FINAL ENVIRONMENTAL ASSESSMENT
CONSTRUCTION OF MAINTENANCE AND STORAGE FACILITY, PERIMETER FENCE UPGRADE AND DEMOLITION OF THREE BUILDINGS AND TWO STRUCTURES
GILA RIVER AIR FORCE SPACE SURVEILLANCE STATION
ARIZONA

November 2012

Air Force Space Command
20th Space Control Squadron
**Report Documentation Page**

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Standard Form 298 (Rev. 8-98)
Proscribed by ANSI Std Z39-18
FINDING OF NO SIGNIFICANT IMPACT
Construction of Maintenance and Storage Facility, Perimeter Fence Upgrade, and
Demolition of Three Buildings and Two Structures
Gila River Air Force Space Surveillance Station, Arizona

Pursuant to provisions of the National Environmental Policy Act (NEPA), 42 U.S. Code 4321 et seq, implementing Council on Environmental Quality (CEQ) Regulations, 40 Code of Federal Regulations (CFR) 1500-1508, and 32 CFR Part 989, Environmental Impact Analysis Process (EIAP), the U.S. Air Force (Air Force) conducted an assessment of the potential environmental consequences of constructing a maintenance and storage facility, installing and upgrading the perimeter security fence and demolishing three buildings and two structures. This Environmental Assessment (EA), Construction of Maintenance and Storage Facility, Installation and Upgrade of Perimeter Fence and Demolition of Three Buildings and Two Structures, Gila River Air Force Space Surveillance Station (AFSSS), AZ, incorporated by reference in this finding, considers the potential impacts of the Proposed Action on the natural and human environments.

Proposed Actions and Alternatives

The Proposed Actions are to construct a useable covered maintenance and storage facility, install and upgrade the perimeter security fence and demolish Buildings 3, 6, 8A, the pit stop and the carport. The No Action Alternative would be not to construct the new maintenance and storage facility, not to add an outrigger to the existing perimeter fence, and not to demolish Buildings 3, 6, 8A, the pit stop and the carport.

Summary of Findings

Geology, Topography, Soils: Implementing one or all three of the Actions would not impact the geology or topography of the Installation but would have minor impacts on soils. The impacts to soils would be unavoidable but temporary and insignificant. No long-term impacts would occur.

Air Quality: There would be temporary increased emissions from the use of equipment and worker vehicles during the construction and demolition activities for each of the three projects. Each type of equipment would be used briefly and would generate a very small amount of emissions. Conformity thresholds and air standards would not be exceeded.

Water Resources: Short-term disturbances from construction activities for one or all three of the projects could cause wind and water erosion but impacts would be localized and insignificant. There are no surface water sources on or adjacent to the Installation that would be affected by runoff and sedimentation.

Biological Resources: Vegetation would be disturbed from grading and clearing the project areas for construction / demolition activities. The project areas are not considered critical habitat and impacts
would be insignificant. After construction the area would be revegetated and no long-term impacts would occur.

**Cultural Resources:** No known cultural resources have been identified in the construction area. The Air Force is working with the Tribal Historic Preservation Officers to determine if the old Operations Building (#8A) is historic. Demolition would not occur until the Air Force and the Preservation Officers have reached an agreement. An archaeological survey would be completed prior to installing the fence along the new two acre boundary.

**Asbestos:** An asbestos survey would be conducted on the old Operations Building prior to demolition. Any asbestos identified would be removed prior to demolition. The quantity of any waste and the short duration of the removal process would result in insignificant impacts.

**Lead-Based Paint:** A lead-based paint survey would be conducted on the old Operations Building and carport prior to demolition. Any lead-based paint identified would be removed prior to demolition. The quantity of any waste and the short duration of the removal process would result in insignificant impacts.

As there are no adverse environmental impacts that will result from implementation of the Proposed Actions, no mitigation measures are necessary. The proposed management practices identified in the EA are standard construction management practices that will be implemented by the contractor.

**Finding of No Significant Impact**

Based upon my review of the facts and analyses contained in the attached EA, conducted in accordance with the provisions of NEPA, the CEQ Regulations, and 32 CFR Part 989, I conclude that the Proposed Actions will not have a significant environmental impact, either by itself or cumulatively with other ongoing projects at Gila River AFSSS, will not involve an element of high risk or uncertainty on the human environment, and its effects on the quality of the human environment are not highly controversial. Accordingly, an Environmental Impact Statement is not required. The signing of this Finding of No Significant Impact (FONSI) completes the environmental impact analysis process.

MITCHELL A. KATOSIC, Lt Col, USAF
Commander, 20th Space Control Squadron

8 NOV 2012
FINAL
ENVIRONMENTAL ASSESSMENT
CONSTRUCTION OF MAINTENANCE AND STORAGE FACILITY,
PERIMETER FENCE UPGRADE AND
DEMOLITION OF THREE BUILDINGS AND TWO STRUCTURES
GILA RIVER AIR FORCE SPACE SURVEILLANCE STATION, ARIZONA
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1.0 PURPOSE AND NEED FOR ACTION

This environmental assessment (EA) evaluates the potential for environmental consequences from three construction/demolition projects planned for Gila River Air Force Space Surveillance Station (AFSSS), Arizona. The Air Force proposes to complete three separate construction / demolition projects, all of which are evaluated in this EA in the interests of efficiency, economy, and cumulative impacts. These projects focus on sustaining the current mission while ensuring the longevity of the Installation through the upgrade and replacement of buildings and infrastructure.

1.1 LOCATION, MISSION AND DESCRIPTION

Gila River AFSSS is on the Gila River Indian Reservation in Pinal County, Arizona. The Department of Defense (DoD) holds a long-term lease on 25.11 acres from the Department of the Interior, Bureau of Indian Affairs and an additional lease on two additional acres. The Installation is located west of State Route (SR) 347 approximately 25 miles south of Phoenix and four miles north of Maricopa (Figure 1).

The AFSSS, known as the “space fence”, is a radar system that detects and tracks objects in orbit over the United States (U.S.). The space fence is comprised of nine field stations (three transmitter sites and six receiving sites) across the southern U.S. from Georgia to California, and is under the command of the 20th Space Control Squadron, Detachment 1 of the U.S. Air Force Space Command (AFSPC). The Gila River AFSSS in Arizona is one of the three transmitter sites. The mission of Gila River AFSSS is to maintain constant surveillance of space by detecting and tracking objects in orbit over the U.S. to assist with national security requirements. The transmitters emit a continuous beam (i.e., fence) of radar energy while the receivers “listen” for radar returns from objects in orbit passing through the fence. Orbiting satellites and other objects that cross the fence reflect radio waves back to earth, where the waves are collected at the six receiver sites.

Facilities and infrastructure at the Installation include an operations building, storage building, maintenance building, carport, generator, non-potable water storage tank, and a fire pump shed located adjacent to the antenna array on the north half of the Installation. The transmitting building, potable water well, chlorine building, and a water storage tank are located on the south half of the Installation. The entrance road from SR 347 (also known as North Maricopa Road) and the Installation access road are paved. The Installation is surrounded by a seven-foot chain-link fence. There are no residential developments adjacent to the Installation; the closest residences are approximately 1.3 miles from the southern fence-line. An aerial view of the Installation is shown in Figure 2. Operation and maintenance of Gila River AFSSS are provided by contract personnel.

1.2 PURPOSE AND NEED

Each of the projects has its own specific purpose; these are discussed in the following paragraphs. These projects are intended to allow the Installation to carry out their assigned responsibilities in ways that fully satisfy mission requirements, foster safe operational practices, and protect human health and the environ-
Figure 1. Location of Gila River AFSSS
Figure 2. Gila River AFSSS – Aerial View of Installation
ment. These construction / demolition projects are necessary to support the Installation’s mission. The projects are described below.

1.2.1 Construct Maintenance and Storage Facility

The existing storage building (Bldg 3) is not large enough to store all of the Installation’s parts and equipment. Because Bldg 3 is not large enough to store all of the parts and equipment, the Installation is using the old Operations Building (Bldg 8A) for storage for their antenna parts. The old Operations Building was built in the 1950’s and most likely contains asbestos and lead-based paint. Building 6 and a carport next to Bldg 3 are also being used for storage. Flammable lockers are currently located in the pit stop area. Bldg 3 is badly deteriorated, and demolition is recommended, warranting a Condition Code 3 (Forced Use, Substandard). Condition codes are defined in the Air Force Project Managers Guide for Design and Construction (June 2000) and are the evaluation of the ability of a facility to support the present occupant. Condition Code 3 means this building cannot be raised to meet Class A standards to house the function for which it is currently designated. However, from necessity it must be continued in use for a short duration or until a suitable facility can be obtained. Class A standards mean the facility is adequate and can house the function for which it is currently designed with reasonable maintenance and without major alteration or reconstruction.

The purpose and need for constructing a new maintenance and storage facility is to have one facility large enough for all the Installation’s storage and maintenance needs. The Installation needs to consolidate tools, flam lockers and equipment into one building in closer proximity to the new Operations Building. This will eliminate redundant trips and improve time efficiency.

1.2.2 Install and Upgrade Perimeter Fencing

In accordance with DoD Instruction 2000.16, DoD Combating Terrorism Standards, Air Force Instruction (AFI) 31-101, The Air Force Installation Security Program, and Air Force Handbook (AFH) 32-1084, Facility Requirements, DoD Installations are required to implement antiterrorism/force protection construction standards and to develop protective measures for DoD assets. Gila River AFSSS plans to implement antiterrorism / force protection standards in accordance with AFH 32-1084 and AFI 31-101, by adding an outrigger to the existing perimeter security fence and constructing a new perimeter fence around a two-acre boundary with no existing fencing. AFH 32-1084 states that “a fence serves as a legal and physical demarcation of a boundary. It is an obstruction which must be jumped, climbed or cut through to gain entry. From a security and law enforcement point of view, such actions would be regarded as unauthorized entry. Signs are displayed at appropriate and regular intervals on the exterior boundary of the fence line describing the type of area and conditions for entry. This combination of fencing and signs is intended to discourage trespassing or unauthorized entry to legal entry points.”

The purpose of the action is to implement antiterrorism/force protection and increase security for personnel and increase protection of the antennas. Type A fencing (the type specified as the Proposed Action) is listed in AFH 32-1084 for areas of high mission value.
1.2.3 **Demolish Buildings 3, 6, 8A, Pit Stop and the Carport**

The purpose of the action is to dispose of facilities that are excess to the needs of the current mission at Gila River AFSSS, have outlived their usefulness, or present safety concerns. Also, a focused effort to consolidate storage space is necessary due to a history of storage dispersement throughout several buildings, making managing antenna parts, supplies and equipment cumbersome. Buildings 3, 6, 8A, the pit stop and the carport are old and outdated and are being evaluated for demolition. These buildings have reached the end of their useful life and are no longer needed.

