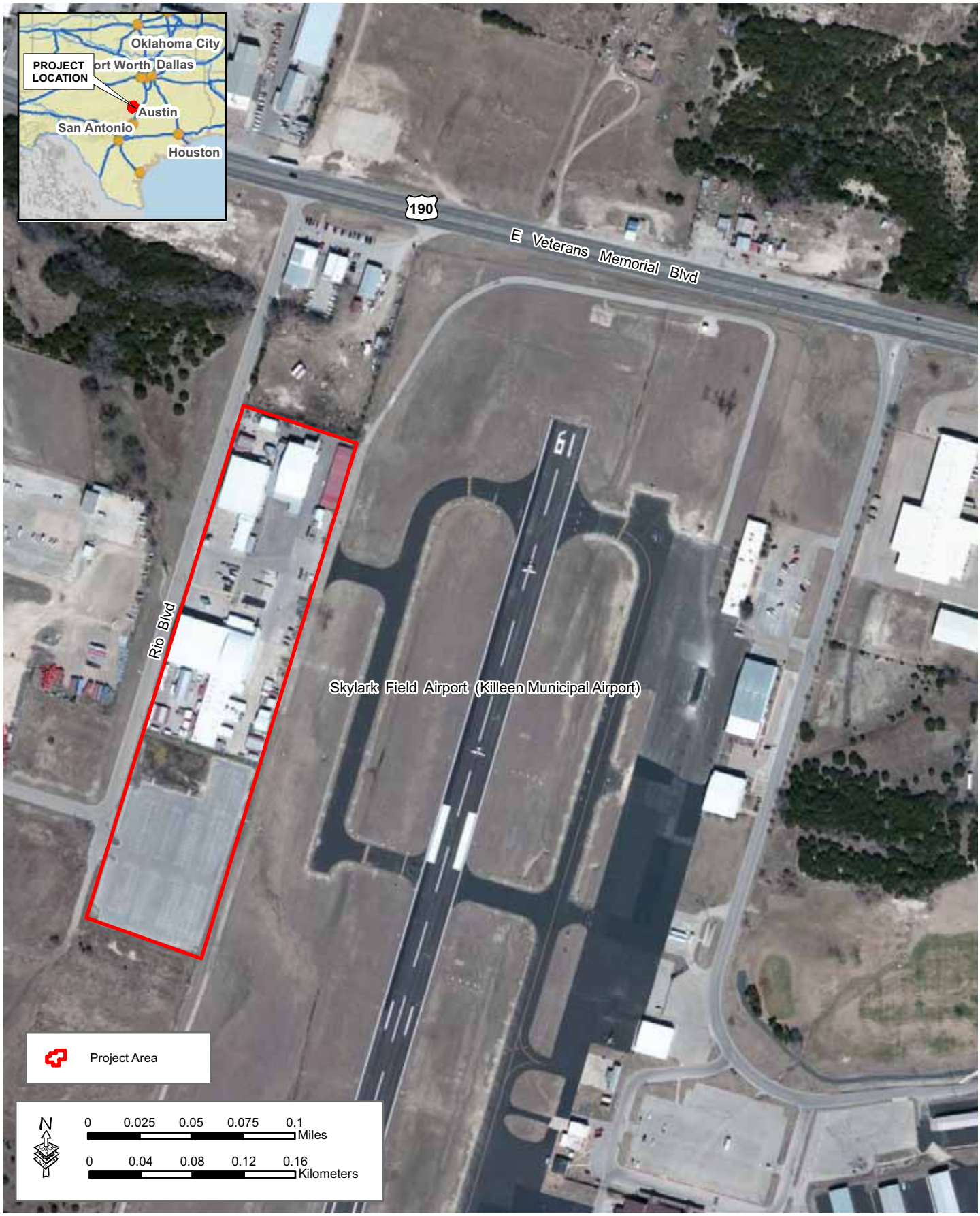

Figure 2: Killeen Project Area

GSRC

August 2010

Figure 3: San Angelo Project Area

GSRC

August 2011

Figure 4: Temple Project Area

GSRC

August 2011

Photograph 1. Inside the main hangar at the Killeen site.

Photograph 2. Overview of the south hangar at the San Angelo site.

Photograph 3. Apache helicopters outside the west hangar at the Temple site.

1.2 PURPOSE AND NEED

The purpose of the Proposed Action is to provide efficient, effective, and adequate facilities for AMCOM's maintenance, modification, and repair of helicopters. The need for the proposed project is to support the Army's training and military missions by providing safe and properly working helicopters.

1.3 APPLICABLE ENVIRONMENTAL STATUTES AND REGULATIONS

This analysis is prepared in accordance with NEPA of 1969 (42 U.S. Code [USC] 4321-4347), the Council on Environmental Quality (CEQ) regulations for implementing NEPA (40 Code of Federal Regulations [CFR] 1500-1508), the Army's NEPA regulations (32 CFR 651), and other pertinent environmental statutes, regulations, and compliance requirements (Table 1).

Table 1. Applicable Environmental Statutes and Regulations

Federal Laws and Regulations
Archaeological and Historic Preservation Act
Clean Air Act of 1970, as amended
Clean Water Act of 1987, as amended
Comprehensive Environmental Response, Compensation and Liability Act of 1986
Endangered Species Act of 1973, as amended
Magnuson-Stevens Fisheries Conservation and Management Act
Migratory Bird Treaty Act of 1972
National Environmental Policy Act of 1969, as amended
National Historic Preservation Act of 1966, as amended
Native American Graves Protection and Repatriation Act of 1990
Resource Conservation and Recovery Act of 1976
Safe Drinking Water Act of 1974
Watershed Protection and Flood Prevention Act of 1954
10 U.S.C. 2665 (Provides for reimbursable forestry funds)
Executive Orders and Army Regulations
Environmental Effects of Army Actions (32 CFR 651)
Invasive Species (Executive Order [E.O.] 13112)
Protection of Migratory Birds and Game Mammals (E.O. 11629)
Flood Plain Management (E.O. 11988)
Protection of Wetlands (E.O. 11990)
Federal Actions to Address Environmental Justice in Minority Populations And Low-Income Populations (E.O. 12898)
Protection of Children from Environmental Health Risks (E.O. 13045)

SECTION 2.0
PROPOSED ACTION AND ALTERNATIVES

2.0 PROPOSED ACTION AND ALTERNATIVES

2.1 PROPOSED ACTION

The Proposed Action includes the renewal of three individual leases at airports in Killeen, San Angelo, and Temple, Texas. The leased facilities in Killeen are privately owned and are located at Skylark Field Airport (also known as the Killeen Municipal Airport, see Figure 2) and include hangars and associated buildings. In San Angelo, two large hangars, associated buildings, and additional space at Mathis Field Airport (see Figure 3) are leased from the City of San Angelo. At the Temple location, two large hangars and associated outdoor space at Draughon-Miller Central Texas Regional Airport (see Figure 4) are leased from the City of Temple. AMCOM also holds separate leases for other buildings at this airport.

In addition to renewing existing leases, the Proposed Action includes the construction of ancillary facilities at the Killeen site. These facilities would house the blade repair program and would consist of a modular-type building erected on paved surfaces adjacent to existing buildings. Currently, there is a lack of dedicated workspace for blade repair. Equipment and supplies must be moved to create space for various blade repair tasks, and work often occurs outdoors. A change to existing leases at the Temple site is also proposed. The City of Temple has offered AMCOM the opportunity to move its supply warehouse and avionics operations into the recently vacated McLane aviation hangar (see Figure 4). The supply warehouse and avionics buildings are currently under a separate lease that expires in 2015. The current lease would be modified, and the McLane aviation hangar would be added to the lease with the Proposed Action.

2.2 NO ACTION ALTERNATIVE

Under the No Action Alternative, the 5-year leases at all three facilities would expire, and repair and maintenance at these sites would cease. This would negatively impact AMCOM's mission and readiness, and displace approximately 593 employees. A separate lease for the avionics building supply warehouse at the airport in Temple would continue until 2015.

2.3 ALTERNATIVES CONSIDERED AND ELIMINATED

2.3.1 Consolidation into One of the Leased Sites

Consolidating the operations of the three facilities into one single leased site was considered. No space for expansion is available at airports in Killeen or San Angelo. The airport in Temple has space for expansion; however, additional hangars and support facilities would need to be constructed. Without legal assurances that AMCOM would lease facilities, it is highly unlikely that additional construction would occur. Because AMCOM cannot legally provide such assurances, the alternative of consolidating operations onto one of the leased sites was rejected.

2.3.2 Consolidation into Fort Hood Military Installation

Construction of new facilities at Hood Army Air Field was proposed; however, sufficient space to construct the hangars and administrative buildings is limited at Fort Hood and Hood Army Airfield. Consequently, this alternative was rejected.

2.3.3 Month-to-Month Lease

Month-to-month leasing was considered, but was rejected because it is not a cost-effective solution and carries the risk of suspension of access to the facilities and interruption of work, which would negatively impact AMCOM's mission and readiness.

SECTION 3.0
AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES

3.0 AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES

This section of the EA describes the natural and human environment within the project areas and the potential impacts of the Proposed Action and No Action Alternative. In accordance with NEPA (42 USC § 4321 et seq.) and CEQ regulations implementing NEPA (40 CFR 1500 - 1508), this EA will examine the potential impacts on those resources that could be affected by the Proposed Action or No Action Alternative. Only those resources that have the potential to be affected by any of the alternatives are described as per CEQ guidance (40 CFR 1501.7 [3]). Some topics are limited in scope due to the lack of direct or indirect effect from the proposed project on the resource or because that particular resource is not located within the project area. Resources that are not addressed in this EA and the reasons for their elimination are:

Airspace: The Proposed Action would not affect airspace regulations or inhibit current air operations.

Geology: The Proposed Action would cause no ground disturbance and no geologic resources would be impacted. All construction would occur on previously paved areas.

Soils and Prime Farmland: The Proposed Action would occur entirely on paved and previously disturbed areas. Though approximately 80 percent of the Killeen site and 97 percent of the San Angelo site occur on prime farmland soil types, the Farmland Protection Policy Act (FPPA) does not restrict military uses or actions in which there would be no conversion of farmland to non-agricultural use. Because the Proposed Action is for military use and there would be no soil disturbance there would be no significant impacts on soils or prime farmland.

Climate: The Proposed Action would neither affect nor be affected by the climate.

