

F-35A Training Basing

ENVIRONMENTAL IMPACT STATEMENT



SUMMARY OF ENVIRONMENTAL IMPACT ANALYSIS

The U.S. Air Force has prepared a Draft Environmental Impact Statement (EIS) to assess the potential environmental impacts of its proposal to establish a Pilot Training Center with F-35A training aircraft at one or more existing Air Force or Air National Guard installations within the continental United States. The Draft EIS presents potential environmental consequences for four basing alternatives: Boise Air Terminal Airport Air Guard Station (AGS), Holloman Air Force Base (AFB), Luke AFB and Tucson International Airport AGS.

This fact sheet includes a brief summary of the potential impacts on environmental resources from the proposal, specifically for Tucson AGS. For information about environmental impacts on the other basing alternatives or for more detailed information about possible impacts from F-35A training at Tucson AGS, please refer to the Draft EIS, available at www.F-35ATrainingEIS.com.

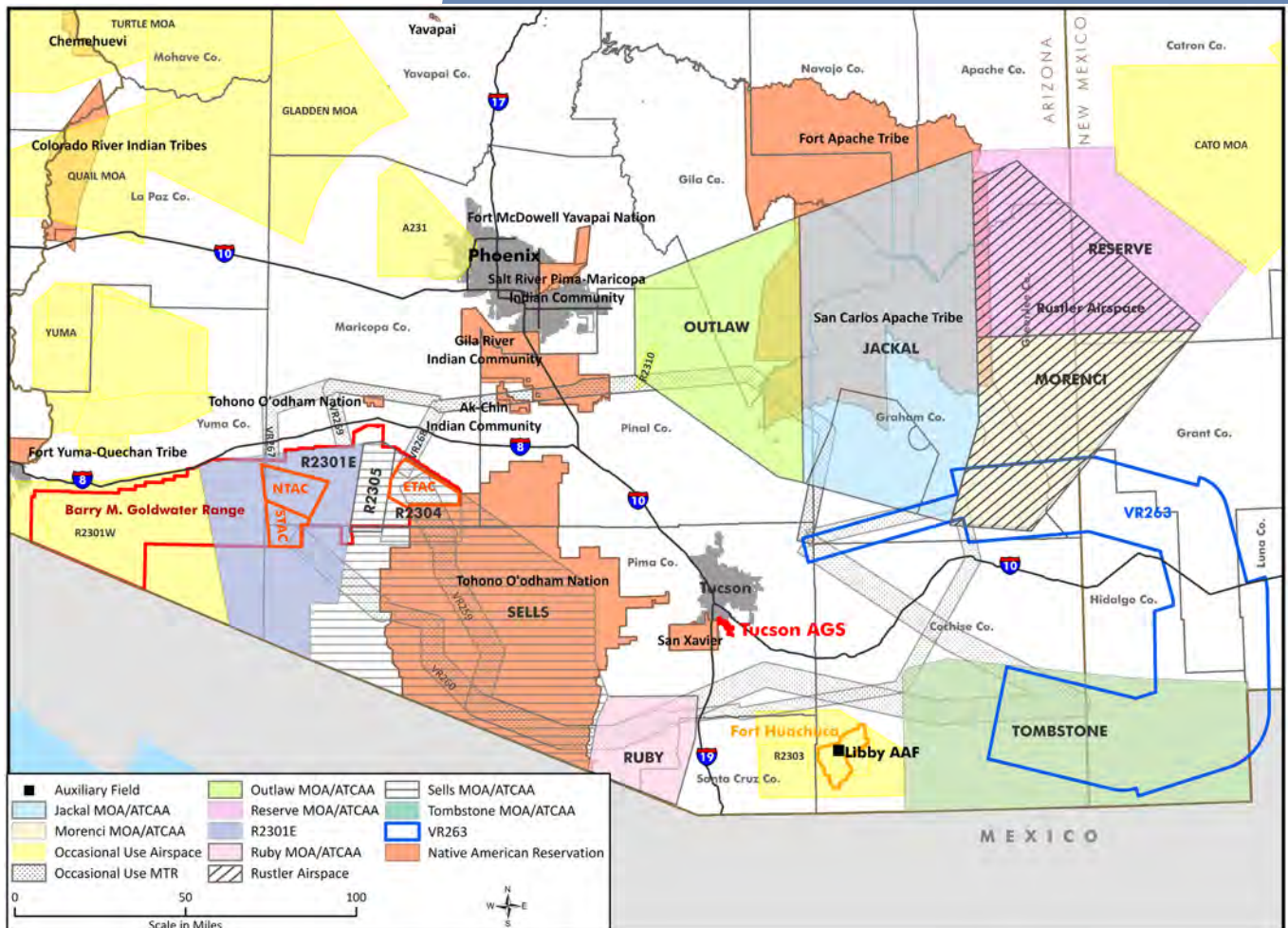
Tucson International Airport Air Guard Station (AGS)