1.3 **SCOPE OF THE ENVIRONMENTAL REVIEW**

The scope of this environmental review is to analyze potential environmental impacts and concerns from construction of a new maintenance and storage building, upgrade and installation of a new perimeter fence, and demolition of three buildings and two structures. An advertisement announcing the availability of the Draft Final EA and Finding of No Significant Impact (FONSI) for public review was published in the Casa Grande Valley Newspaper on July 15, 2012. A copy of the Draft Final EA was placed in the Phoenix Arizona Public Library – Ironwood Branch, 4333 E. Chandler Blvd., Phoenix, Arizona. The Draft Final EA was also made available on the internet at ftp://ftp.pbainc.com/public. Appendix A contains a copy of the notice of availability.

A copy of the Final Draft EA was sent to Ms. Janet Bollmann, Sr. Environmental Planner and Policy Analyst at the Gila River Indian Community. No comments were received.

After reviewing the environmental impact analysis and public and/or agency comments, the Air Force has decided that the environmental effects are not significant. The Air Force will issue a FONSI; an environmental impact statement (EIS) is not necessary based on the limited impacts identified in the EA.

1.4 **REGULATORY REQUIREMENTS AND GUIDANCE**

The National Environmental Policy Act (NEPA) of 1969, as amended, requires Federal agencies to consider environmental consequences in their decision-making process. The President’s Council on Environmental Quality (CEQ) issued regulations (40 Code of Federal Regulations [CFR] 1500-1508) to implement NEPA that include provisions for both the content and procedural aspects of the required environmental analysis. The Air Force has prepared this EA through adherence to procedures set forth in the CEQ regulations (Title 40 CFR 1500 et seq.), and Air Force Instruction (AFI) 32-7061, as promulgated at 32 CFR Part 989 (Air Force *Environmental Impact Analysis Process*). These Federal regulations establish both the administrative process and substantive scope of the environmental impact evaluation, designed to ensure deciding authorities have a proper understanding of the potential environmental consequences of a contemplated course of action. This EA will facilitate decision-makers in making environmentally informed decisions of the potential environmental impacts of selecting the Proposed Action or the No Action Alternative. Other federal laws and executive orders (EO) related to environmental issues addressed in this EA are briefly described in Table 1.
<table>
<thead>
<tr>
<th>Title</th>
<th>Citation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Endangered Species Act</td>
<td>16 USC 1531</td>
<td>Requires federal agencies to evaluate the effects of their actions on endangered or threatened species of fish, wildlife, and plants and take steps to conserve and protect these species and their critical habitat.</td>
</tr>
<tr>
<td>Migratory Bird Treaty Act</td>
<td>16 USC 703</td>
<td>Provides for the protection of migratory birds and prohibits their unlawful take or possession.</td>
</tr>
<tr>
<td>Clean Water Act</td>
<td>33 USC 1251</td>
<td>Establishes limits on the amounts of specific pollutants discharged to surface waters to restore and maintain the chemical, physical, and biological integrity of the water as established by ambient water quality standards.</td>
</tr>
<tr>
<td>Floodplain Management</td>
<td>EO 11988</td>
<td>Requires federal agencies to evaluate the potential effects of actions on floodplains and to consider alternatives to avoid adverse effects and incompatible development wherever possible.</td>
</tr>
<tr>
<td>Clean Air Act</td>
<td>42 USC 7401</td>
<td>Establishes policy to protect and enhance the quality of the nation’s air resources to protect human health and the environment. Federal actions must conform to a State Implementation Plan and cannot cause or contribute to new violations of National Ambient Air Quality Standards.</td>
</tr>
<tr>
<td>Federal Noxious Weed Act</td>
<td>7 USC 2801</td>
<td>Requires federal agencies to develop management programs to control undesirable plants on federal lands that have the potential to impact agriculture, wildlife resources, or public health.</td>
</tr>
<tr>
<td>Invasive Species</td>
<td>EO 13112</td>
<td>Directs federal agencies to make efforts to prevent the introduction and spread of invasive plant species.</td>
</tr>
<tr>
<td>National Historic Preservation Act</td>
<td>16 USC 470</td>
<td>Requires federal agencies to determine the effect of their actions on cultural resources and take certain steps to ensure these resources are located, identified, evaluated, and preserved.</td>
</tr>
<tr>
<td>Polychlorinated Biphenyls (PCBs) Manufacturing,</td>
<td>40 CFR 761</td>
<td>Establishes policy to regulate the use, storage, and disposal of PCBs, and prohibits production of these compounds after January 1979.</td>
</tr>
<tr>
<td>Processing, Distribution in Commerce, and Use</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prohibitions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>National Emissions Standards for Hazardous Air</td>
<td>40 CFR 61</td>
<td>Requires building owners to thoroughly inspect a facility for asbestos prior to demolition and renovation activities.</td>
</tr>
<tr>
<td>Pollutants</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Occupational Safety and Health Act of 1970</td>
<td>32 CFR 989.27</td>
<td>Requires the assessment of direct and indirect impacts of proposed actions on the safety and health of Air Force employees and others at a work site.</td>
</tr>
<tr>
<td>Resource Conservation Recovery Act (RCRA)</td>
<td>42 USC 6961</td>
<td>Comprehensive program for regulating and managing hazardous wastes. Includes requirements for lead-based paint abatement and removal.</td>
</tr>
<tr>
<td>Title</td>
<td>Citation</td>
<td>Description</td>
</tr>
<tr>
<td>-------------------------------------------------</td>
<td>----------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Strengthening Federal Environmental, Energy, and Transportation Management</td>
<td>EO 13423</td>
<td>Sets goals in the areas of energy efficiency, acquisition, renewable energy, toxics reductions, recycling, sustainable buildings, electronics stewardship, fleets, and water conservation.</td>
</tr>
<tr>
<td>Federal Leadership in Environmental, Energy, and Economic Performance</td>
<td>EO 13514</td>
<td>Expands on EO 13423 and sets sustainability goals for Federal agencies and focuses on making improvements in their environmental, energy and economic performance.</td>
</tr>
</tbody>
</table>

1.5 **APPLICABLE REGULATIONS AND PERMITS**

- Installation contractors would follow safety guidelines of the Occupational Safety and Health Administration as presented in the Code of Federal Regulations. Should any Installation employees participate in the Proposed Actions, they would comply with relevant Air Force occupational safety and health standards.

- The Gila River Indian Community does require a permit and dust control plan for earth moving operations, including grading and leveling, that exceed one acre. The Installation manager is responsible to obtain the proper permits prior to conducting these activities.

1.6 **ORGANIZATION**

This EA follows the recommended outline in the Council on Environmental Quality (CEQ) and USAF NEPA-implementing regulations.

Section 1.0—Purpose and Need for the Actions provides background information about the installation; the purpose and need for the Proposed Actions; the scope of the environmental review; applicable regulatory requirements; permits and a brief description of how the document is organized.

Section 2.0—Provides details of the Proposed Actions and the No Action Alternative.

Section 3.0—Affected Environment provides a description of the existing conditions of the areas potentially affected by the Proposed Actions.

Section 4.0—Environmental Consequences provides an analysis of potential direct, indirect, and cumulative impacts to environmental resources that may result from implementing the Proposed Actions or Alternatives.

Section 5.0—References provides a listing of the references used in preparing this EA.

Section 6.0—List of Preparers lists the names, affiliations, and qualifications of the document preparers.

Appendices—Provides a List of Agencies, Organizations, and Individuals Contacted for information in the preparation of this document and a copy of the Notice of Availability.
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2.0 PROPOSED ACTIONS AND ALTERNATIVES

This Section describes the Proposed Actions for each project and the No Action Alternative. CEQ regulations require the inclusion of the No Action Alternative. The No Action Alternative serves as a baseline against which the impacts of the Proposed Action and Alternatives are compared. There are three proposed construction/demolition projects that are described individually in terms of proposed functions, location, and construction/demolition.

2.1 SELECTION CRITERIA FOR ALTERNATIVES

In accordance with 32 CFR Part 989.8(c) the development of site-selection criteria is an effective mechanism for the identification, comparison, and evaluation of reasonable alternatives. The following site selection criteria were developed to be consistent with the purpose and need for the action.

- Support the Installation’s mission to detect orbital objects passing over America;
- Be protective of facilities, human health and the environment;
- Not violate provisions of the National Historic Preservation Act;
- Meet current Air Force design standards and energy goals;
- Have sufficient space to house all necessary parts and equipment;
- Enhance security for the space surveillance system program;
- Meet antiterrorism force protection standards; and
- Impacts to natural resources such as floodplains, wetlands, water bodies and threatened and endangered species and habitats must be minimized to the maximum extent practicable. Unavoidable impacts must be addressed according to federal, Air Force, state and local regulations.

2.2 PROPOSED ACTIONS BY PROJECT

The Air Force is proposing three separate construction/demolition projects in support of the mission at Gila River AFSSS. The proposed projects would occur at various locations around the Installation. Table 2 presents a list of the three projects.

<table>
<thead>
<tr>
<th>Table 2. Construction / Demolition Projects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number</td>
</tr>
<tr>
<td>--------</td>
</tr>
<tr>
<td>1</td>
</tr>
<tr>
<td>2</td>
</tr>
<tr>
<td>3</td>
</tr>
</tbody>
</table>
2.3 PROPOSED ACTIONS

The Air Force proposes to construct a new covered storage and maintenance facility, add outriggers to the existing security fence, add a new fence around two acres, and demolish Buildings 3, 6, 8A, the pit stop and the carport. There would be no increase in personnel as part of the Proposed Action.

2.3.1 Construct Maintenance and Storage Facility

2.3.1.1 Proposed Action
This Action is to construct a useable covered maintenance and storage facility. The building footprint of the facility would be 50 feet long by 30 feet wide. The roof would be extended 15 feet in length making the total length 65 feet. Construction would include site preparation, a reinforced concrete foundation (3,000 psi minimum), gabled roof, six skylights (two per bay), a 15 foot long driveway, exterior doors, windows, six-inch insulation for the wall and roof, three overhead roll-up doors (12’ high x 12’ wide), electrical and plumbing systems, and connections to existing utilities including telecommunications. Approximately 0.09 acres (assumes a three-foot buffer around the site) would be disturbed for construction of the new facility.

The facility would be large enough for the Installation to store all their equipment and antenna parts in one location. The proposed facility would have four bays, two for vehicles, one for storage and one for office space. One of the bays would be open and would be used for driving equipment in for maintenance. Two locations are being considered for the new facility and are illustrated as Proposed Location No. 1 and the Alternate Location on Figure 3. A hazardous waste locker would be moved from the pit stop to the new maintenance and storage facility. Photo 1 shows the proposed look of the new storage facility.

2.3.1.2 No Action Alternative
The No Action Alternative would be not to construct a new maintenance and storage facility. The Installation would continue to use the old outdated facilities.

2.3.2 Install and Upgrade Perimeter Fencing

2.3.2.1 Proposed Action
Part of this Action is to add an outrigger (facing outward) with three strands of barbed wire to the top of the existing seven foot chain link perimeter fence (see Figure 4). The overall height of the fence with the outrigger would be eight feet. Disturbance to the soil around the fence line would be nominal because the outrigger is mounted to the existing fence and new, supporting fence posts are not required. An estimated 1.068 acres of soil would be compacted / disturbed during construction to add the outrigger (assumes a three foot wide buffer on either side of the fence).