Wetlands, Waters of the U.S., Water Resources: The Proposed Action would not affect any water-related resources because no wetlands, waters of the U.S., or surface waters occur at or immediately adjacent to any of the project areas. No additional demand on groundwater supplies would occur as a result of the Proposed Action.

Wild and Scenic Rivers: The Proposed Action would not affect any designated Wild and Scenic Rivers because no rivers designated as such are located within or near the project areas.

Vegetation: No natural vegetation communities occur in the project areas, which are predominantly paved surfaces. Thus, the Proposed Action would have no effect on vegetation.

Noise: The Proposed Action would cause no increase or decrease in noise levels, and project areas are within operating airports and adjacent to runways.

Land Use: The Proposed Action would not affect land use because all project areas are located within airports where land is dedicated to industrial uses and the Proposed Action would not change this land use classification.

Utilities and Transportation: The Proposed Action would use existing utilities and would not cause any change in transportation access or in the number of personnel commuting to the sites.

3.1 BIOLOGICAL RESOURCES

3.1.1 Affected Environment

3.1.1.1 Wildlife

No natural wildlife habitat occurs within any of the project areas. The airports all contain large open areas around their runways that could attract raptors and other birds. Hangars and buildings are used by suburban species such as rock dove (*Columba livia*) and house sparrows (*Passer domesticus*). At the San Angelo site, a raccoon (*Procyon lotor*) was recently removed by pest control.

3.1.1.2 Special Status Species

Endangered species that are known to occur in Bell or Tom Green counties are listed in Appendix A (Texas Parks and Wildlife Department [TPWD] 2011). No endangered species habitat occurs at or immediately adjacent to any of the project sites.

The Fort Hood Military Installation is approximately 3 miles from the Killeen and Temple sites and contains vast expanses of wildlife habitat. Multiple endangered species have been recorded on-base, and substantial conservation efforts target the golden-cheeked warbler (*Dendroica chrysoparia*) and black-capped vireo (*Vireo atricapilla*), which are known to nest there. No nesting habitat for either of these species was noted during site visits in 2011, and there is no reported evidence of special status species existing on or near the project sites.

3.1.2 Environmental Consequences

3.1.2.1 No Action Alternative

3.1.2.1.1 Wildlife

No impacts on native population wildlife would occur under the No Action Alternative, because no natural habitat for wildlife is present and each site is completely developed.

3.1.2.1.2 Special Status Species

No special status species would be impacted under the No Action Alternative, because no special status species or their potential habitat occur at any of the sites.

3.1.2.2 Proposed Action

3.1.2.2.1 Wildlife

No impact on native wildlife population or natural wildlife habitat would occur under the Proposed Action, because no natural habitat exists and there would be no change in flights or operations.

3.1.2.2.2 Special Status Species

No special status species would be affected by the Proposed Action because none are known to occur at any of the sites.

3.2 AIR QUALITY

3.2.1 Affected Environment

The U.S. Environmental Protection Agency (USEPA) established National Ambient Air Quality Standards (NAAQS) for specific pollutants determined to be of concern with respect to the health and welfare of the general public. Areas that do not meet these NAAQS standards are called non-attainment areas, while areas that meet both primary and secondary standards are known as attainment areas. The Killeen and Temple sites are located in Bell County, which is in

attainment for all NAAQS. The San Angelo site is located in Tom Green County, which is also is in attainment for all NAAQS.

3.2.2 Environmental Consequences

3.2.2.1 No Action Alternative

Implementation of the No Action Alternative would not impact ambient air quality in Bell or Tom Green counties.

3.2.2.2 Proposed Action

Temporary and minor increases in air quality would occur from construction equipment and combustible emissions during construction at the Killeen site and reorganization at the Temple site. There would be no impacts on air quality at the San Angelo site. The following paragraphs describe the air calculation methodologies used to estimate air emissions produced by the Proposed Action.

USEPA's NONROAD Model (USEPA 2005a) was used, as recommended by USEPA's *Procedures Document for National Emission Inventory, Criteria Air Pollutants, 1985-1999* (USEPA 2001), to calculate emissions from construction equipment. Combustible emission calculations were made for standard construction equipment, such as front-end loaders, backhoes, and bulldozers. Assumptions were made regarding the total number of days and hours per day that each piece of equipment would be used. Commuting construction workers and delivery trucks would temporarily increase combustible emissions in the airshed. These emissions were calculated using the USEPA MOBILE6.2 Model (USEPA 2005b, 2005c and 2005d).

The total air emissions were calculated for the construction activities to compare to the General Conformity Rule. Summaries of the estimated total emissions for the Proposed Action are presented in Table 2. Details of the analyses are presented in Appendix B.

Table 2. Total Air Emissions (tons/year) at the Killeen and Temple Sites from Proposed Action versus *de minimis* Threshold Levels

Criteria Pollutant	Total	*de minimis* Thresholds
Carbon Monoxide (CO)	0.51	100
Volatile Organic Compounds	0.12	100
Nitrous Oxides	0.83	100
Particulate matter less than 10 microns	0.28	100
Particulate matter less than 2.5 microns	0.11	100
Sulfur dioxide	0.11	100
Carbon Dioxide Equivalent	340	27,557

Source: 40 CFR 51.853 and Gulf South Research Corporation (GSRC) model projections.
Note that Bell and Tom Green counties are in Attainment for all NAAQS (USEPA 2010).

Air emissions from the Proposed Action would not exceed Federal *de minimis* thresholds and would not require a Conformity Determination even if any of the sites were in non-attainment areas. As there are no violations of air quality standards and no conflicts with State Implementation Plans, the impacts on air quality from the Proposed Action would be less than significant. All vehicles and construction equipment would be properly maintained to ensure that emissions are within the design standards.

3.3 CULTURAL RESOURCES

3.3.1 Affected Environment

3.3.1.1 Cultural History

The Proposed Action lease sites are within the Central Texas archaeological region. A complete cultural history for the area can be found in *The Prehistory of Texas* (Perttula 2004).

3.3.1.2 Previously Recorded Cultural Resources and Investigations

An archival records search and literature review of previous investigations and previously recorded sites within a 1-mile buffer of each project site was conducted. The results of the archival records search for each site are summarized below (Tables 3 to 8).

3.3.1.2.1 Killeen Site

The archival research of the area within 1 mile of the Killeen site identified 11 previously conducted cultural resources investigations (Table 3). A survey conducted for the Federal Aviation Administration (FAA) in 1981 flanks and partially overlaps the current project area to the east. Another survey for an unknown agency, with Permit No. 1131, flanks and partially overlaps the current project area to the west. Although both of these surveys partially overlap the current project area, the entire current project area has not been completely surveyed (Texas Historical Commission [THC] 2011).

Table 3. Cultural Investigation Conducted Within 1 Mile of the Killeen Project Area

Project Type	Date	Agency	Permit Number	Report Author
Survey	05/1981	Texas A&M University (TAMU)	NA	NA
Survey	12/1996	City of Killeen	1719	NA
Survey	11/1993	NA	1131	NA
Survey	08/1981	FAA	NA	NA
Survey	6/26/2005	Bell County Water Control District	3734	Godwin, Molly
Survey	01/15/2003	City of Harker Heights	3185	Godwin, Molly
Survey	04/1988	TDHPT (Texas Department of Highway and Public Transportation)	NA	NA
Survey	03/1986	TDHPT	NA	NA
Survey	05/1986	FHWA (Federal Highway Administration)	NA	NA
Survey	06/1996	FAA/TxDOT (Texas Department of Transportation)	NA	NA
Survey	05/14/2003	TWDB (Texas Water Development Board)	3042	Henderson, Jerry

Source: THC 2011
NA=Not available/No data in database

A total of eight archaeological sites were recorded within 1 mile of the Killeen site (Table 4). The majority of these sites consist of scatters of lithic debitage left from tool production (Largent 1999; Price 1999a, 1999b, 1999c, 1999d; Schafer 1981a, 1981b). One site consists of a historic scatter that represents the remains of a shed (41BL255) (Voellinger 1980). Two of the sites (41BL246 and 41BL248) have unknown National Register of Historic Places (NRHP) eligibility recommendations, although the author of the site forms recommended that no further work was necessary (Schafer 1981a, 1981b). The remaining sites were not recommended for NRHP eligibility and were not considered significant cultural resources (Largent 1999; Price

1999a, 1999b, 1999c, 1999d; Voellinger 1980). None of the recorded archaeological sites are within the boundaries of the Killeen project area (THC 2011). No other previously recorded cultural resources, including buildings, structures, objects, sites, or districts, are located within the 1-mile archival study area.

Table 4. Archaeological Sites Recorded Within 1 Mile of the Killeen Project Area

Site Number	Site Type	Recommendations for Future Work	NRHP Recommendation
41BL246	Flakes, burned rock scatter (trace)	None	NA
41BL248	Flake scatter (trace)	None	NA
41BL255	Historic scatter	None	Not Eligible
41BL1037	Prehistoric open site	None	Not Eligible
41BL1061	Lithic scatter	None	Not Eligible
41BL1062	Lithic scatter	None	Not Eligible
41BL1063	Lithic scatter	None	Not Eligible
41BL1064	Lithic Scatter	None	Not Eligible

Source: THC 2011
NA=Not available/No data in database

3.3.1.2.2 San Angelo Site

The archival research conducted for the 1-mile study area around the San Angelo project area identified two previously recorded cultural resources investigations (Table 5). The two cultural resources investigations were both survey projects sponsored by the USACE-Fort Worth District (CESWF). None of the previously surveyed areas contain lands within the San Angelo project area (THC 2011).

Table 5. Cultural Resources Investigations Conducted within 1 Mile of the San Angelo Project Area

Project Type	Date	Agency	Permit Number	Report Author
Survey	08/1984	CESWF	NA	NA
Survey	08/1981	CESWF	NA	NA

Source: THC 2011
NA=Not available/No data in database

Four archaeological sites were previously recorded within 1 mile of the San Angelo project area (Table 6, THC 2011). The recorders of the sites do not provide NRHP recommendations on the site forms, but do make recommendations for further work at the archaeological sites (Lyle and Nickels 1999a, 1999b, 1999c, 1999d). No other previously recorded cultural resources, including buildings, structures, objects, sites, or districts, are located within the 1-mile study area.