Located on the northwestern grounds of Tucson International Airport in Pima County, Tucson AGS is home to the Air National Guard's premier F-16 fighter pilot training unit, the 162nd Fighter Wing. It is the largest Air National Guard fighter wing in the country, with a fleet of 65 F-16 Fighting Falcons. Since its activation in 1956, the 162nd Fighter Wing fulfills dual federal and state missions by preparing units for war and supporting emergency relief efforts. The Wing has more than 42 years experience in fighter training, more than 22 years experience in international military training and has trained pilots from more than 25 countries. Since 1969, the Wing has graduated more than 6,800 fighter pilots.

For more information about Tucson AGS, please visit www.162fw.ang.af.mil.



Figure 1: Training Airspace and Ranges at Tucson Air Guard Station



DRAFT ENVIRONMENTAL IMPACT STATEMENT



The Air Force analyzed potential environmental consequences associated with changes in personnel, construction or renovation of installation facilities, and training activities in existing military airspace, ranges and at Libby Army Airfield (AAF), which would serve as an auxiliary airfield to support F-35A training aircraft based at Tucson AGS. Environmental resources identified by the public and agencies and addressed in the Draft EIS are summarized here.

For more detailed information about the analysis of resources and potential environmental consequences, please refer to the Draft EIS at www.F-35ATrainingEIS.com.

Environmental resource categories evaluated in the Draft Environmental Impact Statement for each alternative installation include:

Aircraft Operations

- Airspace Management and Use
- Noise
- Air Quality
- Safety (ground, airfield and explosives)

Natural Resources

- Soils and Water (soils, surface water, floodplains and groundwater)
- Vegetation and Wildlife
- Wetlands and Aquatic Communities
- Threatened, Endangered and Special Status Species



Cultural and Traditional Resources

- Archaeological, Historic Architectural, Traditional and Native American Concerns

Human Resources

- Land Use and Recreation
- Socioeconomics
- Environmental Justice and Protection of Children

Community and Infrastructure

- Infrastructure
- Transportation
- Hazardous Materials and Waste

The Air Force assessed basing up to 72 F-35A training aircraft at Tucson AGS. The environmental analysis was conducted using the basing scenarios described in Table 1.

TABLE 1. TUCSON AGS AIRCRAFT BASING SCENARIOS

Aircraft Scenario	F-35A*	F-16**	Total Aircraft
Baseline Condition	0	65	65
T1	24	18 [†]	42
T2	48	6 ^{††}	54
T3	72	6 ^{††}	78

* All basing scenarios used increments of 24 aircraft.

** Air Force F-16 training mission relocates under all three scenarios.

[†] Dutch F-16 training mission and Air National Guard/Air Force Reserve Command Test Center remain.

^{††} The Air National Guard/Air Force Reserve Command Test Center remains.

Nearby Davis-Monthan AFB is not a candidate location for the F-35A Pilot Training Center and training aircraft; however, a small portion of F-35A training may require limited use of its flightline and other facilities.

Noise

Noise, defined as unwanted sound, could affect several of the environmental resource areas. For more information on the methods used to assess and quantify noise impacts and detailed results, please see the Noise section in the Draft EIS (Chapter 4, Section TU 3.2 Noise). The Air Force would continue to adhere to all existing Federal Aviation Administration (FAA) and local avoidance procedures, flight restrictions, scheduling adjustments and other practices designed to reduce aircraft noise.