New Type A fencing (described in Section 1.2.2) would be installed on a two-acre area leased by the Air Force in 2006 (see Figure 4). This area currently does not contain any fencing. Construction of the fence would require holes drilled to an approximate depth of 42 inches at 10 foot intervals. Each of these holes would have a diameter of approximately 12 inches, excluding the corner posts which would have a diameter of approximately 18 inches. The soil removed from the holes would be used for grading around
Figure 3. Proposed Actions for Gila River AFSSS
Figure 4. Location of Fence Projects at Gila River AFSSS
the installed posts and along the length of the fence if necessary. Approximately 0.12 acres or 5,312 square feet would be disturbed by constructing the new fence around the two-acre area (assumes a three-foot wide buffer on either side of the fence).

### 2.3.2.2 No Action Alternative
The No Action Alternative would be not to construct a new fence around the two acre area and not to add the outrigger to the existing perimeter security fence. Not adding the outrigger or constructing the new portion of the fence around the two acres would be in non-compliance with current antiterrorism/force protection measures to protect the Installation assets.

### 2.3.3 Demolish Buildings 3, 6, 8A, Pit Stop and the Carport

#### 2.3.3.1 Proposed Action
This Action is to demolish Buildings 3, 6, 8A, the pit stop and the carport (see Figures 2 and 3 and Photos 2-8). Buildings 3 and 6 are on concrete slabs. The pit stop is a five-sided vehicle maintenance facility with low, concrete-block walls on two sides and a wood screen on two sides. Five steel pipe columns support a steel-framed, shallow-pitched shed roof with corrugated steel-panel roofing. Demolition of the pit stop would disturb 532 square feet; Buildings 3, 6 and the carport would disturb 1,209 square feet and demolition of Building 8A would disturb 2,936 square feet. Calculations assumed a three-foot buffer around the disturbed areas. Lead-based paint and asbestos surveys would be conducted prior to demolition.

All demolition materials would be properly disposed of, off Site. All materials would be recycled to the fullest extent possible and all trucks used to haul materials would be covered to prevent materials from...
Photo 2: Old Operations Buildings

Photo 3: Old Operations Building
Photo 4: Storage Sheds and Carport

Photo 5: Storage Shed Bldg 6
Photo 6: Carport

Photo 7: Storage Shed Bldg 3
littering roadways and surrounding areas. Debris not reused, recycled, or considered as inert waste would be disposed of in the local landfill. Any utilities to these structures would be disconnected prior to demolition. After demolition, the land would be graded and restored to natural vegetation with the exception of the area proposed for the new maintenance and storage facility.

2.3.3.2 No Action Alternative

The No Action Alternative would be not to demolish Buildings 3, 6, 8A, the pit stop and the carport. The old Operations Building would continue to be used to store the antenna parts and personnel have the potential to be exposed to asbestos and lead-based paint.

2.4 ALTERNATIVES CONSIDERED BUT ELIMINATED FROM FURTHER ANALYSIS

Alternatives to constructing the maintenance and storage facility and installing the perimeter security fence were considered but eliminated from further analysis. The alternatives considered and reasons for their eliminations are discussed below. The Proposed Actions are the only feasible alternatives to the No Action Alternative.

2.4.1 Have Maintenance Work Done Off-Site and Rent Storage Space Off-Site

An alternative to constructing a new maintenance and storage facility is to have maintenance work done off-site and to rent storage space off-site. This alternative was considered to be more expensive in the
long-term and time consuming to travel off-site each time a part or maintenance was needed. Also due to the rural proximity of the Installation this alternative was eliminated from further consideration.

2.4.2 Install Security Cameras Along the Two Acre Area

An alternative to constructing a security fence around the two-acre area is to install security cameras on poles every 200 feet around the perimeter. Monitored security cameras can detect intruders crossing a particular boundary or entering a protected zone. These cameras would have to withstand outdoor weather conditions such as extreme heat, cold, dust and rain. The camera’s would require power supply cables to be installed to all of the cameras. A backup power system would also be required in the event of a power loss or in the event an intruder would try to “cut” the power to the cameras. Although an allowable alternative under DoD Instruction 2000.16, this alternative was eliminated from further consideration due to the requirements for power supply cables to be installed over the area and the need for a backup power supply system.
3.0 AFFECTED ENVIRONMENT

This Section describes the environment at Gila River AFSSS and the area surrounding the Installation that may be affected by implementing the Proposed Actions. The existing environmental conditions serve as a baseline from which to identify and evaluate potential environmental changes attributable to the Proposed Actions and alternatives. The intent of NEPA is to focus the analysis on the human (i.e., physical, biological, and social) environment potentially affected by the federal action. Resources and areas of the human environment that are not present on or in the vicinity of Gila River AFSSS, or that would not be affected by the Proposed Action or alternatives are not described in this Section. Table 3 lists these resources and provides the rationale for excluding them from further description and from impact analysis in Section 4.

<table>
<thead>
<tr>
<th>Resource</th>
<th>Rationale for Excluding from Evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Noise</td>
<td>There are no noise sensitive receptors on or in the vicinity of the Installation. Noise sources within the AFSSSS are limited to vehicles, including the tractor used to mow and grade the fire breaks. The nearest residence is more than a mile from the Installation. Gila River AFSSS does not generate noise that would affect sensitive receptors in nearby communities.</td>
</tr>
<tr>
<td>Outdoor Recreation</td>
<td>The Installation does not support public outdoor recreation opportunities because of the military mission, small land area, and lack of natural resources and facilities.</td>
</tr>
<tr>
<td>Visual Resources</td>
<td>The Installation is isolated and the antenna array, single-story buildings, and infrastructure have limited visual appeal. There are no views to the site from public areas, except from SR 347. Implementing the Proposed Actions would not adversely affect the scenic view of observers from public access locations.</td>
</tr>
<tr>
<td>Hazardous Material and Hazardous Waste</td>
<td>Typical hazardous materials found on the Installation include cleaning supplies, paints, and petroleum products. The Installation has a 435-horsepower, diesel powered emergency generator with a 520 gallon above ground storage tank. A secondary containment berm is sufficient to contain the entire volume of the tank if there were to be a rupture. The amount of hazardous waste generated on the Installation is less than 100 kilograms per month, which is within the Conditionally Exempt Small Quantity Generator status.</td>
</tr>
<tr>
<td>Energy Usage</td>
<td>The use of vehicles and other energy-consuming equipment is monitored by the Air Force for abuse and unnecessary use beyond that needed to maintain the mission. Engines would be turned off when vehicles and equipment are parked unless maintenance operations require the engine to be running. Generators would only be used when necessary and turned off when not in use. Energy consumption to complete the proposed actions would not be considered excessive for the action. No significant impacts are anticipated. To minimize energy consumption and greenhouse gas emissions, when materials are required for the proposed actions they would be procured from within or close to the project area as practicable to reduce fuel use from transporting materials. Contractors would be requested to use appropriately-sized equipment for the construction/demolition projects and maintain construction equipment and haul trucks in good working order so fuel efficiency is maximized.</td>
</tr>
<tr>
<td>Solid Waste</td>
<td>Demolition of Buildings 3, 6, 8A, Pit Stop and the Carport would temporarily increase solid waste generation. This short-term increase in demolition debris would not have a significant impact on local landfills. Materials would be recy-</td>
</tr>
</tbody>
</table>
### Resource Rationale for Excluding from Evaluation

<table>
<thead>
<tr>
<th>Resource</th>
<th>Rationale for Excluding from Evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Occupational Safety and Health</td>
<td>Contractor personnel would be responsible for ensuring ground safety and compliance with all applicable occupational health and safety regulations and worker compensation programs. Contractors would also be required to conduct construction activities in a manner that would not pose any risks to personnel in the project areas. The contractor would also be responsible for managing exposure to hazardous materials, use of personal protective equipment, and availability of Material Safety Data Sheets.</td>
</tr>
<tr>
<td>Utilities</td>
<td>The Proposed Action would have an insignificant increase on utility requirements from operation of the maintenance and storage facility. Short-term utility increases during construction / demolition would not result in significant impacts to utility providers and electrical and water distribution systems are adequate.</td>
</tr>
<tr>
<td>Transportation</td>
<td>Transportation patterns and traffic volumes would not change from existing conditions. Only a small number of worker vehicles and equipment would be required to support the construction projects. Activities associated with this project are considered to be minor with only a small number of contractor personnel required.</td>
</tr>
<tr>
<td>Airspace</td>
<td>Gila River AFSSS does not have a flying mission; therefore, airspace would not be affected.</td>
</tr>
<tr>
<td>Environmental Restoration Program (ERP) Sites</td>
<td>There are no ERP (contaminated) sites on Gila River AFSSS.</td>
</tr>
<tr>
<td>Farmlands</td>
<td>There are no prime or unique farmlands present on the Installation.</td>
</tr>
<tr>
<td>Radon</td>
<td>No radon testing has been performed at Gila River AFSSS. Based on a review of the USEPA Radon Zone Map, the subject property is located within Zone 2, defined as having a predicted average from 2.0 to 4.0 pico-Curies per liter. The threshold set by USEPA is 4.0 pico-Curies per liter.</td>
</tr>
<tr>
<td>Polychlorinated Biphenyls (PCB)</td>
<td>Based on the 2003 External Environmental Quality Assessment, no PCB transformers, capacitors, or hydraulic systems are known at Gila River AFSSS.</td>
</tr>
<tr>
<td>Socioeconomics</td>
<td>There would be small beneficial impacts to local employment and income from construction of the maintenance and storage facility and upgrade of the fence. Construction jobs would most likely be filled by persons living in the area, no increase in population would occur.</td>
</tr>
<tr>
<td>Environmental Justice Protection of Children</td>
<td>The Gila River Indian community would be defined as an environmental justice population based on its minority status. Although the Installation is located on the Gila River Indian Reservation, there would be no disproportionately high and adverse human health or environmental effects on minority populations and low-income populations. There would be no health or safety risks to children.</td>
</tr>
</tbody>
</table>

1. EO 12898, Federal Actions to Address Environmental Justice in Minority and Low-Income Populations
2. EO 13045, Protection of Children from Environmental Health Risks and Safety Risks

### 3.1 GEOLOGY, TOPOGRAPHY AND SOILS

The Gila River AFSSS lies within the Sonoran Desert sub-province in the southern end of the Basin and Range physiographic province. This area of Arizona consists largely of broad, open-ended basins or valleys of gentle slope with isolated northwest to southeast trending mountain ranges. The Installation is situated on nearly flat alluvium at an elevation of 1,149 feet above mean sea level. The nearest bedrock exposures include a rocky outcrop, known as Maricopa Mountain or Pima Butte, which rises to 1,677 feet.
above mean sea level approximately two miles north of the Installation. The Sierra Estrella mountain range is approximately six miles west of the Installation and the Sacaton mountain range lie approximately six miles to the southeast (see Figure 5). These exposures consist of Proterozoic crystalline rocks more than two billion years old (USGS, 2007). There are no bedrock exposures at Gila River AFSSS.

The soil at the Gila River AFSSS is a Casa Grande fine sandy loam on 0 to 3 percent slopes with Casa Grande complex soil on 0 to 5 percent slopes bordering the northeast portion of the Installation (see Figure 6). This soil type extends to a depth of approximately 60 inches, is considered well-drained, and susceptible to wind erosion (NRCS, 2009). Casa Grande soils are in Hydrologic Group C meaning a high relative runoff potential with a low infiltrate rate of 0.05 to 0.15 inches per hour. The shrink-swell potential of the Casa Grande soils is moderate. Building limitations are for the Casa Grande soils are shown in Table 4.