Table 6. Archaeological Sites Recorded Within 1 Mile of the San Angelo Project Area

Site Number	Site Type	Recommendations for Future Work	NRHP Recommendation
41TG521	Farmstead	Additional archival research	NA
41TG522	Lithic Scatter	No further work	NA
41TG523	Farmstead, Lithic Scatter	Additional shovel testing and archival research	NA
41GT524	Lithic Scatter	Excavation of test unit (1m x 1m)	NA

Source: THC 2011
NA=Not available/No data in database

3.3.1.2.3 Temple Site

The archival research conducted for the 1-mile study area around the Temple project area identified three previously conducted cultural resources investigations (Table 7). All three of the previously conducted cultural resources investigations consisted of surveys. The TxDOT survey was adjacent to the site and to the west and southwest (THC 2011) but did not enter the Temple project area.

Table 7. Cultural Resources Investigations Conducted Within 1 Mile of the Temple Project Area

Project Type	Date	Agency	Permit Number	Report Authors
Survey	10/1982	CESWF	NA	NA
Survey	12/6/2010	CESWF	NA	Padilla, Antonio E and Kevin Stone
Survey	01/1982	TxDOT	NA	NA

Source: THC 2011
NA=Not available/No data in database

A total of two archaeological sites were previously recorded within 1 mile of the Temple project area (Table 8). Neither site is located within the Temple project area.

Table 8. Archaeological Sites Recorded Within 1 Mile of the Temple Project Area

Site Number	Site Type	Recommendations for Future Work	NRHP Recommendation
41BL39	Unknown Prehistoric	Limited testing-original site form	Unknown
41BL1332	Unknown Prehistoric	None	Not Eligible

Source: THC 2011
NA=Not available/No data in database

One Texas Historic Cemetery is located within 1 mile of the Temple project area. The Bellwood Memorial Park Cemetery is located to the west of the Temple project area across U.S. Highway 36 (Airport Road). No other information for the cemetery is recorded in the THC database (THC 2011). No other previously recorded cultural resources, including buildings, structures, objects, sites, or districts, are located within the 1-mile archival study area.

3.3.2 Environmental Consequences

3.3.2.1 No Action Alternative

Given the lack of any construction or alteration of facilities under the No Action Alternative, no impacts on cultural resources would occur.

3.3.2.2 Proposed Action

Under the Proposed Action, the three leases would be renewed and ancillary facilities would be constructed at the Killeen site. No previously recorded NRHP-eligible aboveground resources are located within a 0.5-mile visual Area of Potential Effect of the proposed modular building. Since the building would be erected on paved ground, there would be no ground disturbance, and no potential impacts on archaeological resources would be anticipated. Given the temporary nature of the modular building and the relatively small size in comparison to the existing buildings in the Killeen project area, there is little or no potential for adverse visual impacts on surrounding structures. No adverse effects on cultural resources would occur at either of the other two sites.

3.4 HAZARDOUS MATERIALS

3.4.1 Affected Environment

Solid and hazardous wastes are regulated in Texas by the USEPA and the Texas Commission on Environmental Quality (TCEQ). In 2010, the Army completed Environmental Performance Assessment System (EPAS) audits on the operation and facilities in Killeen, San Angelo, and Temple (AMCOM Life Cycle Management Command [LCMC] 2010 a, b, and c). Those audit reports provide additional information on the processes which generate pollutants and hazardous materials that are used on-site.

The largest quantities of bulk materials at the project sites are vehicle and aviation fuels. Any aviation fuel arriving with aircraft is used to power generators and vehicles on-site, but is not used for fuel for any aircraft or treated as waste. Additional materials are used to clean and otherwise maintain aircraft and include sealants, paints, greases, lubricating oils, and other hazardous materials. Materials Safety Data Sheets are available at each site for all chemicals housed on-site.

The San Angelo facility strips aircraft of paint within a large container which captures and separates the removed paint materials for proper disposal. Only small, spot applications of paint are applied at any of the sites; major painting of aircraft occurs off-site at a private facility. Spill Prevention, Control, and Countermeasure Plans are in place at each site.

There are no underground storage tanks at the Killeen, San Angelo, or Temple sites; however, there are two aboveground storage tanks used for gasoline and diesel fuels at each site. None of the storage tanks exceed 1,100 gallons, which would require registration with the State of Texas. All facilities are small-quantity generators of hazardous waste. Any waste generated is disposed through the Defense Reutilization and Marketing Office (DRMO). Asbestos-containing materials could occur at the San Angelo site (AMCOM LCMC 2010b).

3.4.2 Environmental Consequences

3.4.2.1 No Action Alternative

Under the No Action Alternative, helicopter maintenance and repair operations at all three sites would cease. The sites would stop creating small quantities of hazardous waste and would no longer store the sealants, paints, greases, lubricating oils, or other hazardous materials used in the maintenance and repair of helicopters. All existing hazardous materials generated by

AMCOM would be removed and, therefore the No Action Alternative would have no impacts on hazardous materials.

3.4.2.2 Proposed Action

Under the Proposed Action, helicopter maintenance and repair operation at all three sites would continue uninterrupted. There would be no change in the amounts or types of hazardous materials used at each site; therefore, the impacts on hazardous materials would be less than significant.

3.5 SOCIOECONOMICS

The Region of Influence (ROI) for the proposed project includes Bell County (Killeen and Temple sites) and Tom Green County (San Angelo site), within the State of Texas.

3.5.1 Affected Environment

3.5.1.1 Population and Demographics

The population and racial mixes of the ROI and Texas are presented in Table 9. According to the U.S. Census Bureau (2009), the State of Texas has an estimated population of 23,819,042. The majority of the population of both counties claim to be white.

Table 9. Population and Race Mix within the ROI (with percent of total population)

Race	Texas	Bell County	Tom Green County
White	17,111,322 (71.8%)	185,406 (67.3%)	87,855 (82.4%)
Black or African American	2,738,904 (11.5%)	56,571 (20.5%)	4,239 (4.0%)
American Indian or Alaska Native	121,241 (0.5%)	1,728 (0.6%)	725 (0.7)
Asian	810,844 (3.4%)	7,298 (2.6%)	1,112 (1.0%)
Native Hawaiian and Other Pacific Islander	19,237 (0.1%)	1,284 (0.5%)	84 (0.1%)
Some Other Race	2,559,403 (10.7 %)	11,105 (4.0%)	10,183 (9.5%)
Two or More Races	458,091 (1.9%)	12,202 (4.4%)	2,445 (2.3)
Hispanic or Latino (of any race)	8,555,099 (35.9%)	54,004 (19.6%)	36,561 (34.3%)

Source: U.S. Census Bureau 2009

3.5.1.2 Employment and Income

Table 10 displays the total number of jobs and unemployment rates in the ROI. Unemployment rates increased from 1999 to 2009 and 2010.

Table 10. Total Number of Jobs and Unemployment Rate in the ROI

Location	Total Jobs (Unemployment Rate) 1999	Total Jobs (Unemployment Rate) 2009	Percent Change in Number of Jobs	2010 Unemployment Rate
Texas	9,766,299 (4.7%)	11,006,179 (7.6 %)	12.7%	8.2%
Bell County	90,997 (3.5)	118,402 (6.7%)	30.1%	7.5%
Tom Green County	48,130 (4.4%)	49,455 (6.3%)	2.8%	6.4%

Source: Real Estate Center 2011

As shown in Table 11, per capita personal income grew 46 percent in Texas, 70 percent in Bell County, and 56 percent in Tom Green County from 1999 to 2009.

Table 11. Income and Median Household Income in the ROI

Location	Per Capita Personal Income 2009	Per Capita Personal Income Change 1999-2009	Estimated Median Household Income*
Texas	$38,609	46%	$48,199
Bell County	$39,839	70%	$46,473
Tom Green County	$35,704	56%	$40,753

Source: U.S. Census Bureau 2009; U.S. Bureau of Economic Analysis 2009
* indicates 2009 inflation-adjusted dollars

Housing figures are shown in Table 12. In Tom Green County there is currently a 9.8 percent vacancy rate, slightly less than the Texas average of 12 percent. The vacancy rate in Bell County is 14.4 percent (U.S. Census Bureau 2009).

Table 12. Housing Units within the ROI

Location	Vacant Housing Units (Percent)	Occupied Housing Units		Total Housing Units
		Owner	Renter	
Texas	1,138,646 (12)	5,350,206	2,918,840	9,407,692
Bell County	16,275 (14.4)	55,504	40,874	112,653
Tom Green County	4,513 (9.8)	27,695	13,631	45,839

Source: U.S. Census Bureau 2009

3.5.2 Environmental Consequences

3.5.2.1 No Action Alternative

If the No Action Alternative were implemented, there could be temporary indirect economic effects from the loss of approximately 578 contractor jobs and the displacement of 15 government employees. These losses would be spread across three separate cities. The most recent unemployment rates show that Bell and Tom Green counties have lower unemployment than the state average, and it is unlikely that the No Action Alternative would cause a significant change.

3.5.2.2 Proposed Action

Under the Proposed Action, there would be no increase or loss of permanent jobs, and thus, no changes in current socioeconomic conditions. Sufficient housing is available for all staff. A temporary, negligible effect on sales taxes and employment would occur during the construction of the building of the Killeen site.

3.6 ENVIRONMENTAL JUSTICE AND PROTECTION OF CHILDREN

3.6.1 Executive Orders 12898 and 13045 - Environmental Justice and Protection of Children

EO 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations,* requires all Federal agencies to identify and address disproportionately strong and adverse effects of its programs, policies, and activities on minority and low-income populations.

EO 13045, *Protection of Children from Environmental Health Risks and Safety Risks*, requires each Federal agency "to identify and assess environmental health risks and safety risks that may disproportionately affect children" and "ensure that its policies, programs, activities, and standards address disproportionate risks to children that result from environmental health risks or safety risks."

3.6.2 Affected Environment

Bell and Tom Green counties have higher proportions of their populations that are below the poverty line than that of the Nation (Table 13). The potential for impacts on the health and safety of children is greater where projects are located near residential or recreational areas. The Killeen site is adjacent to residential areas, while the Temple site is predominately surrounded by rural agricultural land with few residences. The San Angelo site is surrounded by open agricultural land and relatively few houses. The majority of the population within the project areas is not considered to represent minority or low-income populations.

Table 13. Poverty, Age, and Minority Status within the ROI

	Percent Individuals in Population in Poverty	Percent of Population Under Age 18	Percent of Population that is Minority
United States	13.5	24.6	25.5
Bell County	14.2	29.5	32.7
Tom Green County	16.3	24.2	17.6

Source: U.S. Census Bureau 2009.