Noise levels were analyzed at noise-sensitive locations, such as on- and off-installation schools, hospitals and places of worship. Under baseline (current) conditions, 407 off-installation residents are affected by noise levels greater than 65 decibel (dB) day-night average sound level (DNL). The analysis indicates that the number of off-installation residents affected by noise levels greater than 65 dB DNL would increase by approximately 1,500 to 8,100 people under the various basing scenarios.

A small percentage of F-35A aircraft operations would occur after 10:00 p.m.

As a result, the likelihood of sleep disturbance, averaged among the locations studied, would increase by up to 10 percent under the basing scenarios. To reduce the impact of airfield operations, current Tucson AGS procedures prohibit certain training activities after 10:00 p.m.; only full-stop landings are permitted.

Day-night average sound level (DNL) is a noise level, averaged over a 24-hour period, with an adjustment for late-night noises. **Sixty-five decibel DNL** is a threshold above which certain land uses, such as residential, are not considered compatible by the Federal Aviation Administration or the Air Force without measures to ensure that interior noise level goals are met.

F-35A training operations would increase subsonic noise levels in areas under training airspace. Supersonic noise (created by aircraft exceeding the speed of sound) would decrease under all scenarios. Live and inert weapons training conducted at Barry M. Goldwater Range (see Figure 1), would not result in significant noise impacts.

Air Quality

Air quality is described by the concentrations of various air pollutants in the atmosphere. Under all basing scenarios, emissions from proposed activities would not exceed air quality standards and would produce less than significant air quality impacts.

Protective measures would continue to be implemented at Tucson AGS including, but not limited to: limiting soil exposure for long periods of time during construction activities, employing dust control and soil retention practices, and employing, where feasible, construction equipment emission-control measures.

Emissions associated with construction and renovation activity would remain well below conformity thresholds and would not result in significant impacts.

Proposed aircraft operations and other day-to-day operations at the installation under Basing Scenario T1 would result in a net reduction in emissions for all pollutants. Under Scenarios T2 and T3, nitrogen oxide emissions would increase; however, this increase would not exceed the conformity threshold.

Annual emissions from aircraft operations in training areas associated with Tucson AGS and aircraft flight routes between training areas and Libby AAF would decrease for all pollutants under all scenarios.

Safety

F-35A training aircraft operations would be conducted at the installation and in existing airspace in a manner similar to current operations. The Air Force anticipates no increase in safety risks associated with aircraft mishaps. Emergency and mishap response plans would be updated to include necessary procedures and response actions specific to the F-35A aircraft.

Ground Safety: Basing scenarios are not expected to create new or unique ground safety risks. All activities would continue to be conducted in accordance with applicable regulations, technical orders and standards. Construction, renovation or infrastructure improvements would comply with all regulations.

Airfield Safety: No increase in safety risks is expected.

Explosives Safety: Ordnance would continue to be handled in accordance with Air Force and Department of Defense directives, and would not result in a greater safety risk. No significant impacts related to explosives safety are anticipated.

Airspace Safety: No increase in airspace safety risks is anticipated. Munitions and defensive flares would continue to be deployed in accordance with airspace and range procedures. Fuel dumping in emergency situations would be conducted in accordance with FAA procedures. Continued use of the Avian Hazard Advisory System, Bird Avoidance Model and pilot briefings would identify avoidance areas and minimize risks from bird-aircraft strikes.

Vegetation and Wildlife/Threatened, Endangered and Special Status Species

Construction and demolition activities would occur in developed portions of the installation. As a result, no long-term effects on vegetation, wildlife or sensitive species are anticipated.

Measures to control erosion and siltation would be included with project implementation.

Revegetation of temporarily disturbed areas would minimize the potential for erosion and dust generation, and decrease the duration of temporary habitat loss.

Surveys would be conducted before demolition, removal and renovation of abandoned buildings to determine if nesting birds or sensitive bat species are present. To comply with the Arizona Native Plant Law to protect native plants, surveys should be conducted at the site of any proposed ground-disturbing action on Tucson AGS to determine the presence or absence of federally or state-protected plants.

As with current operations, low-level overflights and associated noise, sonic booms, munitions expenditures, flares and bird-aircraft collisions could impact biological resources. Based on the low percentage of time spent in low-level flight and current exposure of wildlife by other aircraft at Tucson AGS and Libby AAF, no significant adverse effects on vegetation or wildlife from overflights, noise or other training actions are anticipated.