<table>
<thead>
<tr>
<th>TABLE 4. BUILDING LIMITATIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Soil Name</td>
</tr>
<tr>
<td>-----------</td>
</tr>
<tr>
<td>Casa Grande</td>
</tr>
</tbody>
</table>

Building limitations are slight if soil properties are generally favorable for building or limitations are minor and easily overcome; moderate if soil properties are not favorable and special planning, design, and maintenance are needed; and severe if soil properties are so unfavorable or difficult to overcome that special design, significant increases in construction costs, and possibly increased maintenance are needed. Feasibility studies could be required where limitations are severe.

Source: USDA, 2009

3.2 AIR QUALITY

The U.S. Environmental Protection Agency (USEPA) established the National Ambient Air Quality Standards (NAAQS) for criteria pollutants, which are those compounds that cause or contribute to air pollution which could endanger public health and the environment. These pollutants may directly or indirectly originate from diverse mobile and stationary sources such as vehicles, maintenance activities, fuel storage tanks, prescribed burns and wildfires and clearing and grading ground surfaces. Air quality is determined by comparing ambient air levels with the upper concentration limits of the NAAQS for each criteria pollutant. Geographic areas that exceed NAAQS are designated as non-attainment for the specific pollutant that is in violation of the standard, whereas areas that meet NAAQS are designated as being in attainment for the criteria pollutant.

A portion of Pinal County in Arizona is designated as nonattainment 24-hour fine particle (PM$_{2.5}$) NAAQS. The county is designated as nonattainment if it has an air quality monitor that is violating the standard or if the county or portion of the county is determined to be contributing to the violation of the standard in a nearby area. USEPA has designated the Gila River Indian Community located within Pinal County as “unclassifiable/attainment” (Blair, 2012). As a result the USEPA deferred designation of the Gila River Indian Community which is located in both Pinal and Maricopa counties. The tribe does not monitor for PM$_{2.5}$. Gila River Indian Community does have an Air Quality Management Plan and a Tribal Implementation Plan; however, these Plans are not applicable to their attainment status (Blair, 2012).
Figure 5. Geological Map of Gila River AFSSS and Vicinity

KEY

- Q Quaternary 2 Ma - 0
- T Tertiary 65 - 2 Ma
- K Cretaceous 145 - 65 Ma
- J Jurassic 208 - 145 Ma
- Mz Mesozoic 2-208 Ma
- Fz Paleozoic 208-570 Ma
- Y Precambrian 1600 - 900 Ma
- X Precambrian 2500 - 1600 Ma
Figure 6. Soil Map of Gila River AFSSS
According to the Gila River Indian Community air emission regulations, sources with actual annual emissions of less than one ton for any pollutant are exempt from permitting requirements. Due to this provision, all of the emission sources, including the diesel engine for the generator, the diesel fuel storage tank, and miscellaneous chemical use of paints and solvents are considered a de minimis source and are not subject to a permit.

The Gila River Indian Community does require a permit and dust control plan for earth moving operations, including grading and leveling, that exceed one acre. The Installation manager is responsible to obtain the proper permits prior to conducting these activities.

The primary source of air emissions at Gila River AFSSS is a 275 kilowatt (kW) emergency generator powered by a 435 horsepower (hp) diesel engine. Another source of emissions includes a 520-gallon single walled above ground storage tank which contains diesel fuel. Fuels from these tanks are used to fuel vehicles and heavy equipment as well as supply fuel to the emergency generator. Other limited activities that occur at the Installation include soldering, spray-painting and solvent cleaning.

The climate in the area is typical of the Sonoran Desert – hot summers, mild winters, and very little precipitation. Average winter temperatures range from lows near freezing to highs near 70 degrees Fahrenheit (°F). Average summer temperatures range from lows between 60°F and 70°F to highs over 100°F. Annual rainfall has averaged 7.74 inches over the period from 1960 to 2005. Most rainfall occurs during summer thunderstorms or winter rains. August and December are the wettest months, with an average of 1.03 and 0.97 inches of rainfall, respectively. The period from April through June is typically the driest, with an average monthly rainfall of 0.17 inch. Average wind speeds are between seven and eight miles per hour.

### 3.3 WATER RESOURCES

Gila River AFSSS is in the Maricopa-Stanfield Sub-basin. Groundwater flow is north toward the Gila River and toward cones of depression that have formed west of the towns of Maricopa and Stanfield. Recent depths to groundwater range from 51 feet below land surface near the Gila River in the north to more than 600 feet below land surface in the vicinity of Stanfield. Near the Installation, the depth to groundwater measures 150 feet below land surface (ADWR, 2004).

Gila River AFSSS is in the lower end of the Santa Cruz River watershed where it drains to the Gila River watershed approximately four miles to the north. There are no ephemeral drainages or washes on the Installation but ephemeral tributaries of the Santa Cruz Wash lie to the east and west of the Installation. The west fork is named the Santa Rosa Wash and the east fork is part of the higher-order Santa Cruz Wash. Although these tributaries are generally dry, the INRMP notes that a 100-year flood event in 1983 flooded the Gila River AFSSS and interrupted power for ten days. The Federal Emergency Management Agency (FEMA) classifies the area as flood zone D (see Figure 7), indicating that flood hazards have not been established for this area (FEMA, 2012).

No jurisdictional wetlands or other waters of the U.S. have been documented on or immediately adjacent to the Gila River AFSSS. The Installation does have a groundwater well located on the Installation. A
Figure 7. Gila River AFSSS Flood Hazard Map
1,000-gallon holding tank and a reverse osmosis system were installed in 1998 to provide a drinking water source for the Installation. Groundwater meets drinking water standards with the reverse osmosis system.

### 3.4 BIOLOGICAL RESOURCES

The biological resources of interest include the common native and introduced plants and animals, species afforded special protections, and the vegetative communities on and adjacent to the Installation.

#### 3.4.1 Vegetation

Gila River AFSSS is essentially devoid of vegetation as a result of Installation operations. The area around the proposed affected area has been landscaped with non-native grasses, shrubs, and trees. Native weeds sprout in areas disturbed by mowing and grading. The vegetation surrounding the Installation is typical of this area of the Sonoran Desert (see Photo 9). Some of the plant species known to occur on and adjacent to the Installation are listed in Table 5.

![Photo 9: Typical Land Use and Vegetation Adjacent to Gila River AFSSS](image)
TABLE 5. PLANT SPECIES ON AND ADJACENT TO GILA RIVER AFSSS

<table>
<thead>
<tr>
<th>Common Name</th>
<th>Scientific Name</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Improved Grounds – Landscaping</td>
<td></td>
</tr>
<tr>
<td>Bermuda Grass</td>
<td><em>Cynodon dactylon</em></td>
<td>Non-native</td>
</tr>
<tr>
<td>Oleander</td>
<td><em>Nerium sp.</em></td>
<td>Non-native</td>
</tr>
<tr>
<td>Date Palm</td>
<td><em>Phoenix sp.</em></td>
<td>Non-native</td>
</tr>
<tr>
<td>California Fan Palm</td>
<td><em>Washingtonia filifera</em></td>
<td>Native; restricted salvage¹</td>
</tr>
<tr>
<td>Mexican Bird of Paradise</td>
<td><em>Caesalpinia pulcherrima</em></td>
<td>Non-native</td>
</tr>
<tr>
<td>Grapefruit Tree</td>
<td><em>Citrus paradise</em></td>
<td>Non-native</td>
</tr>
<tr>
<td>Texas Ranger</td>
<td><em>Leucophyllum sp.</em></td>
<td>Native</td>
</tr>
<tr>
<td></td>
<td>Semi-improved Grounds – Disturbed Areas</td>
<td></td>
</tr>
<tr>
<td>Desert Horse Purslane</td>
<td><em>Trianthema portulacastrum</em></td>
<td>Native</td>
</tr>
<tr>
<td>Creeping Spurge</td>
<td><em>Chamaesyce serpens</em></td>
<td>Native</td>
</tr>
<tr>
<td></td>
<td>Adjacent to Installation²</td>
<td></td>
</tr>
<tr>
<td>Creosote Bush</td>
<td><em>Larrea tridentata</em></td>
<td>Native</td>
</tr>
<tr>
<td>White Bursage</td>
<td><em>Ambrosia dumosa</em></td>
<td>Native</td>
</tr>
<tr>
<td>Saltbush</td>
<td><em>Atriplex sp.</em></td>
<td>Native</td>
</tr>
<tr>
<td>Cholla</td>
<td><em>Opuntia sp.</em></td>
<td>Native</td>
</tr>
<tr>
<td>Mesquite</td>
<td><em>Prosopis sp.</em></td>
<td>Native</td>
</tr>
</tbody>
</table>

¹ Arizona Department of Agriculture designation. ² Typical shrub/tree/cactus species of Sonoran Desert creosote-bursage community. Source: USAF, 2007a

3.4.2 Invasive Species and Noxious Weeds

Invasive species can be non-native plants, insects, crustaceans, birds, etc. that are usually destructive, difficult to control or eradicate, and generally cause ecological and economic harm; whereas, a noxious weed is any non-native plant designated by a government agency as injurious to public health, agriculture, recreation, wildlife, or property. Invasive plant species and noxious weeds are generally found in disturbed soil conditions.

A survey completed for the Invasive Plant Species Control Plan (USAF, 2007c) did not locate any invasive plant species or noxious weeds on Gila River AFSSS. Saltcedar or tamarisk (*Tamarix* sp.), a non-native invasive tree is known to occur in the Santa Cruz Wash to the northeast of the Installation.