3.6.3 Environmental Consequences

3.6.3.1 No Action Alternative

Under the No Action Alternative, helicopter repair and modification activities would cease at each site, and no significant effects on low-income, children, or minority populations would be expected. There could be indirect economic effects in the communities from the loss of approximately 578 contractor jobs and displacement of 15 government employees, but these losses would be spread across three separate cities and two counties and would not disproportionately affect low-income or minority populations.

3.6.3.2 Proposed Action

Under the Proposed Action, helicopter repair and maintenance activities would continue at the present rate and intensity. There would be no significant pollution, land use, economic, or other changes that could disproportionately impact low-income, children, or minority populations. Additionally, neither the low-income nor the minority populations comprise 50 percent of the counties' population.

3.7 CUMULATIVE IMPACTS

NEPA regulations define a cumulative impact as an "impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions" (40 CFR 1508.7).

This cumulative impacts analysis summarizes expected environmental impacts from the combined effects of past, current, and reasonably foreseeable future projects at the sites of the Proposed Action.

The factors used in this document to determine which resources are cumulatively affected considered the following:

- whether the Proposed Action is one of several similar actions in the same geographic area
- whether other activities in the area have similar effects on the resource
- whether the resource is especially vulnerable to incremental effects
- whether these effects are historically significant for this resource
- whether other analyses in the area have identified a cumulative effects concern.

3.7.1 Past and Present Actions

Past and present actions are defined as actions within the cumulative impacts analysis area that have occurred before July 2011 or that are currently ongoing. A selection of past and present actions follows.

- In October 2008, the Department of Defense published a Notice of Intent to prepare an Environmental Impact Statement to construct a second runway at the Killeen-Fort Hood Regional Airport in Killeen. No draft EIS has been published to date. This is a joint use airport, also known as Robert Gray Army Airfield, and is within the boundaries of the Fort Hood Military Reservation. It is a different airport than those considered in the Proposed Action, as discussed in this EA.
- In 2003, a Finding of No Significant Impact (FONSI) was signed for new building construction to house U.S. Border Patrol operations at Mathis Field in San Angelo.
- In December 2010, the Aviation Division of TxDOT released a Request for Proposal for professional engineering services to reconstruct runways, taxiways, and aviation aprons at Draughon-Miller Central Texas Regional Airport in Temple.

3.7.2 Reasonably Foreseeable Future Actions

It is assumed that all airports would continue operating with daily flights and regular maintenance activities. The airport in Temple leases two buildings to Fort Hood that are used to house AMCOM avionics operations and provide storage space. Under the Proposed Action, that lease would be discontinued so that facilities can be moved to the McLane Hangar facility,

which would be included in the lease for helicopter repair facilities proposed for renewal under the Proposed Action. Otherwise, the lease for the avionics and storage buildings expires in 2015. Former operations in this hangar are moving to a recently constructed hangar at the airport.

3.7.3 Cumulative Environmental Consequences

3.7.3.1 No Action Alternative

Under the No Action Alternative, there would be a loss of approximately 578 total contractor jobs and displacement of 15 government employees. These losses would be spread across the communities of Killeen, San Angelo, and Temple; still, this would add to the unemployment rate and result in adverse cumulative impacts.

3.7.3.2 Proposed Action

Under the Proposed Action there would be no significant cumulative effects on any of the resources discussed below.

3.7.3.2.1 Biological Resources-Wildlife and Special Status Species

No wildlife or natural habitat would be lost or impacted, and no take of sensitive or protected species would occur, so the Proposed Action would not contribute to cumulative impacts.

3.7.3.2.2 Air Quality

Cumulative impacts on air quality would be considered adverse if the action results in a violation of ambient air quality standards, obstructs implementation of an air quality plan, or exposes sensitive receptors to substantial pollutant concentrations. The emissions from construction of a new building and consolidation of some operations into the McLane Hangar at the Temple site would be minor and short-term. The Proposed Action would not cause air quality in either Bell or Tom Green counties to exceed NAAQS standards, disproportionately affect sensitive receptors, or generate long-term increases in air pollutants above the existing levels.

3.7.3.2.3 Cultural Resources

Because no ground disturbance would occur outside of paved areas, and no sensitive cultural resources occur at any of the project areas, there would be no impacts on cultural resources that could contribute to regional cumulative effects. No locations eligible for the NRHP occur near the project areas that might be adversely affected by the construction of a building at the Killeen site.

3.7.3.2.4 Hazardous Materials

Under the Proposed Action, there would be no change in the types or quantities of hazardous materials stored at any of the sites and, thus, there would be no contribution to cumulative effects with respect to hazardous materials.

3.7.3.2.5 Socioeconomics and Environmental Justice

Thresholds for cumulative adverse impacts on socioeconomic conditions include displacement or relocation of residences or commercial buildings, increases in long-term demands for public services in excess of existing and projected capacities, and disproportionate impacts on minority and low-income families. Implementation of the Proposed Action would not result in significant or long-term impacts on the region's economy. No adverse impacts on residential areas, population, or minority or low-income families around the airports would occur.

SECTION 4.0
PUBLIC INVOLVEMENT

4.0 PUBLIC INVOLVEMENT

4.1 AGENCY COORDINATION

Coordination with various Federal and state agencies, including the U.S. Fish and Wildlife Service (USFWS), USEPA, TCEQ, Texas Parks and Wildlife Department, and the State Historic Preservation Officer will occur throughout the preparation of this EA. The EA and draft FONSI will be sent to these and other agencies, as well as the general public, for review and comment in accordance with coordination requirements as set forth by 32 CFR 651. A notice of availability will also be placed in local newspapers announcing that the draft EA and draft FONSI will be available for review at the local public libraries.

All pertinent comments received during the 30-day public review period will be addressed before the FONSI can be signed. Correspondence received during this review period will be included as Appendix C to the final EA and retained as part of the administrative record.

4.2 PUBLIC REVIEW

After the 30-day review period, if a FONSI is determined to be appropriate, it will be signed by Colonel Donald Nitti, Director, Aviation Field Directorate, AMCOM, Redstone Arsenal, Alabama; or by Mark McMillan, Regional Aviation Sustainability Manager West, Aviation Field Maintenance Activity, Fort Hood. The signed FONSI and final EA will remain on record with the Fort Hood Environmental Division office.

SECTION 5.0
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5.0 REFERENCES

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SECTION 6.0
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6.0 LIST OF PREPARERS

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7.0 PERSONS AND AGENCIES CONSULTED

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SECTION 8.0
ACRONYMS AND ABBREVIATIONS

8.0 ACRONYMS AND ABBREVIATIONS

AMCOM	Army Aviation and Missile Command
CESWF	U.S. Army Corps of Engineers Fort Worth District
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
CO	Carbon Monoxide
EA	Environmental Assessment
EO	Executive Order
EPAS	Environmental Performance Assessment System
FAA	Federal Aviation Administration
FHWA	Federal Highway Administration
FONSI	Finding of No Significant Impact
FPPA	Farmland Protection Policy Act of 1980 and 1995
GSRC	Gulf South Research Corporation
LCMC	Life Cycle Management Command
NAAQS	National Ambient Air Quality Standards
NEPA	National Environmental Policy Act
NRHP	National Register of Historic Places
ROI	Region of Influence
TAMU	Texas A&M University
TCEQ	Texas Commission on Environmental Quality
TDHPT	Texas Department of Highway and Public Transportation (now TxDOT)
THC	Texas Historical Commission
TxDOT	Texas Department of Transportation
TWDB	Texas Water Development Board
U.S.	United States
USACE	U.S. Army Corps of Engineers
USC	United States Code
USEPA	U.S. Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service
UT	University of Texas

APPENDIX A
THREATENED AND ENDANGERED SPECIES

Last Revision: 5/25/2011 3:02:00 PM

BELL COUNTY

AMPHIBIANS

		Federal Status	State Status
Salado Springs salamander	*Eurycea chisholmensis*	C	

endemic; surface springs and subterranean waters of the Salado Springs system along Salado Creek

BIRDS

		Federal Status	State Status
American Peregrine Falcon	*Falco peregrinus anatum*	DL	T

year-round resident and local breeder in west Texas, nests in tall cliff eyries; also, migrant across state from more northern breeding areas in US and Canada, winters along coast and farther south; occupies wide range of habitats during migration, including urban, concentrations along coast and barrier islands; low-altitude migrant, stopovers at leading landscape edges such as lake shores, coastlines, and barrier islands.

Arctic Peregrine Falcon	*Falco peregrinus tundrius*	DL	

migrant throughout state from subspecies' far northern breeding range, winters along coast and farther south; occupies wide range of habitats during migration, including urban, concentrations along coast and barrier islands; low-altitude migrant, stopovers at leading landscape edges such as lake shores, coastlines, and barrier islands.

Bald Eagle	*Haliaeetus leucocephalus*	DL	T

found primarily near rivers and large lakes; nests in tall trees or on cliffs near water; communally roosts, especially in winter; hunts live prey, scavenges, and pirates food from other birds

Black-capped Vireo	*Vireo atricapilla*	LE	E

oak-juniper woodlands with distinctive patchy, two-layered aspect; shrub and tree layer with open, grassy spaces; requires foliage reaching to ground level for nesting cover; return to same territory, or one nearby, year after year; deciduous and broad-leaved shrubs and trees provide insects for feeding; species composition less important than presence of adequate broad-leaved shrubs, foliage to ground level, and required structure; nesting season March-late summer

Golden-cheeked Warbler	*Dendroica chrysoparia*	LE	E

juniper-oak woodlands; dependent on Ashe juniper (also known as cedar) for long fine bark strips, only available from mature trees, used in nest construction; nests are placed in various trees other than Ashe juniper; only a few mature junipers or nearby cedar brakes can provide the necessary nest material; forage for insects in broad-leaved trees and shrubs; nesting late March-early summer

Henslow's Sparrow	*Ammodramus henslowii*		

wintering individuals (not flocks) found in weedy fields or cut-over areas where lots of bunch grasses occur along with vines and brambles; a key component is bare ground for running/walking

Interior Least Tern	*Sterna antillarum athalassos*	LE	E

subspecies is listed only when inland (more than 50 miles from a coastline); nests along sand and gravel bars within braided streams, rivers; also know to nest on man-made structures (inland beaches, wastewater treatment plants, gravel mines, etc); eats small fish and crustaceans, when breeding forages within a few hundred feet of colony

BELL COUNTY

BIRDS

		Federal Status	State Status
Mountain Plover	*Charadrius montanus*		

breeding: nests on high plains or shortgrass prairie, on ground in shallow depression; nonbreeding: shortgrass plains and bare, dirt (plowed) fields; primarily insectivorous

Peregrine Falcon	*Falco peregrinus*	DL	T

both subspecies migrate across the state from more northern breeding areas in US and Canada to winter along coast and farther south; subspecies (F. p. anatum) is also a resident breeder in west Texas; the two subspecies' listing statuses differ, F.p. tundrius is no longer listed in Texas; but because the subspecies are not easily distinguishable at a distance, reference is generally made only to the species level; see subspecies for habitat.