No known federally listed threatened or endangered wildlife species or their habitats occur on Tucson AGS. Therefore, no adverse effects on federally listed wildlife are anticipated. Proposed airfield operations are similar to current operations and are not anticipated to cause significant impacts on special status wildlife that occur on base.

The potential for adverse effects of F-35A training on endangered, threatened or special status wildlife is minimal. Although it is possible for a federally listed wildlife species to exhibit a temporary response, it is unlikely that such a response would adversely affect the survival or fertility of the individual or population, or approach the level of "take" as defined in the Endangered Species Act.



Archaeological, Historic Architectural, Traditional and Native American Concerns

Consultations with Native American tribes are ongoing regarding airspace actions. National Historic Preservation Act Section 106 consultation would take place regarding visual and other potential cultural impacts.

Land Use and Recreation

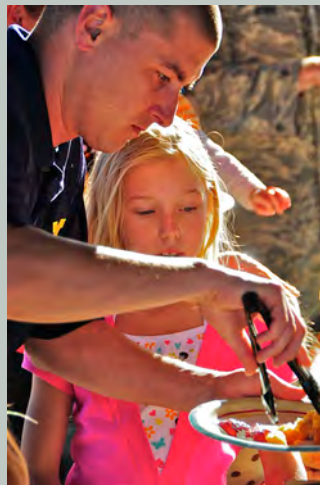
The F-35A aircraft basing would require construction and modification of facilities within Tucson AGS. New or modified facilities would be designed and sited to be consistent with the installation master plan, airfield safety guidelines and related planning programs so that projected development would be compatible with surrounding land uses.

Total land area in the vicinity of Tucson AGS affected by noise levels of 65 dB DNL or greater would increase under all basing scenarios. Several land use types, including residences without adequate sound attenuation, are considered incompatible with noise levels greater than 65 dB DNL.

Noise levels exceeding 65 dB DNL in the vicinity of Libby AAF would affect only land owned by the airport and the surrounding military installation. No additional incompatible land use areas would result from implementation of the basing scenarios.

Subsonic and supersonic aircraft noise would increase beneath several training airspace areas, potentially reducing recreational users' enjoyment of the natural setting. The quality of recreation experiences in wilderness areas, recreation areas and other specially managed lands underneath training airspace could be affected, depending upon the type of recreation and remoteness of the area.

F-35A flight training activities would take place in existing military airspace. No modifications to airspace would be required. Proposed training activities would be consistent with existing airspace operations and would comply with established range and land management plans.



Socioeconomics

Under the basing scenarios, between 1,815 to 2,089 direct, indirect and induced jobs are anticipated and could be filled by unemployed persons in Pima County. Under Scenario T1, a loss of personnel and jobs would decrease tax revenues by \$3.54 million. Under Scenarios T2 and T3, tax revenues would increase by approximately \$5 million and \$9 million, respectively.

The current housing market could accommodate additional personnel. Schools are anticipated to have sufficient capacity to accommodate an estimated increase of up to 342 school-aged children, but there may be need for additional teachers.

Property value is defined by qualities of the property itself, surrounding properties and the local real estate market. Noise generated by F-35A operations could impact property values for properties experiencing noise levels in excess of 65 dB DNL. Residents and recreationists may notice and respond to the noise level increase.



Environmental Justice and Protection of Children

Noise associated with training activities would present a disproportionately high and adverse environmental impact on low-income populations in the vicinity of Tucson AGS. The share of low-income persons affected by noise levels greater than 65 dB DNL is higher as compared to the community of comparison, Pima County. The share of minority populations affected by noise levels greater than 65 dB DNL under baseline conditions and all basing scenarios is substantially higher than the share of minority populations in Pima County.

Noise levels greater than 65 dB DNL generated under all scenarios may have adverse effects on children at one to two schools and up to one child care center. Additional noise attenuation measures could be applied to impacted schools and child care centers to address potential adverse noise impacts.

Under the training airspace or in the vicinity of Libby AAF, no disproportionately high and adverse human health or environmental effects on minority or low-income populations or children have been identified.

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