3.4.3 Wildlife

Wildlife occurrences at the Gila River AFSSS are limited because of the small land area of the Installation, the fenced perimeter; and the lack of suitable food, water, or cover. Wildlife observed by Installation personnel and during a biological survey are listed in the Table 6. Typical species that have been observed include lizards, jackrabbits, ground squirrels, desert mice, snakes, scorpions, songbirds, and raptors. The rangeland around the Gila River AFSSS is grazed by feral horses.
TABLE 6. WILDLIFE SPECIES ON AND ADJACENT TO GILA RIVER AFSSS

<table>
<thead>
<tr>
<th>Family</th>
<th>Common Name</th>
<th>Scientific Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reptiles</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Arizona coral snake¹</td>
<td>Micruroides euryxanthus</td>
<td></td>
</tr>
<tr>
<td>Tuscon banded gecko</td>
<td>Coleonyx variegatus bogerti</td>
<td></td>
</tr>
<tr>
<td>Zebra-tailed lizard</td>
<td>Callisaurus draconoides</td>
<td></td>
</tr>
<tr>
<td>Desert iguana</td>
<td>Diposaurus dorsalis</td>
<td></td>
</tr>
<tr>
<td>Regal horned lizard</td>
<td>Phrynosoma solare</td>
<td></td>
</tr>
<tr>
<td>Side-blotched lizard</td>
<td>Uta stansburiana</td>
<td></td>
</tr>
<tr>
<td>Western whiptail²</td>
<td>Cnemidophorus tigris</td>
<td></td>
</tr>
<tr>
<td>Gila monster¹</td>
<td>Heloderma suspectum suspectum</td>
<td></td>
</tr>
<tr>
<td>Western diamondback rattlesnake</td>
<td>Crotalus viridis</td>
<td></td>
</tr>
<tr>
<td>Mojave rattlesnake</td>
<td>Crotalus scutalatus</td>
<td></td>
</tr>
<tr>
<td>Sidewinder</td>
<td>Crotalus cerastes</td>
<td></td>
</tr>
<tr>
<td>Western shovel-nose snake</td>
<td>Chionactis occipitalis</td>
<td></td>
</tr>
<tr>
<td>Mammals</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Coyote</td>
<td>Canis latrans</td>
<td></td>
</tr>
<tr>
<td>Kit fox¹,²</td>
<td>Vulpes macrotis</td>
<td></td>
</tr>
<tr>
<td>Badger¹,²</td>
<td>Taxidea taxus</td>
<td></td>
</tr>
<tr>
<td>Black-tailed jackrabbit²</td>
<td>Lepus californicus</td>
<td></td>
</tr>
<tr>
<td>White-throated woodrat</td>
<td>Neotoma albigula</td>
<td></td>
</tr>
<tr>
<td>Merriam’s kangaroo rat</td>
<td>Dipodomys merriami</td>
<td></td>
</tr>
<tr>
<td>Ord’s kangaroo rat</td>
<td>Dipodomys ordii</td>
<td></td>
</tr>
<tr>
<td>Desert pocket mouse</td>
<td>Perognathus penicillatus</td>
<td></td>
</tr>
<tr>
<td>Round-tailed ground squirrel²</td>
<td>Spermophilus tereticaudus</td>
<td></td>
</tr>
<tr>
<td>Collared peccary/javelina¹</td>
<td>Tayassu tajacu</td>
<td></td>
</tr>
</tbody>
</table>

Source: Species list as identified in U.S. Department of the Navy INRMP, 1998.
¹ Noted by Gila River AFSSS personnel
² Observed on Gila River AFSSS in 1997

3.4.4 Protected Species

A protected species is so designated because of federal or state regulations or federal land management agency policies that restrict the use of the species and its habitat. A species is listed under the Endangered Species Act because of danger of its extinction as a consequence of economic growth and development without adequate conservation. A species listed as threatened or endangered under the Act receives federal protection. Most birds are protected by the Migratory Bird Treaty Act (MBTA). The MBTA provides protection of nearly all species of birds from harm by prohibiting the destruction of active nesting habitat. The Arizona Department of Agriculture and Arizona Game and Fish Department list species of native flora and fauna identified for preservation and protection because populations are declining and habitats are deteriorating.

There is no federal listed threatened or endangered plant or wildlife species, or designated critical habitat known to occur on or in the vicinity of Gila River AFSSS. Although the desert vegetation, ephemeral wash vegetation, and agricultural fields in the area are typical habitat for some Arizona wildlife species of
special concern, no such wildlife have been documented on the Installation or observed since the early 1980s (Navy, 2001).

A number of neotropical migrant bird species and raptors have been observed on and in the vicinity of Gila River AFSSS. The palm trees on the Installation are known to host nesting great horned owls (*Bubo virginianus*) and occasionally a cactus wren (*Campylorhynchus brunneicapillus*) (Navy, 2001).

### 3.5 CULTURAL RESOURCES

Cultural resources are the physical remains of past human activity and include prehistoric and historic sites, structures, features, or locations considered important to a culture or a community for scientific, traditional, religious, or other reasons. AFI 32-7065, Cultural Resource Management, provides the Air Force with guidance on compliance with the National Historic Preservation Act, and applicable federal, state and local regulations.

Formerly referred to as the Gila River Space Surveillance Station, Gila River AFSSS was built in 1959 under the U.S. Department of the Navy. Prior to military establishment, the land was managed as range land, similar to the rest of the Gila River Indian Reservation. The original array and main building were constructed on the southeast portion of the site and in 1965 and a new array and main building were constructed in the northeast portion of the property and operations were moved to the new facilities.

A cultural resource inventory of the Gila River AFSSS was conducted in 2001. Three structures on the Installation were found to be historic properties and eligible for listing on the National Register of Historic Places (Navy, 2002). These structures included the old Operations Building (#8A) built in 1965, the transmitter building built in 1959, and the remnants of the antenna array built in 1965. The original antenna was removed in 1971 but the concrete foundations that supported the array remain in place. The old Operations Building (#8A) may be eligible for the National Register of Historic Places under National register Criteria Consideration G, for their exceptional significance associated with the Cold War.

Tribal Historic Preservation Officers (THPOs) have the responsibilities of State Historic Preservation Officers on tribal lands to advise and work with federal agencies on the management of tribal historic properties. THPOs also preserve and rejuvenate the unique cultural traditions and practices of their tribal communities. Founded in 1998, the Association is a national non-profit membership organization of Tribal government officials who implement federal and tribal preservation laws. The Air Force is working with the THPOs to determine if the old Operations Building is historic. Any future plans for demolition of the old Operations Building would not occur until the Air Force and THPO have reached an agreement.

As part of compliance with Section 110 of the National Historic Preservation Act of 1966, an archaeological survey was conducted in 2002. The survey consisted on a pedestrian walk over of 23.11 of the 25.11 acres of the Installation. An isolated pottery sherd was found. No other cultural resources were found as a result of the survey. The survey findings determined little potential exists for future resources to be discovered on the Installation and that all of the property is highly disturbed from grading and previous construction activities (USAF, 2002). The additional two acre leased area proposed for fence construction has not been surveyed for archaeological resources. There are no buildings located on these two acres.
3.6 ASBESTOS

Asbestos is a regulated substance because it is a known carcinogen and a cause of asbestosis (a lung disease). Asbestos is a designated Hazardous Air Pollutant (HAP) under the National Emission Standards for Hazardous Air Pollutants (NESHAP) of the CAA. The federal Asbestos NESHAP coordinator who is based in the EPA Region 9 office in San Francisco has sole jurisdiction over all 25 tribal lands in Arizona.

When asbestos poses a health danger from the release of airborne fibers (because it is in a friable state), Air Force policy (AFI 32-1053, Facility Asbestos Management) is to remove or isolate it. There are three main categories of ACM that must be managed during building demolition:

- **Category I non-friable ACM**—packings, gaskets, resilient floor covering, pliable sealants and mastics and asphalt roofing products containing more than one percent asbestos.

- **Category II non-friable ACM**—any material, excluding Category I non-friable ACM, containing more than one percent asbestos that, when dry, cannot be crumbled, pulverized or reduced to powder by hand pressure.

- **Regulated ACM (RACM):**
  - Friable ACM (dry ACM that can crumble or be reduced to powder by hand pressure);
  - Category I non-friable ACM that has become friable;
  - Category I non-friable ACM that will be or has been subjected to sanding, grinding, cutting or abrading; or
  - Category II non-friable ACM that has a high probability of becoming or has become crumbled, pulverized or reduced to powder by the forces expected to act on the material in the course of demolition or renovation operations regulated by NESHAP 40 CFR Part 61.141.

Generally, Category I or Category II non-friable ACM can be left in place unless it is disturbed during demolition activities. Category I or Category II non-friable ACM can be disposed as solid waste (trash). All RACM is subject to regulations under NESHAP and must be removed prior to demolition activities. Asbestos can be found in almost any building material and is routinely found in insulation, blown acoustic ceiling finishes, flooring and roofing materials. Less commonly used as a building material since the mid-1970s, asbestos is still in use or distribution in certain materials such as flooring and roofing.

Gila River AFSSS has developed an Asbestos O&M Plan (USAF, 2010c). An asbestos survey report completed for the old Operations Building in 2005 indicated asbestos was found in the mastic beneath the tan and gray speckled floor tile in the Operations Room and joint compound in the former office building. One foot by one foot ceiling tiles and brown mastic were assumed to contain asbestos. The survey was not available and based on the date of construction of the building (1959) and the fact that data indicating that the buildings are asbestos free is not available, an additional survey should be completed prior to demolition. The other buildings on the Installation were not surveyed because they appeared to be constructed of metal and wood.
3.7 LEAD BASED PAINT

Lead is a health and environmental hazard that was once used in many materials. One use of lead that causes concern is LBP. LBP can be hazardous when dust or chips are generated from deteriorating paint or during removal (e.g. sanding off old paint). Lead exposure (which can result from ingesting paint dust or chips, or from inhaling lead vapors from torch cutting operations) can affect the human nervous system at low levels. Lead is especially hazardous to children due to their small size and developing nervous system. Air Force policy (USAF, Undated) states that workers subjected to prolonged or repeated exposure to airborne LBP dust are working in a hazardous environment. Any LBP found at Gila River AFSSS in areas subject to demolition is removed by trained and certified abatement personnel, and the resultant waste sampled for hazardous constituents. If the waste is hazardous, it is removed, handled, and disposed of properly. USEPA and Housing and Urban Development do not define a regulated lead concentration in lead-containing components (LCC).

Gila River AFSSS has developed a Lead Management Plan (USAF, 2010d). The Installation has no priority facilities and is considered a minor Installation as it is not frequented by children. A September 2005 limited lead survey did identify lead above the USEPA thresholds in the overhead support poles of the Operations Building, the carport support poles, and the awning support poles at the former office building (USAF, 2010d).

Lead-bearing waste may be managed as either a solid waste or a hazardous waste depending upon the results of Toxicity Characteristic Leaching Procedure (TCLP) tests for lead. The TCLP maximum contaminant concentration for lead is 5.0 milligram per liter (mg/L) (5.0 ppm). Wastes with 5.0 ppm or greater TCLP exhibit the toxicity characteristic for lead and require management as a hazardous waste.
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4.0 ENVIRONMENTAL CONSEQUENCES

This Section discusses the potential for impacts to the environment as a result of implementing the Proposed Actions and alternatives. The potential direct and indirect, adverse or beneficial, and long-term and short-term impacts of the Proposed Actions and Alternative location are evaluated by resource and compared to the environmental consequences of the No Action Alternative. Potential impacts are quantified wherever possible and discussed at a level of detail necessary to determine the significance of the impacts. Best management practices are included as necessary to minimize potential adverse consequences of the federal action. No significant impacts were identified; therefore, no mitigation measures are required.

4.1 GEOLOGY, TOPOGRAPHY AND SOILS

The geological resources within the proposed project area were studied to determine the potential impacts from implementing the Proposed Actions and No Action Alternative. Geological studies, the soil survey for the Pinal County, and topographic contours were reviewed to characterize the existing environment. Construction activities that could influence resources were evaluated to predict the type and magnitude of impacts.

4.1.1 Potential Site-Specific Project Impacts

The three projects are evaluated for project specific impacts in the following subsections.