Sprague's Pipit	*Anthus spragueii*	C

only in Texas during migration and winter, mid September to early April; short to medium distance, diurnal migrant; strongly tied to native upland prairie, can be locally common in coastal grasslands, uncommon to rare further west; sensitive to patch size and avoids edges.

Western Burrowing Owl *Athene cunicularia hypugaea*

open grasslands, especially prairie, plains, and savanna, sometimes in open areas such as vacant lots near human habitation or airports; nests and roosts in abandoned burrows

Whooping Crane	*Grus americana*	LE	E

potential migrant via plains throughout most of state to coast; winters in coastal marshes of Aransas, Calhoun, and Refugio counties

FISHES

		Federal Status	State Status
Guadalupe bass	*Micropterus treculii*		

endemic to perennial streams of the Edward's Plateau region; introduced in Nueces River system

Smalleye shiner	*Notropis buccula*	C

endemic to upper Brazos River system and its tributaries (Clear Fork and Bosque); apparently introduced into adjacent Colorado River drainage; medium to large prairie streams with sandy substrate and turbid to clear warm water; presumably eats small aquatic invertebrates

MAMMALS

		Federal Status	State Status
Cave myotis bat	*Myotis velifer*		

colonial and cave-dwelling; also roosts in rock crevices, old buildings, carports, under bridges, and even in abandoned Cliff Swallow (Hirundo pyrrhonota) nests; roosts in clusters of up to thousands of individuals; hibernates in limestone caves of Edwards Plateau and gypsum cave of Panhandle during winter; opportunistic insectivore

Plains spotted skunk *Spilogale putorius interrupta*

catholic; open fields, prairies, croplands, fence rows, farmyards, forest edges, and woodlands; prefers wooded, brushy areas and tallgrass prairie

BELL COUNTY

MAMMALS

		Federal Status	State Status
Red wolf	*Canis rufus*	LE	E

extirpated; formerly known throughout eastern half of Texas in brushy and forested areas, as well as coastal prairies

MOLLUSKS

		Federal Status	State Status
False spike mussel	*Quadrula mitchelli*		T

possibly extirpated in Texas; probably medium to large rivers; substrates varying from mud through mixtures of sand, gravel and cobble; one study indicated water lilies were present at the site; Rio Grande, Brazos, Colorado, and Guadalupe (historic) river basins

Smooth pimpleback	*Quadrula houstonensis*		T

small to moderate streams and rivers as well as moderate size reservoirs; mixed mud, sand, and fine gravel, tolerates very slow to moderate flow rates, appears not to tolerate dramatic water level fluctuations, scoured bedrock substrates, or shifting sand bottoms, lower Trinity (questionable), Brazos, and Colorado River basins

Texas fawnsfoot	*Truncilla macrodon*		T

little known; possibly rivers and larger streams, and intolerant of impoundment; flowing rice irrigation canals, possibly sand, gravel, and perhaps sandy-mud bottoms in moderate flows; Brazos and Colorado River basins

REPTILES

		Federal Status	State Status
Texas garter snake	*Thamnophis sirtalis annectens*		

wet or moist microhabitats are conducive to the species occurrence, but is not necessarily restricted to them; hibernates underground or in or under surface cover; breeds March-August

Texas horned lizard	*Phrynosoma cornutum*		T

open, arid and semi-arid regions with sparse vegetation, including grass, cactus, scattered brush or scrubby trees; soil may vary in texture from sandy to rocky; burrows into soil, enters rodent burrows, or hides under rock when inactive; breeds March-September

PLANTS

		Federal Status	State Status
Texabama croton	*Croton alabamensis var texensis*		

Texas endemic; in duff-covered loamy clay soils on rocky slopes in forested, mesic limestone canyons; locally abundant on deeper soils on small terraces in canyon bottoms, often forming large colonies and dominating the shrub layer; scattered individuals are occasionally on sunny margins of such forests; also found in contrasting habitat of deep, friable soils of limestone uplands, mostly in the shade of evergreen woodland mottes; flowering late February-March; fruit maturing and dehiscing by early June

TOM GREEN COUNTY

BIRDS

		Federal Status	State Status
American Peregrine Falcon	*Falco peregrinus anatum*	DL	T

year-round resident and local breeder in west Texas, nests in tall cliff eyries; also, migrant across state from more northern breeding areas in US and Canada, winters along coast and farther south; occupies wide range of habitats during migration, including urban, concentrations along coast and barrier islands; low-altitude migrant, stopovers at leading landscape edges such as lake shores, coastlines, and barrier islands.

Arctic Peregrine Falcon	*Falco peregrinus tundrius*	DL	

migrant throughout state from subspecies' far northern breeding range, winters along coast and farther south; occupies wide range of habitats during migration, including urban, concentrations along coast and barrier islands; low-altitude migrant, stopovers at leading landscape edges such as lake shores, coastlines, and barrier islands.

Baird's Sparrow	*Ammodramus bairdii*		

shortgrass prairie with scattered low bushes and matted vegetation; mostly migratory in western half of State, though winters in Mexico and just across Rio Grande into Texas from Brewster through Hudspeth counties

Bald Eagle	*Haliaeetus leucocephalus*	DL	T

found primarily near rivers and large lakes; nests in tall trees or on cliffs near water; communally roosts, especially in winter; hunts live prey, scavenges, and pirates food from other birds

Black-capped Vireo	*Vireo atricapilla*	LE	E

oak-juniper woodlands with distinctive patchy, two-layered aspect; shrub and tree layer with open, grassy spaces; requires foliage reaching to ground level for nesting cover; return to same territory, or one nearby, year after year; deciduous and broad-leaved shrubs and trees provide insects for feeding; species composition less important than presence of adequate broad-leaved shrubs, foliage to ground level, and required structure; nesting season March-late summer

Common Black-Hawk	*Buteogallus anthracinus*		T

cottonwood-lined rivers and streams; willow tree groves on the lower Rio Grande floodplain; formerly bred in south Texas

Ferruginous Hawk	*Buteo regalis*		

open country, primarily prairies, plains, and badlands; nests in tall trees along streams or on steep slopes, cliff ledges, river-cut banks, hillsides, power line towers; year-round resident in northwestern high plains, wintering elsewhere throughout western 2/3 of Texas

Interior Least Tern	*Sterna antillarum athalassos*	LE	E

subspecies is listed only when inland (more than 50 miles from a coastline); nests along sand and gravel bars within braided streams, rivers; also know to nest on man-made structures (inland beaches, wastewater treatment plants, gravel mines, etc); eats small fish and crustaceans, when breeding forages within a few hundred feet of colony

Mountain Plover	*Charadrius montanus*		

TOM GREEN COUNTY

BIRDS

Federal Status State Status

breeding: nests on high plains or shortgrass prairie, on ground in shallow depression; nonbreeding: shortgrass plains and bare, dirt (plowed) fields; primarily insectivorous

Peregrine Falcon *Falco peregrinus* DL T

both subspecies migrate across the state from more northern breeding areas in US and Canada to winter along coast and farther south; subspecies (F. p. anatum) is also a resident breeder in west Texas; the two subspecies' listing statuses differ, F.p. tundrius is no longer listed in Texas; but because the subspecies are not easily distinguishable at a distance, reference is generally made only to the species level; see subspecies for habitat.

Snowy Plover *Charadrius alexandrinus*

formerly an uncommon breeder in the Panhandle; potential migrant; winter along coast

Sprague's Pipit *Anthus spragueii* C

only in Texas during migration and winter, mid September to early April; short to medium distance, diurnal migrant; strongly tied to native upland prairie, can be locally common in coastal grasslands, uncommon to rare further west; sensitive to patch size and avoids edges.

Western Burrowing Owl *Athene cunicularia hypugaea*

open grasslands, especially prairie, plains, and savanna, sometimes in open areas such as vacant lots near human habitation or airports; nests and roosts in abandoned burrows

Western Snowy Plover *Charadrius alexandrinus nivosus*

uncommon breeder in the Panhandle; potential migrant; winter along coast

Whooping Crane *Grus americana* LE E

potential migrant via plains throughout most of state to coast; winters in coastal marshes of Aransas, Calhoun, and Refugio counties

FISHES

Federal Status State Status

Guadalupe bass *Micropterus treculii*

endemic to perennial streams of the Edward's Plateau region; introduced in Nueces River system

Headwater catfish *Ictalurus lupus*

originally throughout streams of the Edwards Plateau and the Rio Grande basin, currently limited to Rio Grande drainage, including Pecos River basin; springs, and sandy and rocky riffles, runs, and pools of clear creeks and small rivers

INSECTS

Federal Status State Status

A mayfly *Allenhyphes michaeli*

TX Hill Country; mayflies distinguished by aquatic larval stage; adult stage generally found in shoreline vegetation

TOM GREEN COUNTY

MAMMALS

		Federal Status	State Status
Black-tailed prairie dog	*Cynomys ludovicianus*		

dry, flat, short grasslands with low, relatively sparse vegetation, including areas overgrazed by cattle; live in large family groups

Cave myotis bat	*Myotis velifer*		

colonial and cave-dwelling; also roosts in rock crevices, old buildings, carports, under bridges, and even in abandoned Cliff Swallow (Hirundo pyrrhonota) nests; roosts in clusters of up to thousands of individuals; hibernates in limestone caves of Edwards Plateau and gypsum cave of Panhandle during winter; opportunistic insectivore

Gray wolf	*Canis lupus*	LE	E

extirpated; formerly known throughout the western two-thirds of the state in forests, brushlands, or grasslands

Red wolf	*Canis rufus*	LE	E

extirpated; formerly known throughout eastern half of Texas in brushy and forested areas, as well as coastal prairies

MOLLUSKS

		Federal Status	State Status
Creeper (squawfoot)	*Strophitus undulatus*		

small to large streams, prefers gravel or gravel and mud in flowing water; Colorado, Guadalupe, San Antonio, Neches (historic), and Trinity (historic) River basins

False spike mussel	*Quadrula mitchelli*		T

possibly extirpated in Texas; probably medium to large rivers; substrates varying from mud through mixtures of sand, gravel and cobble; one study indicated water lilies were present at the site; Rio Grande, Brazos, Colorado, and Guadalupe (historic) river basins

Texas fatmucket	*Lampsilis bracteata*		T

streams and rivers on sand, mud, and gravel substrates; intolerant of impoundment; broken bedrock and course gravel or sand in moderately flowing water; Colorado and Guadalupe River basins

Texas fawnsfoot	*Truncilla macrodon*		T

little known; possibly rivers and larger streams, and intolerant of impoundment; flowing rice irrigation canals, possibly sand, gravel, and perhaps sandy-mud bottoms in moderate flows; Brazos and Colorado River basins

Texas pimpleback	*Quadrula petrina*		T

mud, gravel and sand substrates, generally in areas with slow flow rates; Colorado and Guadalupe river basins

REPTILES

		Federal Status	State Status
Concho water snake	*Nerodia paucimaculata*	LT-PDL	

TOM GREEN COUNTY

REPTILES

Federal Status State Status

Texas endemic; Concho and Colorado river systems; shallow fast-flowing water with a rocky or gravelly substrate preferred; adults can be found in deep water with mud bottoms; breeding March-October

Spot-tailed earless lizard *Holbrookia lacerata*

central and southern Texas and adjacent Mexico; moderately open prairie-brushland; fairly flat areas free of vegetation or other obstructions, including disturbed areas; eats small invertebrates; eggs laid underground

Texas horned lizard *Phrynosoma cornutum* T

open, arid and semi-arid regions with sparse vegetation, including grass, cactus, scattered brush or scrubby trees; soil may vary in texture from sandy to rocky; burrows into soil, enters rodent burrows, or hides under rock when inactive; breeds March-September

PLANTS

Federal Status State Status

Hill Country wild-mercury *Argythamnia aphoroides*

Texas endemic; mostly in bluestem-grama grasslands associated with plateau live oak woodlands on shallow to moderately deep clays and clay loams over limestone on rolling uplands, also in partial shade of oak-juniper woodlands in gravelly soils on rocky limestone slopes; flowering April-May with fruit persisting until midsummer

APPENDIX B
AIR EMISSIONS MODEL

CALCULATION SHEET-COMBUSTIBLE EMISSIONS-CONSTRUCTION-ALTERNATIVE 3

Assumptions for Combustible Emissions					
Type of Construction Equipment	Num. of Units	HP Rated	Hrs/day	Days/yr	Total hp-hrs
Water Truck	1	300	8	20	48000
Diesel Road Compactors	0	100	8	20	0
Diesel Dump Truck	0	300	8	20	0
Diesel Excavator	0	300	8	20	0
Diesel Hole Trenchers	0	175	8	20	0
Diesel Bore/Drill Rigs	0	300	8	20	0
Diesel Cement & Mortar Mixers	0	300	8	20	0
Diesel Cranes	1	175	8	20	28000
Diesel Graders	0	300	8	20	0
Diesel Tractors/Loaders/Backhoes	1	100	8	20	16000
Diesel Bull Dozers	0	300	8	20	0
Diesel Front End Loaders	0	300	8	20	0
Diesel Fork Lifts	1	100	8	20	16000
Diesel Generator Set	2	40	8	20	12800

Emission Factors							
Type of Construction Equipment	VOC g/hp-hr	CO g/hp-hr	NOx g/hp-hr	PM-10 g/hp-hr	PM-2.5 g/hp-hr	SO2 g/hp-hr	CO2 g/hp-hr
Water Truck	0.440	2.070	5.490	0.410	0.400	0.740	536.000
Diesel Road Compactors	0.370	1.480	4.900	0.340	0.330	0.740	536.200
Diesel Dump Truck	0.440	2.070	5.490	0.410	0.400	0.740	536.000
Diesel Excavator	0.340	1.300	4.600	0.320	0.310	0.740	536.300
Diesel Trenchers	0.510	2.440	5.810	0.460	0.440	0.740	535.800
Diesel Bore/Drill Rigs	0.600	2.290	7.150	0.500	0.490	0.730	529.700
Diesel Cement & Mortar Mixers	0.610	2.320	7.280	0.480	0.470	0.730	529.700
Diesel Cranes	0.440	1.300	5.720	0.340	0.330	0.730	530.200
Diesel Graders	0.350	1.360	4.730	0.330	0.320	0.740	536.300
Diesel Tractors/Loaders/Backhoes	1.850	8.210	7.220	1.370	1.330	0.950	691.100
Diesel Bull Dozers	0.360	1.380	4.760	0.330	0.320	0.740	536.300
Diesel Front End Loaders	0.380	1.550	5.000	0.350	0.340	0.740	536.200
Diesel Fork Lifts	1.980	7.760	8.560	1.390	1.350	0.950	690.800
Diesel Generator Set	1.210	3.760	5.970	0.730	0.710	0.810	587.300

CALCULATION SHEET-COMBUSTIBLE EMISSIONS-CONSTRUCTION-ALTERNATIVE 3

Emission factors (EF) were generated from the NONROAD2005 model for the 2006 calendar year. The VOC EFs includes exhaust and evaporative emissions. The VOC evaporative components included in the NONROAD2005 model are diurnal, hotsoak, running loss, tank permeation, hose permeation, displacement, and spillage. The construction equipment age distribution in the NONROAD2005 model is based on the population in U.S. for the 2006 calendar year.

Emission Calculations							
Type of Construction Equipment	VOC tons/yr	CO tons/yr	NOx tons/yr	PM-10 tons/yr	PM-2.5 tons/yr	SO2 tons/yr	CO2 tons/yr
Water Truck	0.023	0.109	0.290	0.022	0.021	0.039	28.352
Diesel Road Paver	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Diesel Dump Truck	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Diesel Excavator	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Diesel Hole Cleaners\Trenchers	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Diesel Bore/Drill Rigs	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Diesel Cement & Mortar Mixers	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Diesel Cranes	0.014	0.040	0.176	0.010	0.010	0.023	16.360
Diesel Graders	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Diesel Tractors/Loaders/Backhoes	0.033	0.145	0.127	0.024	0.023	0.017	12.185
Diesel Bull Dozers	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Diesel Front End Loaders	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Diesel Aerial Lifts	0.035	0.137	0.151	0.025	0.024	0.017	12.180
Diesel Generator Set	0.017	0.053	0.084	0.010	0.010	0.011	8.284
Total Emissions	**0.121**	**0.484**	**0.829**	**0.091**	**0.089**	**0.107**	**77.362**

Conversion factors	
Grams to tons	1.102E-06

CALCULATION SHEET-TRANSPORTATION COMBUSTIBLE EMISSIONS-CONSTRUCTION-ALTERNATIVE 3

Construction Worker Personal Vehicle Commuting to Construction Site-Passenger and Light Duty Trucks									
	Emission Factors		Assumptions				Results by Pollutant		
Pollutants	Passenger Cars g/mile	Pick-up Trucks, SUVs g/mile	Mile/day	Day/yr	Number of cars	Number of trucks	Total Emissions Cars tns/yr	Total Emissions Trucks tns/yr	Total tns/yr
VOCs	1.36	1.61	60	7	1	3	0.00	0.00	0.00
CO	12.4	15.7	60	7	1	3	0.01	0.02	0.03
NOx	0.95	1.22	60	7	1	3	0.00	0.00	0.00
PM-10	0.0052	0.0065	60	7	1	3	0.00	0.00	0.00
PM 2.5	0.0049	0.006	60	7	1	3	0.00	0.00	0.00
CO2	369	511	60	7	1	3	0.17	0.71	0.88

Heavy Duty Trucks Delivery Supply Trucks to Construction Site									
	Emission Factors		Assumptions				Results by Pollutant		
Pollutants	10,000-19,500 lb Delivery Truck	33,000-60,000 lb semi trailer rig	Mile/day	Day/yr	Number of trucks	Number of trucks	Total Emissions Cars tns/yr	Total Emissions Trucks tns/yr	Total tns/yr
VOCs	0.29	0.55	60	240	0	0	-	0.00	-
CO	1.32	3.21	60	240	0	0	-	0.00	-
NOx	4.97	12.6	60	240	0	0	-	0.00	-
PM-10	0.12	0.33	60	240	0	0	-	0.00	-
PM 2.5	0.13	0.36	60	240	0	0	-	0.00	-
CO2	536	536	60	240	0	0	-	0.00	-
Daily Commute New Staff Associated with Proposed Action									
	Emission Factors		Assumptions				Results by Pollutant		
Pollutants	Passenger Cars g/mile	Pick-up Trucks, SUVs g/mile	Mile/day	Day/yr	Number of Cars	Number of trucks	Total Emissions cars tns/yr	Total Emissions Trucks tns/yr	Total tns/yr
VOCs	1.36	1.61	40				-	0.00	-
CO	12.4	15.7	40				-	0.00	-
NOx	0.95	1.22	40				-	0.00	-
PM-10	0.0052	0.0065	40				-	0.00	-
PM 2.5	0.0049	0.006	40				-	0.00	-
CO2	369	511	40				-	0.00	-

Truck Emission Factor Source: MOBILE6.2 USEPA 2005 Emission Facts: Average annual emissions and fuel consumption for gasoline-fueled passenger cars and light trucks. EPA 420-F-05-022 August 2005. Emission rates were generated using MOBILE.6 highway.