4.1.1.1 Potential Impacts of Constructing Maintenance and Storage Facility

4.1.1.1.1 Proposed Action

Constructing the maintenance and storage facility would not impact the geology or topography of the Installation but would have minor impacts on soils. Impacts to geological resources would not occur because the soil depths exceed the proposed drilling depth of two to four feet. The new maintenance and storage facility would be located in the same area disturbed for demolition of Buildings 3, 6 and the Carport. Constructing the new facility would disturb 0.09 acres of soils from boring, grading, and compaction by equipment during construction. The affected areas would be regraded after the disturbance. This action would not significantly affect the topography or drainage in the area.

Because the Casa Grande soil is highly erodible, disturbance of these soils during grading and construction activities would expose the soil to potential erosion by wind and water. Best management practices discussed below would minimize soil erosion. Impacts to soils would be unavoidable but impacts would be temporary and insignificant. No long term impacts would occur. Soil erosion by water is limited because of the low annual precipitation (less than eight inches) and relatively flat topography (less than one percent slope). Wind erosion may occur due to the lack of vegetation on the Installation from grading activities.
Best management practices include limiting grading and ground disturbing activities to the frequency and the areas necessary to complete the proposed activities. Daily watering, stabilization, and maintaining existing vegetation and/or revegetating sites by planting low-growing native ground cover would reduce wind and water erosion in the disturbed area. Grading and construction activity should be curtailed during strong wind conditions to minimize soil erosion from wind.

4.1.1.1.2 Alternative Location
Impacts of this Alternative would be similar to the Proposed Action. The area would be graded as necessary after construction activities, and existing vegetation maintained and/or revegetated by planting low-growing native ground cover to reduce wind and water erosion in the disturbed area.

4.1.1.1.3 No Action Alternative
Current operations at the Installation would continue. The proposed new maintenance and storage facility would not be built; therefore, geology, topography and soils would not be impacted.

4.1.1.2 Potential Impacts of Installing and Upgrading Perimeter Security Fence

4.1.1.2.1 Proposed Action
Implementing the Proposed Actions would not impact the geology or topography of the Installation but would have minor impacts on soils. Adding the outrigger to the existing perimeter fence would not impact the underlying geological layers because soil borings for fence posts would not be necessary. Approximately one acre of Casa Grande soil could be disturbed by compaction from equipment during installation of the outrigger along the existing perimeter fence (assumes a three foot wide buffer on either side of the fence) (see Photo 10). The area inside and outside of the existing fence is currently graded for wildland fire protection; therefore soils in this area are already disturbed.

Approximately 0.12 acres of Casa Grande soils would be disturbed on the east side of the Installation where a new fence would be constructed. The underlying geological layers would not be impacted due to the depth of the soil borings. All soils are greater than 5 feet in depth and the soil boreholes would extend to a depth of about 4 feet. Construction of the fence would require holes drilled to a depth of 42 inches at 10 foot intervals. Each of these holes would have a diameter of 12 inches, excluding the corner posts which would have a diameter of 18 inches. The soil removed from the holes would be used for grading around the installed posts and along the length of the fence if necessary.

Because the Casa Grande soil is highly erodible, disturbance of these soils during grading and construction activities would expose the soil to potential erosion by wind and water. Best management practices discussed below would minimize soil erosion. Impacts to soils would be unavoidable but impacts would be temporary and insignificant. No long term impacts would occur. Soil erosion by water is limited because of the low annual precipitation (less than eight inches) and relatively flat topography (less than one percent slope). Wind erosion may occur due to the lack of vegetation on the Installation from grading activities.

Best management practices include limiting grading and ground disturbing activities to the frequency and the areas necessary to complete the proposed activities. Daily watering, stabilization, and maintaining
existing vegetation and/or revegetating sites by planting low-growing native ground cover would reduce wind and water erosion in the disturbed area. Grading and construction activity should be curtailed during strong wind conditions to minimize soil erosion from wind.

4.1.2.2 No Action Alternative
Current operations at the Installation would continue. The proposed outrigger and new fence would not be built; therefore, geology, topography and soil resources would not be impacted.

4.1.3 Potential Impacts of Demolishing Buildings 3, 6, 8A, Pit Stop and the Carport

4.1.3.1 Proposed Action
Demolition of Buildings 3, 6, 8A, Pit Stop and the Carport would not impact the geology or topography of the Installation but would have minor impacts on soils. Impacts to geological resources would not occur because the soil depths exceed the excavation depth of two to four feet. Demolition of these buildings and structures would disturb 0.14 acres of soils from excavation, grading and compaction by equipment during demolition. The affected areas would be regraded for the proposed maintenance and storage facility. This action would not significantly affect the topography or drainage in the area.

Because the Casa Grande soil is highly erodible, disturbance of these soils during grading and demolition activities would expose the soil to potential erosion by wind and water. Best management practices discussed below would minimize soil erosion. Impacts to soils would be unavoidable but impacts would be temporary and insignificant. No long term impacts would occur. Soil erosion by water is limited because of the low annual precipitation (less than eight inches) and relatively flat topography (less than one per-
Wind erosion may occur due to the lack of vegetation on the Installation from grading activities.

Best management practices include limiting grading and ground disturbing activities to the frequency and the areas necessary to complete the proposed activities. Daily watering, stabilization, and maintaining existing vegetation and/or revegetating sites by planting low-growing native ground cover would reduce wind and water erosion in the disturbed area. Grading and demolition activity should be curtailed during strong wind conditions to minimize soil erosion from wind.

4.1.3.2 No Action Alternative

Current operations at the Installation would continue. The buildings proposed for demolition would not be demolished; therefore, geology, topography and soil resources would not be impacted.

4.2 AIR QUALITY

Impacts to air quality are based on federal, state, local and Gila River Indian Community pollution regulations or standards. The analysis was based on a review of existing air quality in the region, information of Gila River AFSSS air emission sources, and projections of emissions from proposed construction and demolition activities.

4.2.1 Potential Site-Specific Project Impacts

The three projects are evaluated for project specific impacts in the following subsections.

4.2.1.1 Potential Impacts of Constructing Maintenance and Storage Facility

4.2.1.1.1 Proposed Action

Construction activities for the maintenance and storage facility would generate emissions of criteria pollutants from grading and excavating, operation of construction equipment, trucks driving on paved and unpaved roads, worker vehicles and possible removal of ACM. Each type of equipment would be used very briefly and would consequently generate a very small amount of emissions. The impacts on air quality due to construction are expected to be localized and very short-term. Therefore, the minimal emissions of criteria pollutants from construction activities would have a negligible impact on air quality. The proposed facility would be connected to public utilities and would not have any stationary air emissions sources or require a permit to operate. Because asbestos is friable, removal of ACM might also contribute to fugitive dust measured as PM$_{2.5}$ or PM$_{10}$.

Because of the small quantity of potential emissions generated during construction and the generally dispersive meteorological conditions (an average of 7-8 miles per hour winds) the activities would not exceed or contribute to an exceedance of air quality standards. This action is exempt from further conformity analysis pursuant to 40 CFR 93 subpart B 93.153.

During construction, air quality impacts could occur from dust carried offsite and combustive emissions from construction equipment. The primary risks from blowing dust particles relate to human health and human nuisance values. Fugitive dust can contribute to respiratory health problems and create an inhospit-
table working environment. Deposition on surfaces can be a nuisance to those living or working down-wind of the construction site. Measures that would be implemented to reduce or eliminate fugitive dust emissions would include:

- **Watering/Irrigation.** Watering the ground surface until it is moist is an effective dust control method for haul roads and other traffic routes. This practice can be applied to almost any site. When suppression methods involving water are used, care would be exercised to minimize over-watering that could cause the transport of mud onto adjoining roadways, ultimately increasing the dust problem.

- **Vegetative Cover.** In areas not expected to handle vehicle traffic, vegetative stabilization of disturbed soil is often desirable. Vegetation provides coverage to surface soils and decreases wind velocity at the ground surface, thus reducing the potential for dust to become airborne.

- **Mulch.** Mulching can be a quick and effective means of dust control for recently disturbed areas.

The Proposed Action would have short-term, but not significant, impacts on air quality generated by construction activities. There would be no long-term impacts from operation of the facility.

4.2.1.2 Alternative Location
Impacts of this Alternative would be similar to the Proposed Action.

4.2.1.3 No Action Alternative
Current operations at the Installation would continue under this alternative. Fugitive dust generation is infrequent and of short duration and has no significant impact on the air quality in the area.

4.2.1.2 Potential Impacts of Installing and Upgrading Perimeter Security Fence

4.2.1.2.1 Proposed Action
Construction activities for adding the outrigger on the existing perimeter fence and installing a new fence on two acres of property would generate emissions of criteria pollutants from grading and excavating, operation of construction equipment, trucks driving on paved and unpaved roads and worker vehicles. Each type of equipment would be used very briefly and would consequently generate a very small amount of emissions. The impacts on air quality due to construction are expected to be localized and very short-term. Therefore, the minimal emissions of criteria pollutants from construction activities would have a negligible impact on air quality. Because of the small quantity of potential emissions generated during construction and the generally dispersive meteorological conditions (an average of 7-8 miles per hour winds) the activities would not exceed or contribute to an exceedance of air quality standards. This action is exempt from further conformity analysis pursuant to 40 CFR 93 subpart B 93.153.

During construction, air quality impacts could occur from dust carried offsite and combustive emissions from construction equipment. The primary risks from blowing dust particles relate to human health and human nuisance values. Fugitive dust can contribute to respiratory health problems and create an inhospitable working environment. Deposition on surfaces can be a nuisance to those living or working down-
wind of the construction site. Measures that would be implemented to reduce or eliminate fugitive dust emissions would include:

- **Watering/Irrigation.** Watering the ground surface until it is moist is an effective dust control method for haul roads and other traffic routes. This practice can be applied to almost any site. When suppression methods involving water are used, care would be exercised to minimize over-watering that could cause the transport of mud onto adjoining roadways, ultimately increasing the dust problem.

- **Vegetative Cover.** In areas not expected to handle vehicle traffic, vegetative stabilization of disturbed soil is often desirable. Vegetation provides coverage to surface soils and decreases wind velocity at the ground surface, thus reducing the potential for dust to become airborne.

- **Mulch.** Mulching can be a quick and effective means of dust control for recently disturbed areas.

The Proposed Action would have short-term, but not significant, impacts on air quality generated by construction activities.

### 4.2.1.2.2 No Action Alternative

Current operations at the Installation would continue under this alternative. Fugitive dust generation is infrequent and of short duration and has no significant impact on the air quality in the area.

### 4.2.1.3 Potential Impacts of Demolishing Buildings 3, 6, 8A, Pit Stop and the Carport

#### 4.2.1.3.1 Proposed Action

Demolition activities would generate emissions of criteria pollutants from grading and excavating, operation of construction equipment, trucks driving on paved and unpaved roads and worker vehicles. Each type of equipment would be used very briefly and would consequently generate a very small amount of emissions. The impacts on air quality due to demolition are expected to be localized and very short-term. Therefore, the minimal emissions of criteria pollutants from demolition activities would have a negligible impact on air quality. Because of the small quantity of potential emissions generated during construction and the generally dispersive meteorological conditions (an average of 7-8 miles per hour winds) the activities would not exceed or contribute to an exceedance of air quality standards. This action is exempt from further conformity analysis pursuant to 40 CFR 93 subpart B 93.153.