CALCULATION SHEET-TRANSPORTATION COMBUSTIBLE EMISSIONS-CONSTRUCTION-ALTERNATIVE 3

Conversion factor:	gms to tons
	0.000001102

Carbon Equivalents	Conversion Factor
N2O or NOx	311
Methane or VOCs	25

Source: EPA 2010 Reference, Tables and Conversions, Inventory of U.S. Greenhouse Gas Emissions and Sinks; http://www.epa.gov/climatechange/emissions/usinventoryreport.html

CARBON EQUIVALENTS

Construction Commuters	Conversion	Emissions CO2 tons/yr	Total CO2
VOCs	25	0.07	
NOx	311	0.00	
Total		0.07	0.95

Delivery Trucks	Conversion	Emissions CO2 tons/yr	Total CO2
VOCs	25	-	
NOx	311	-	
Total		-	-

Kirtland AFB staff and Students	Conversion	Emissions CO2 tons/yr	Total CO2
VOCs	25	-	
NOx	311	-	
Total		-	-

CALCULATION SHEET-FUGITIVE DUST-CONSTRUCTION-ALTERNATIVE 3

Construction Fugitive Dust Emissions

Construction Fugitive Dust Emission Factors

	Emission Factor	Units	Source
General Construction Activities	0.19	ton PM10/acre-month	MRI 1996; EPA 2001; EPA 2006
New Road Construction	0.42	ton PM10/acre-month	MRI 1996; EPA 2001; EPA 2006

PM2.5 Emissions

PM2.5 Multiplier	0.10	(10% of PM10 emissions assumed to be PM2.5)	EPA 2001; EPA 2006
Control Efficiency	0.50	(assume 50% control efficiency for PM10 and PM2.5 emissions)	EPA 2001; EPA 2006

Project Assumptions

Construction Area (0.19 ton PM10/acre-month)

			Conversion Factors	
Duration of Construction Project	2	months	0.000022957	acres per feet
Length	0	miles	5280	feet per mile
Length (converted)	0	feet		
Width	0	feet		
Area	1.00	acres		

Staging Areas

Duration of Construction Project	0	months
Length		miles
Length (converted)		feet
Width		feet
Area	0.00	acres

	Project Emissions (tons/year)			
	PM10 uncontrolled	PM10 controlled	PM2.5 uncontrolled	PM2.5 controlled
Construction Area (0.19 ton PM10/ac	0.38	0.19	0.04	0.02
Staging Areas	0.00	0.00	0.00	0.00
Total	**0.38**	**0.19**	**0.04**	**0.02**

References:

EPA 2001. *Procedures Document for National Emissions Inventory, Criteria Air Pollutants, 1985-1999.* EPA-454/R-01-006. Office of Air Quality Planning and Standards, United States Environmental Protection Agency. March 2001.

EPA 2006. *Documentation for the Final 2002 Nonpoint Sector (Feb 06 version) National Emission Inventory for Criteria and Hazardous Air Pollutants.* Prepared for: Emissions Inventory and Analysis Group (C339-02) Air Quality Assessment Division Office of Air Quality Planning and Standards, United States Environmental Protection Agency. July 2006.

MRI 1996. *Improvement of Specific Emission Factors (BACM Project No. 1).* Midwest Research Institute (MRI). Prepared for the California South Coast Air Quality Management District, March 29, 1996.

Construction Fugitive Dust Emission Factors

General Construction Activities Emission Factor

0.19 ton PM10/acre-month Source: MRI 1996; EPA 2001; EPA 2006

The area-based emission factor for construction activities is based on a study completed by the Midwest Research Institute (MRI) Improvement of Specific Emission Factors (BACM Project No. 1), March 29, 1996. The MRI study evaluated seven construction projects in Nevada and California (Las Vegas, Coachella Valley, South Coast Air Basin, and the San Joaquin Valley). The study determined an average emission factor of 0.11 ton PM10/acre-month for sites without large-scale cut/fill operations. A worst-case emission factor of 0.42 ton PM10/acre-month was calculated for sites with active large-scale earth moving operations. The monthly emission factors are based on 168 work-hours per month (MRI 1996). A subsequent MRI Report in 1999, Estimating Particulate Matter Emissions from Construction Operations, calculated the 0.19 ton PM10/acre-month emission factor by applying 25% of the large-scale earthmoving emission factor (0.42 ton PM10/acre-month) and 75% of the average emission factor (0.11 ton PM10/acre-month).

The 0.19 ton PM10/acre-month emission factor is referenced by the EPA for non-residential construction activities in recent procedures documents for the National Emission Inventory (EPA 2001; EPA 2006). The 0.19 ton PM10/acre-month emission factor represents a refinement of EPA's original AP-42 area-based total suspended particle (TSP) emission factor in Section 13.2.3 Heavy Construction Operations. In addition to the EPA, this methodology is also supported by the South Coast Air Quality Management District and the Western Regional Air Partnership (WRAP) which is funded by the EPA and is administered jointly by the Western Governor's Association and the National Tribal Environmental Council. The emission factor is assumed to encompass a variety of non-residential construction activities including building construction (commercial, industrial, institutional, governmental), public works, and travel on unpaved roads. The EPA National Emission Inventory documentation assumes that the emission factors are uncontrolled and recommends a control efficiency of 50% for PM10 and PM2.5 in PM nonattainment areas.

New Road Construction Emission Factor

0.42 ton PM10/acre-month Source: MRI 1996; EPA 2001; EPA 2006

The emission factor for new road construction is based on the worst-case conditions emission factor from the MRI 1996 study described above (0.42 tons PM10/acre-month). It is assumed that road construction involves extensive earthmoving and heavy construction vehicle travel resulting in emissions that are higher than other general construction projects. The 0.42 ton PM10/acre-month emission factor for road construction is referenced in recent procedures documents for the EPA National Emission Inventory (EPA 2001; EPA 2006).

PM2.5 Multiplier **0.10**

PM2.5 emissions are estimated by applying a particle size multiplier of 0.10 to PM10 emissions. This methodology is consistent with the procedures documents for the National Emission Inventory (EPA 2006).

Control Efficiency for PM10 and PM2.5 **0.50**

The EPA National Emission Inventory documentation recommends a control efficiency of 50% for PM10 and PM2.5 in PM nonattainment areas. Wetting controls will be applied during project construction (EPA 2006).

References:

EPA 2001. *Procedures Document for National Emissions Inventory, Criteria Air Pollutants, 1985-1999.* EPA-454/R-01-006. Office of Air Quality Planning and Standards, United States Environmental Protection Agency. March 2001.

EPA 2006. *Documentation for the Final 2002 Nonpoint Sector (Feb 06 version) National Emission Inventory for Criteria and Hazardous Air Pollutants.* Prepared for: Emissions Inventory and Analysis Group (C339-02) Air Quality Assessment Division Office of Air Quality Planning and Standards, United States Environmental Protection Agency. July 2006.

MRI 1996. *Improvement of Specific Emission Factors (BACM Project No. 1).* Midwest Research Institute (MRI). Prepared for the California South Coast Air Quality Management District, March 29, 1996.

CALCULATION SHEET-SUMMARY OF EMISSIONS-ALTERNATIVE 3

Alternative 1 Construction Emissions for Criteria Pollutants (tons per year)									
Emission Source	VOC	CO	NOx	PM-10	PM-2.5	SO2	CO2	CO2 Equivalents	Total CO2
Combustible Emissions	0.12	0.48	0.83	0.09	0.09	0.11	77.36	260.96	338.32
Construction Site-Fugitive PM-10	NA	NA	NA	0.19	0.02	NA	NA	NA	NA
Construction Workers Commuter & Trucking	0.00	0.03	0.00	0.00	0.00	NA	0.88	0.74	1.62
Total emissions-CONSTRUCTION	**0.12**	**0.51**	**0.83**	**0.28**	**0.11**	**0.11**	**78**	**262**	**340**
De minimis Threshold (1)	100	100	100	100	100	100	NA	NA	27,557

1. Lafayette Parish is in attainment for all NAAQS.

Carbon Equivalents	Conversion Factor
N2O or NOx	311
Methane or VOCs	25

Source: EPA 2010 Reference, Tables and Conversions, Inventory of U.S. Greenhouse Gas Emissions and Sinks; http://www.epa.gov/climatechange/emissions/usinventoryreport.html

APPENDIX C
CORRESPONDENCE

DEPARTMENT OF THE ARMY
UNITED STATES ARMY AVIATION AND MISSILE COMMAND
AVIATION FIELD MAINTENANCE ACTIVITY
1202 RIO BLVD
KILLEEN TX 76543

4 August 2011

Integrated Materiel Management Center

Al Armendariz
Mail Code 6MD-A
Environmental Protection Agency
1445 Ross Ave, Suite 1200
Dallas, TX 75202

Dear Mr. Armendariz:

The United States Army Aviation and Missile Command (AMCOM) is preparing an Environmental Assessment (EA) to evaluate the potential effects, both adverse and beneficial, on the human and natural environment resulting from the proposed renewal of three leases at airports in Killeen, San Angelo, and Temple, Texas (see Figures 1 to 4). Additionally, it is proposed that a modular building be built within the current facility footprint at the Killeen site to support the blade repair program. At the Temple site there is a proposal to consolidate avionics repair and supply warehouse operations into an existing hangar complex closer to the AMCOM campus to better facilitate these operations. Facilities at these three airports are used to repair and maintain helicopters, and the end of the lease term is approaching.

Alternatives considered include a No Action Alternative, consolidation of the three existing lease sites into a single existing leased location, consolidation of the three existing operations into Fort Hood military installation, and engagement in a month-to-month lease at each existing site.

The project areas are in Bell and Tom Green counties, and both counties are in compliance with NAAQS. Under the Proposed Action there would be a temporary increase in air emissions in Bell County during construction; however, there would be no long-term increases in air emissions or hazardous wastes.

AMCOM would like to extend an invitation to your agency to identify any specific information, issues, or concerns that should be included in the EA. We intend to provide your agency with a copy of the Draft EA once the document is complete. Please inform us if additional copies are needed and/or if someone within your agency other than you should receive the Draft EA. For additional information or questions, please contact Major David L. Mozley at 254-953-2854 or via email at david.mozley@us.army.mil.

Sincerely,

Donald R. Nitti
COL, US Army
Director, Maintenance Directorate

Enclosure

DEPARTMENT OF THE ARMY
UNITED STATES ARMY AVIATION AND MISSILE COMMAND
AVIATION FIELD MAINTENANCE ACTIVITY
1202 RIO BLVD
KILLEEN TX 76543

4 August 2011

Integrated Materiel Management Center

Mark Wolfe
State Historic Preservation Officer
Texas Historical Commission
PO Box 12276
Austin, TX 78711

Dear Mr. Wolfe:

The United States Army Aviation and Missile Command (AMCOM) is preparing an Environmental Assessment (EA) to evaluate the potential effects, both adverse and beneficial, on the human and natural environment resulting from the proposed renewal of three leases at airports in Killeen, San Angelo, and Temple, Texas (see Figures 1 to 4). Additionally, it is proposed that a modular building be built within the current facility footprint at the Killeen site to support the blade repair program. At the Temple site there is a proposal to consolidate avionics repair and supply warehouse operations into an existing hangar complex closer to the AMCOM campus to better facilitate these operations. Facilities at these three airports are used to repair and maintain helicopters, and the end of the lease term is approaching.

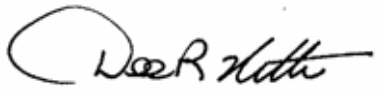
Alternatives considered include a No Action Alternative, consolidation of the three existing lease sites into a single existing leased location, consolidation of the three existing operations into Fort Hood military installation, and engagement in a month-to-month lease at each existing site.

An archival records search and literature review for previous investigations and previously recorded sites was performed for the area within 1 mile of each project site. That search revealed 11 previously conducted cultural resource investigations and eight identified archaeological sites in the vicinity of the Killeen project area. The majority of the recorded archaeological sites consisted of scatters of lithic debitage. Around the San Angelo site the records search identified two previous cultural resources investigations and four known archaeological sites. There were three previously conducted cultural resources investigation near the Temple site and one historic Texas Cemetery, Bellwood Memorial Park. Two previously identified archaeological sites occur within 1 mile of the Temple site.

No previously recorded archaeological sites or cultural resources, including buildings, structures, objects, sites, or districts, were within the boundaries of any project areas. No sites recommended for the National Register of Historic Places were identified within a 0.5 mile visual Area of Proposed Effect around each site. The proposed building at the Killeen site is relatively small compared to existing structures in the project area so there is little potential for adverse visual impacts. Because all project areas are paved and no ground disturbance would occur, no potential impacts on archaeological resources are anticipated.

AMCOM would like to extend an invitation to your agency to identify any specific information, issues, or concerns that should be included in the EA. We intend to provide your agency with a copy of the Draft EA once the document is complete. Please inform us if additional copies are needed and/or if someone within your agency other than you should receive the Draft EA. For additional information or questions, please contact Major David L. Mozley at 254-953-2854 or via email at david.mozley@us.army.mil.

Sincerely,



Donald R. Nitti
COL, US Army
Director, Maintenance Directorate

Enclosure

DEPARTMENT OF THE ARMY
UNITED STATES ARMY AVIATION AND MISSILE COMMAND
AVIATION FIELD MAINTENANCE ACTIVITY
1202 RIO BLVD
KILLEEN TX 76543

4 August 2011

Integrated Materiel Management Center

Carolyn Runyon
Texas Commission on Environmental Quality
P.O. Box 13087
Austin, TX 78711-3087

Dear Mrs. Runyon:

The United States Army Aviation and Missile Command (AMCOM) is preparing an Environmental Assessment (EA) to evaluate the potential effects, both adverse and beneficial, on the human and natural environment resulting from the proposed renewal of three leases at airports in Killeen, San Angelo, and Temple, Texas (see Figures 1 to 4). Additionally, it is proposed that a modular building be built within the current facility footprint at the Killeen site to support the blade repair program. At the Temple site there is a proposal to consolidate avionics repair and supply warehouse operations into an existing hangar complex closer to the AMCOM campus to better facilitate these operations. Facilities at these three airports are used to repair and maintain helicopters, and the end of the lease term is approaching.

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AMCOM would like to extend an invitation to your agency to identify any specific information, issues, or concerns that should be included in the EA. We intend to provide your agency with a copy of the Draft EA once the document is complete. Please inform us if additional copies are needed and/or if someone within your agency other than you should receive the Draft EA. If you have any questions, please contact Major David L. Mozley at 254-953-2854 or via email at david.mozley@us.army.mil.

Sincerely,

Donald R. Nitti
COL, US Army
Director, Maintenance Directorate

Enclosure

DEPARTMENT OF THE ARMY
UNITED STATES ARMY AVIATION AND MISSILE COMMAND
AVIATION FIELD MAINTENANCE ACTIVITY
1202 RIO BLVD
KILLEEN TX 76543

4 August 2011

Integrated Materiel Management Center

Tom Heyger
Texas Parks and Wildlife Department
4200 Smith School Road
Austin, TX 78744

Dear Mr. Heyger,

The United States Army Aviation and Missile Command (AMCOM) is preparing an Environmental Assessment (EA) to evaluate the potential effects, both adverse and beneficial, on the human and natural environment resulting from the proposed renewal of three leases at airports in Killeen, San Angelo, and Temple, Texas (see Figures 1 to 4). Additionally, it is proposed that a modular building be built within the current facility footprint at the Killeen site to support the blade repair program. At the Temple site there is a proposal to consolidate avionics repair and supply warehouse operations into an existing hangar complex closer to the AMCOM campus to better facilitate these operations. Facilities at these three airports are used to repair and maintain helicopters, and the end of the lease term is approaching.

Alternatives considered include a No Action Alternative, consolidation of the three existing lease sites into a single existing leased location, consolidation of the three existing operations into Fort Hood military installation, and engagement in a month-to-month lease at each existing site.

The project areas are in Bell and Tom Green Counties. State-listed species that are known to occur in those counties are shown in the enclosed lists. No habitat for any listed species occurs in any of the project areas, which are paved and part of larger airport complexes. Because there would be no change in existing operations and no potential habitat for listed species, the Proposed Action would have no impact on any listed species.

AMCOM would like to extend an invitation to your agency to identify any specific information, issues, or concerns that should be included in the EA. We intend to provide your agency with a copy of the Draft EA once the document is complete. Please inform us if additional copies are needed and/or if someone within your agency other than you should receive the Draft EA. For additional information or questions, please contact Major David L. Mozley at 254-953-2854 or via email at david.mozley@us.army.mil.

Sincerely,

Donald R. Nitti
COL, US Army
Director, Maintenance Directorate

Enclosure

DEPARTMENT OF THE ARMY
UNITED STATES ARMY AVIATION AND MISSILE COMMAND
AVIATION FIELD MAINTENANCE ACTIVITY
1202 RIO BLVD
KILLEEN TX 76543

4 August 2011

Integrated Materiel Management Center

Adam Zerrenner
Field Supervisor
U.S. Fish and Wildlife Service
10711 Burnet Road, Suite 200
Austin, Texas 78758

Dear Mr. Zerrenner:

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UNITED STATES ARMY AVIATION AND MISSILE COMMAND
AVIATION FIELD MAINTENANCE ACTIVITY
1202 RIO BLVD
KILLEEN TX 76543

1 August 2011

Integrated Materiel Management Center

Brenda Edwards, Chair Person
Caddo Nation of Oklahoma
507 NE 1 or 5 Miles W of City
Binger, OK 73009

Dear Ms. Edwards,

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Sincerely,

FOR

Donald R. Nitti
COL, US Army
Director, Maintenance Directorate

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UNITED STATES ARMY AVIATION AND MISSILE COMMAND
AVIATION FIELD MAINTENANCE ACTIVITY
1202 RIO BLVD
KILLEEN TX 76543

1 August 2011

Integrated Materiel Management Center

Terry Rambler, Chairman
San Carlos Apache Tribe
PO Box 0
San Carlos, AZ 85550

Dear Mr. Rambler,

The United States Army Aviation and Missile Command (AMCOM) is preparing an Environmental Assessment (EA) to evaluate the potential effects, both adverse and beneficial, on the human and natural environment resulting from the proposed renewal of three leases at airports in Killeen, San Angelo, and Temple, Texas (see Figures 1 to 4). Additionally, it is proposed that a modular building be built within the current facility footprint at the Killeen site to support the blade repair program. At the Temple site there is a proposal to consolidate avionics repair and supply warehouse operations into an existing hangar complex closer to the AMCOM campus to better facilitate these operations. Facilities at these three airports are used to repair and maintain helicopters, and the end of the lease term is approaching.

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Sincerely,

FOR

Donald R. Nitti
COL, US Army
Director, Maintenance Directorate

Enclosure

DEPARTMENT OF THE ARMY
UNITED STATES ARMY AVIATION AND MISSILE COMMAND
AVIATION FIELD MAINTENANCE ACTIVITY
1202 RIO BLVD
KILLEEN TX 76543

1 August 2011

Integrated Materiel Management Center

Stratford Williams, President
Wichita and Affiliated Tribes
PO Box 729
Anadarko, OK 73005

Dear Mr. Williams,

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For

Donald R. Nitti
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Director, Maintenance Directorate

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DEPARTMENT OF THE ARMY
UNITED STATES ARMY AVIATION AND MISSILE COMMAND
AVIATION FIELD MAINTENANCE ACTIVITY
1202 RIO BLVD
KILLEEN TX 76543

1 August 2011

Integrated Materiel Management Center

Louis Maynahonah, Chairman
Apache Tribe of Oklahoma
511 E. Colorado
Anadarko, OK 73005

Dear Mr. Maynahonah,

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Donald R. Nitti
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AVIATION FIELD MAINTENANCE ACTIVITY
1202 RIO BLVD
KILLEEN TX 76543

1 August 2011

Integrated Materiel Management Center

Comanche Nation, Oklahoma
Michael Burgess, Chairman
Comanche Nation
HC-32, Box 1720
Lawton, OK 73502

Dear Mr. Burgess,

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Donald R. Nitti
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Director, Maintenance Directorate

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UNITED STATES ARMY AVIATION AND MISSILE COMMAND
AVIATION FIELD MAINTENANCE ACTIVITY
1202 RIO BLVD
KILLEEN TX 76543

1 August 2011

Integrated Materiel Management Center

Ron Twohatchet, Chairman
Kiowa Tribe of Oklahoma
PO Box 369
Carnegie, OK 73015

Dear Mr. Twohatchet,

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UNITED STATES ARMY AVIATION AND MISSILE COMMAND
AVIATION FIELD MAINTENANCE ACTIVITY
1202 RIO BLVD
KILLEEN TX 76543

1 August 2011

Integrated Materiel Management Center

Mark Chino, President
Mescalero Apache Tribe
PO Box 227
Mescalero, NM 88340

Dear Mr. Chino,

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UNITED STATES ARMY AVIATION AND MISSILE COMMAND
AVIATION FIELD MAINTENANCE ACTIVITY
1202 RIO BLVD
KILLEEN TX 76543

1 August 2011

Integrated Materiel Management Center

Tonkawa Tribe of Indians of Oklahoma
1 Rush Buffalo Road
Tonkawa, OK 74653-4449

Dear Sir,

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