During demolition, air quality impacts could occur from dust carried offsite and combustive emissions from construction equipment. The primary risks from blowing dust particles relate to human health and human nuisance values. Fugitive dust can contribute to respiratory health problems and create an inhospitable working environment. Deposition on surfaces can be a nuisance to those living or working downwind of the construction site. Measures that would be implemented to reduce or eliminate fugitive dust emissions would include:

- **Watering/Irrigation.** Watering the ground surface until it is moist is an effective dust control method for haul roads and other traffic routes. This practice can be applied to almost any site. When suppression methods involving water are used, care would be exercised to minimize over-
watering that could cause the transport of mud onto adjoining roadways, ultimately increasing the dust problem.

- **Vegetative Cover.** In areas not expected to handle vehicle traffic, vegetative stabilization of disturbed soil is often desirable. Vegetation provides coverage to surface soils and decreases wind velocity at the ground surface, thus reducing the potential for dust to become airborne.

- **Mulch.** Mulching can be a quick and effective means of dust control for recently disturbed areas.

The Proposed Action would have short-term, but not significant, impacts on air quality generated by demolition activities.

4.2.1.3.2 No Action Alternative

Current operations at the Installation would continue under this alternative. Fugitive dust generation is infrequent and of short duration and has no significant impact on the air quality in the area.

4.3 WATER RESOURCES

The analysis focused on the proximity of the construction and demolition activities in relation to surface waters, hydrogeology at the sites and water quality in the local area. Maps showing topography, watersheds, and drainage were reviewed.

4.3.1 Potential Site-Specific Project Impacts

The three projects are evaluated for project specific impacts in the following subsections.

4.3.1.1 Potential Impacts of Constructing Maintenance and Storage Facility

4.3.1.1.1 Proposed Action

Direct impacts to water resources would result primarily from disturbing the ground during construction and from altering surface hydrology. The building foundation would be between two and four feet and would not impact groundwater. A spill or leak of fuel or lubricants is not likely during construction of the facility, but if one occurs, it would be cleaned up immediately to prevent contamination of the groundwater. Given the small amount of oil and fluids used by construction equipment, impacts to the water quality of aquifer underlying the Installation would not be significant.

Short-term disturbances from construction activities could cause wind and water erosion. There are no surface water sources on or adjacent to the Installation that would be affected by runoff and sedimentation. Limited rainfall and a flat slope would minimize runoff. A storm water discharge permit would not be required since the construction activities would not exceed one acre. Runoff would be localized and would not impact storm water drainage in the area. Impacts from storm water runoff would not be significant.

A minimal amount of water would be used during construction for concrete, equipment washing and other construction-related purposes. The proposed facility would not result in a change in personnel authorizations. There would be a minimal increase in water usage for maintenance activities. This increase is easily
handled by the utility provider and would have insignificant impacts on water demand. There would be no impacts to floodplains. Revegetating areas of exposed soil with natural vegetation or grasses after construction and demolition would minimize soil erosion.

4.3.1.2 Alternative Location
Impacts of this alternative would be similar to the Proposed Action.

4.3.1.3 No Action Alternative
Current operations at the Installation and activities to manage the water resources would continue and no impact to the water resources on or adjacent to the Installation would occur.

4.3.1.2 Potential Impacts of Installing a Perimeter Security Fence
4.3.1.2.1 Proposed Action
Direct impacts to water resources would result primarily from disturbing the ground during construction activities and from altering surface hydrology. Borings for placing fence posts for the proposed security fence would reach a depth of about four feet and would not impact groundwater. A spill or leak of fuel or lubricants is not likely during excavation for the fence, but if one occurs, it would be cleaned up immediately to prevent contamination of the groundwater. Given the small amount of oil and fluids used by construction equipment, impacts to the water quality of aquifer underlying the Installation would not be significant.

Short-term disturbances from construction activities could cause wind and water erosion. There are no surface water sources on or adjacent to the Installation that would be affected by runoff and sedimentation. Limited rainfall and a flat slope would minimize runoff. A storm water discharge permit would not be required since the construction activities for the new fence would not exceed one acre. Adding the outrigger to the existing fence would not disturb the ground other than vehicles driving along the existing firebreak. Storm water runoff would negligibly increase around the areas of concrete footings for fence posts. Runoff would be localized and would not impact storm water drainage in the area. There would not be any increase in potential storm water contamination from construction of the fence (the fence is not located next to any parking lots or other areas of potentially contaminated runoff). Impacts from storm water runoff would not be significant.

A minimal amount of water would be used during construction for concrete, equipment washing and other construction-related purposes. There would be no impacts to water quality and long-term water use would remain at existing levels. There would be no impacts to floodplains. Revegetating areas of exposed soil with natural vegetation or grasses after construction and demolition would minimize soil erosion.

4.3.1.2.2 No Action Alternative
Current operations at the Installation and activities to manage the water resources would continue and no impact to the water resources on or adjacent to the Installation would occur.
4.3.1.3 Potential Impacts of Demolishing Buildings 3, 6, 8A, Pit Stop and the Carport

4.3.1.3.1 Proposed Action

Direct impacts to water resources would result primarily from disturbing the ground during demolition activities and from altering surface hydrology. A spill or leak of fuel or lubricants is not likely during demolition activities, but if one occurs, it would be cleaned up immediately to prevent contamination of the groundwater. Given the small amount of oil and fluids used by construction equipment, impacts to the water quality of aquifer underlying the Installation would not be significant.

Short-term disturbances from demolition activities could cause wind and water erosion. There are no surface water sources on or adjacent to the Installation that would be affected by runoff and sedimentation. Limited rainfall and a flat slope would minimize runoff. A storm water discharge permit would not be required since the demolition activities would not exceed one acre. Storm water runoff would negligibly increase around the areas of concrete footings for fence posts. Runoff would be localized and would not impact storm water drainage in the area. Impacts from storm water runoff would not be significant.

A minimal amount of water would be used during demolition for concrete, equipment washing and other construction-related purposes. There would be no impacts to water quality and long-term water use would remain at existing levels. There would be no impacts to floodplains. Revegetating areas of exposed soil with natural vegetation or grasses after construction and demolition would minimize soil erosion.

4.3.1.3.2 No Action Alternative

Current operations at the Installation and activities to manage the water resources would continue and no impact to the water resources on or adjacent to the Installation would occur.

4.4 BIOLOGICAL RESOURCES

The analysis focused on the proposed construction and demolition locations relative to various habitats on Gila River AFSSS. The INRMP was reviewed to provide data on existing biological resources on the Installation.

4.4.1 Potential Site-Specific Project Impacts

The three projects are evaluated for project specific impacts in the following subsections.

4.4.1.1 Potential Impacts of Constructing Maintenance and Storage Facility

4.4.1.1.1 Proposed Action

The loss of minimal vegetation and temporary displacement of wildlife during construction activities would be an unavoidable impact, but not significant. Less than one acre of land would be cleared and graded for construction of the maintenance and storage facility. The project area is located on semi-improved lands. The project area is not considered critical habitat. Short-term impacts to vegetative resources during construction activities would not be significant.

The amount of vegetation disturbed by construction for the facility would be kept to the minimum amount required to complete the activities. Disturbed areas could be re-established with grasses identified by the
Arizona Native Plant Society for drought tolerance and survivability in the local area. Additional measures proposed to minimize adverse effects could include using straw bales, silt fences, silt traps, and covering stockpiles during grading activities to contain waterborne erosion and reduce or prevent it from reaching storm sewers and ditches. After construction is complete and the area is revegetated, no long-term impacts to vegetation would occur.

4.4.1.1.2 Alternative Location
Impacts of this Alternative would be similar to the Proposed Action.

4.4.1.1.3 No Action Alternative
Current operations would continue at the Installation. Vegetation control and grading the perimeter for the firebreak would continue. Since habitat value of the Installation is very low, continued impacts to any wildlife would be negligible.

4.4.1.2 Potential Impacts of Installing a Perimeter Security Fence
4.4.1.2.1 Proposed Action
The loss of minimal vegetation and temporary displacement of wildlife during construction activities would be an unavoidable impact, but not significant. Less than one acre of land would be cleared and graded for construction of the fence around the two acre property. Adding the outrigger on the existing security fence would not disturb any vegetation since the activities would occur in an area that is currently cleared and graded for the fire break. The project areas is not considered critical habitat. Short-term impacts to vegetative resources during construction activities would not be significant. Some trees would need to be cleared for construction of the fence around the two-acre area. Trees and vegetative material cleared would be recycled through shredding and mulching to the extent feasible. None of the trees are considered critical habitat. Most of the bird species are common and widely distributed throughout the area and loss of some trees would not have a significant impact on the species populations. Prior to removal of any palm trees, the trees would be observed for great horned owl nests. If nests are observed, tree removal would not occur until after nesting season.

The amount of vegetation disturbed by construction of the fence would be kept to the minimum amount required to complete the activities. Disturbed areas would be graded and maintained as a fire break. Any areas disturbed outside the buffer area for the firebreak could be re-established with grasses identified by the Arizona Native Plant Society for drought tolerance and survivability in the local area. Additional measures proposed to minimize adverse effects could include using straw bales, silt fences, silt traps, and covering stockpiles during grading activities to contain waterborne erosion and reduce or prevent it from reaching storm sewers and ditches. After construction is complete, no long-term impacts to vegetation would occur.

Significant impacts to wildlife from the construction of the fence are not expected to occur since habitat alteration would be minor. The Installation has an existing seven foot chain-lined fence around the perimeter so adding the outrigger would not impact small mammals as they would have adequate forage within the fenced area, or be able to manipulate an exit from the fenced area without harm. Medium to
large mammals would continue to be excluded from accessing the Installation. Fencing of the additional two acres would have insignificant impacts on wildlife.

4.4.1.2.2 No Action Alternative
Current operations would continue at the Installation. Vegetation control and grading the perimeter for the firebreak would continue. Since habitat value of the Installation is very low, continued impacts to any wildlife would be negligible.

4.4.1.3 Potential Impacts of Demolishing Buildings 3, 6, 8A, Pit Stop and the Carport
4.4.1.3.1 Proposed Action
The loss of minimal vegetation and temporary displacement of wildlife during demolition activities would be an unavoidable impact, but not significant. Less than one acre of land would be cleared and graded during demolition. The project areas are located on semi-improved lands and are not considered critical habitat. Short-term impacts to vegetative resources during demolition activities would not be significant.

The amount of vegetation disturbed by demolition activities would be kept to the minimum amount required to complete the activities. Disturbed areas could be re-established with grasses identified by the Arizona Native Plant Society for drought tolerance and survivability in the local area. Additional measures proposed to minimize adverse effects could include using straw bales, silt fences, silt traps, and covering stockpiles during grading activities to contain waterborne erosion and reduce or prevent it from reaching storm sewers and ditches. After construction is complete and the area is revegetated, no long-term impacts to vegetation would occur.

4.4.1.3.2 No Action Alternative
Current operations would continue at the Installation. Vegetation control and grading the perimeter for the firebreak would continue. Since habitat value of the Installation is very low, continued impacts to any wildlife would be negligible.

4.5 CULTURAL RESOURCES
The analysis focused on the proposed location for the construction and demolition in relation to any historic buildings or archaeological resources. The archaeological survey and cultural resource inventory were reviewed.

4.5.1 Potential Site-Specific Project Impacts
The three projects are evaluated for project specific impacts in the following subsections.

4.5.1.1 Potential Impacts of Constructing Maintenance and Storage Facility
4.5.1.1.1 Proposed Action
No known cultural resources have been identified in the area for the proposed maintenance and storage facility. No archaeological artifacts of any significance were located during a survey for cultural resources and considering the high level of ground disturbance that has occurred on the Installation, no other potential impacts are likely.
Should any unknown archaeological resources be uncovered during construction activities, the Installation would follow procedures described in AFI-32-7065, Cultural Resource Management, and consult with the Gila River Indian Community.

4.5.1.1.2 Alternate Location
Impacts from this Alternative would be the same as the Proposed Action.

4.5.1.1.3 No Action Alternative
For the No Action Alternative, current conditions would not change and impacts to cultural resources would not occur.

4.5.1.2 Potential Impacts of Installing a Perimeter Security Fence

4.5.1.2.1 Proposed Action
An archaeological survey of these two acres would be completed prior to installation of the new fence. There are no buildings currently located on the two acres where the new fence would be constructed.

4.5.1.2.2 No Action Alternative
For the No Action Alternative, current conditions would not change and impacts to cultural resources would not occur.

4.5.1.3 Potential Impacts of Demolishing Buildings 3, 6, 8A, Pit Stop and the Carport

4.5.1.3.1 Proposed Action
The Air Force is working with the Tribal Historic Preservation Officers to determine if the old Operations Building is historic. Demolition would not occur until the Air Force and THPO have reached an agreement. The Air Force would comply with the terms of the agreement.

No known cultural resources have been identified in the area for the other proposed demolition activities. No archaeological artifacts of any significance were located during a survey for cultural resources and considering the high level of ground disturbance that has occurred on the Installation, no other potential impacts are likely.

Should any unknown archaeological resources be uncovered during construction activities, the Installation would follow procedures described in AFI-32-7065, Cultural Resource Management, and consult with the Gila River Indian Community.

4.5.1.3.2 No Action Alternative
For the No Action Alternative, current conditions would not change and impacts to cultural resources would not occur.

4.6 ASBESTOS
The analysis focused on issues relating to removal and disposal of asbestos. These included a review of federal and state laws and regulations, asbestos survey and Asbestos O&M Plan (USAF, 2010c).
4.6.1 Potential Site-Specific Project Impacts

The three projects are evaluated for project specific impacts in the following subsections.

4.6.1.1 Potential Impacts of Constructing Maintenance and Storage Facility

4.6.1.1.1 Proposed Action
There would be no impacts related to asbestos from this Action.

4.6.1.1.2 Alternative Location
There would be no impacts related to asbestos from this Alternative.

4.6.1.1.3 No Action Alternative
There would be no impacts related to asbestos from the No Action Alternative.

4.6.1.2 Potential Impacts of Installing a Perimeter Security Fence

4.6.1.2.1 Proposed Action
There would be no impacts related to asbestos from this Action.

4.6.1.2.2 No Action Alternative
There would be no impacts related to asbestos from the No Action Alternative.

4.6.1.3 Potential Impacts of Demolishing Buildings 3, 6, 8A, Pit Stop and the Carport

4.6.1.3.1 Proposed Action
An asbestos survey would be conducted on the old Operations Building prior to demolition. Any asbestos identified would be removed prior to demolition in accordance with the procedures in the Installation Asbestos O&M Plan. The removal and disposal of any asbestos in this building would be performed by trained contractor personnel in accordance with all applicable Federal, state, local and Air Force regulations.

The quantity of waste and the short duration of the removal process would be an insignificant impact. The other buildings and structures proposed for demolition are not suspected to contain asbestos.

4.6.1.3.2 No Action Alternative
Under the No Action Alternative, all asbestos-containing building materials would remain in place. ACM that has the potential to become friable could expose workers to asbestos fibers and the potential for handling of ACM during maintenance procedures. The potential impact to human health and the environment from the No Action Alternative is minor but could become significant if the ACM became friable.

4.7 LEAD-BASED PAINT

The analysis focused on issues relating to removal and disposal of LBP. These included a review of Federal and state laws and regulations and a LBP survey.
4.7.1 Potential Site-Specific Project Impacts

The three projects are evaluated for project specific impacts in the following subsections.

4.7.1.1 Potential Impacts of Constructing Maintenance and Storage Facility

4.7.1.1.1 Proposed Action
There would be no impacts related to LBP from this Action.

4.7.1.1.2 Alternative Location
There would be no impacts related to LBP from this Alternative.

4.7.1.1.3 No Action Alternative
There would be no impacts related to LBP from the No Action Alternative.

4.7.1.2 Potential Impacts of Installing a Perimeter Security Fence

4.7.1.2.1 Proposed Action
There would be no impacts related to LBP from this Action.

4.7.1.2.2 No Action Alternative
There would be no impacts related to LBP from the No Action Alternative.

4.7.1.3 Potential Impacts of Demolishing Buildings 3, 6, 8A, Pit Stop and the Carport

4.7.1.3.1 Proposed Action
A LBP survey would be conducted on the old Operations Building and carport prior to demolition. Any LBP identified would be removed prior to demolition in accordance with abatement procedures identified in the Installation Lead Management Plan (USAF, 2010d). The removal and disposal of any LBP in this building would be performed by trained contractor personnel in accordance with all applicable Federal, state, local and Air Force regulations. The quantity of waste and the short duration of the removal process would be an insignificant impact.

The Occupational Safety and Health Administration’s (OSHA) regulation 29 CFR 1926.62 applies to construction work where an employee may be occupationally exposed to lead. OSHA does not recognize lead levels in paint, but focuses on lead levels in the ambient air during construction or demolition. Therefore, OSHA applies during demolition activities that impact lead-containing paint as well as LBP. Paint chip samples should be collected and analyzed to provide information regarding lead-containing paint. The use of personal protective equipment during the demolition and removal of materials that are coated with LBP are generally used to meet the OSHA standard.

4.7.1.3.2 No Action Alternative
Under the No Action alternative, LBP would be left in place and would continue to be monitored for deterioration. If deterioration is noticed, steps to remediate the situation would be taken.
4.8 CUMULATIVE IMPACTS

This section describes the impacts to the environment that may potentially occur because of the additive (i.e., cumulative) effects of implementing the Proposed Action with other past, present, and reasonably foreseeable future actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.

Past and present actions on the Installation center on the mission – maintaining the Installation to keep the antenna array operational and personnel safe. Gila River AFSSS is an active military Installation and is subject to regular maintenance and improvement of facilities to maintain mission readiness. No major changes to the mission or new facility construction other than the Proposed Actions are planned for the Installation. Future actions by others in the vicinity of the Installation include commercial real estate development.

Cumulative impacts associated with the Proposed Actions include an incremental decrease in available habitat. The use of construction-related vehicles and their short-term impacts on air quality is unavoidable. The short-term increases in air emissions and the minimal impacts predicted for other resource areas would not be significant when considered cumulatively with other previous, ongoing, or reasonably foreseeable activities. No other known construction is planned for the Installation or adjacent areas.

4.9 IRREVERSIBLE AND IRRETRIEVABLE COMMITMENT OF RESOURCES

The irreversible and irretrievable commitment of resources would most likely involve the commitment of concrete, energy, fuel, labor, and fencing and building materials. The irretrievable resources to be committed are typical for the scale of the proposed project. Implementation of best construction management practices, standard equipment maintenance schedules, and use of energy conservation and recycling measures during the fence construction would minimize the use of irretrievable resources. None of these materials are considered rare and the long-term commitment of these resources would not have a substantial effect on their future availability.

4.10 SHORT-TERM USE AND LONG-TERM PRODUCTIVITY

The definitions of short-term and long-term are based on the scope of the Proposed Actions. Short-term use of the environment, as it relates to the Proposed Actions would encompass the construction and demolition period. Long-term productivity would occur after the construction and demolition has ended. During construction soil would be excavated and there would be associated dust emissions. Excavation and construction would not have a significant effect and impacts would be minimized through best management practices. The fence and maintenance and storage facility would have a long useful life and therefore, high long-term productivity.
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5.0 LIST OF PREPARERS

This Environmental Assessment has been prepared for the U.S. Air Force Space Command with contractual assistance from PB&A, Inc. The following personnel were involved in the preparation and review of this EA:

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The following persons were contacted during the preparation of this EA:

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7.0 REFERENCES


ERSI — see Environmental Systems Research Institute


Title 40 of the Code of Federal Regulations (CFR), Parts 1500 through 1508, “National Environmental Policy Act.”


Appendix A – Public Notice of Availability
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NOTICE OF AVAILABILITY
DRAFT FINAL ENVIRONMENTAL ASSESSMENT (EA)
AND FINDING OF NO SIGNIFICANT IMPACT (FONSI)
CONSTRUCTION OF MAINTENANCE AND STORAGE FACILITY,
UPGRADE OF PERIMETER FENCE,
AND DEMOLITION OF 3 BLDGS AND
2 STRUCTURES GILA RIVER AIR FORCE SPACE SURVEILLANCE STATION,
ARIZONA

An EA has been prepared in accordance with the National Environmental Policy Act (NEPA) of 1969 and the Council on Environmental Quality implementing NEPA to analyze the potential environmental consequences of constructing a new maintenance and storage facility, upgrading the perimeter security fence, and demolishing 3 buildings and 2 structures at Gila River, AFSSS. The EA analyzes potential impacts from geology, topography and soils; air quality; land use; water resources; biological resources; cultural resources; asbestos and lead-based paint. The Draft Final EA and FONSI, dated July 2012 are available for review on line at http://pbainc.com/public/ and at the following library: Phoenix Arizona Public Library - Ironwood Branch
4333 E. Chandler Blvd.
Public comments on the Draft EA will be accepted through August 14, 2012. Written comments and inquiries on the EA and FONSI should be directed to Ms. Melissa Trenchik, 21 CES / CENPP, 580 Goodfellow Street, Peterson AFB, Colorado 80914 or email: melissa.trenchik@peterson.af.mil
No. of publications: 1; date of publication: July 15, 2012.

STATE OF ARIZONA ss.
COUNTY OF PINAL

Affidavit of Publication

RUTH A. KRAMER first being duly sworn deposes and says: That he/she is a native born citizen of the United States of America, over 21 years of age, that I am an agent and/or publisher of the Casa Grande Dispatch, a daily newspaper published at Casa Grande, Pinal County, Arizona, Tuesday through Sunday of each week; that a notice, a full, true and complete printed copy of which is hereunto attached, was printed in the regular edition of said newspaper, and not in a supplement thereto, for ONE (1) issues the first publication thereof having been on the 15th day of July A.D., 2012

Second publication

Third publication

Fourth publication

Fifth publication

Sixth publication

CASA GRANDE DISPATCH

By

agent and/or publisher of the Casa Grande Dispatch

Sworn to before me this 23rd day of July A.D., 2012

Notary Public in and for the County of Pinal, State of Arizona

Official Seal
NOTARY PUBLIC
State of Arizona
County of Pinal
DEBBIE L. MUMME
My Comm. Expires 10-23-2013