

RECORD OF DECISION

PROPOSED EXPANSION OF GERMAN AIR FORCE (GAF) OPERATIONS AT HOLLOWMAN AIR FORCE BASE (AFB), NEW MEXICO

INTRODUCTION

Pursuant to Section 102(2)(C) of the National Environmental Policy Act (NEPA) of 1969 and regulations promulgated by the President's Council on Environmental Quality (CEQ) at Title 40 Code of Federal Regulations (CFR) Part 1500 et seq., and Air Force Instruction (AFI) 32-7061, Environmental Impact Analysis Process, the United States Air Force has prepared an Environmental Impact Statement (EIS) evaluating the potential environmental effects of the proposed expansion of German Air Force Operations at Holloman Air Force Base, New Mexico. This Record of Decision (ROD) identifies my decisions for this proposed action. These decisions have been made in consideration of the information contained in the EIS which was filed with the United States Environmental Protection Agency (US EPA) and made available to the public by announcement in the Federal Register on April 17, 1998.

PUBLIC PARTICIPATION

Public participation is one of the cornerstones of NEPA and is reflected in CEQ NEPA regulations, which require an early and open process for determining the scope of issues to be addressed in the EIS. The objective of the scoping process is to determine the range of issues to be addressed and to identify significant issues related to the proposed action.

The first step of scoping for this EIS was publication of the Notice of Intent (NOI) in the Federal Register on May 8, 1996. The NOI announced the dates, times, and locations of the proposed scoping meetings and alerted the public of the Air Force's intent to publish an EIS.

The scoping period was from May 8 to August 15, 1996. The Air Force placed announcements in local and state newspapers to advertise scoping meetings and solicit public comments. The scoping meetings were held between July 7 and 12, 1996 in El Paso, Texas and Carlsbad, Carizozo, Las Cruces, and Alamogordo New Mexico. In addition, public comments were accepted throughout the public scoping period, as well as during preparation of the Draft EIS (DEIS), the public comment period following the release of the DEIS, and the preparation of the Final EIS (FEIS).

A Notice of Availability for the Draft EIS was published in the Federal Register on June 20, 1997. The notice started the 45-day public review and comment period, which concluded on August 4, 1997. Announcements were placed in local and state newspapers to notify the public of the Draft EIS availability and to solicit comments on the document. Copies of the Draft EIS were mailed to agencies, organizations, and individuals on the mailing list for their review and comment. In addition, copies of the Draft EIS were placed in several libraries in the area for public review. Comments received during the public review and comment period were considered in preparation of the Final EIS (FEIS). Modifications were made to the Final EIS based upon the input received during the public review and comment period for the Draft EIS to provide further clarification of the proposed action, alternatives, impact assessment, and proposed mitigation measures.

BACKGROUND

Changes in international requirements and in the United States military budgets have established a need to foster combined action capabilities for the military forces of many nations to work together to meet specific threats. Combined action capabilities permit each nation to substantially reduce their military force, while concurrently creating the larger force necessary to permit response to international requirements. The current U.S. National Military Strategy emphasizes peacetime engagement by way of military-to-military contacts through international training and military exchanges. This strategy requires military personnel from different nations to achieve a uniformly high standard of training and proficiency, and forge the strongest possible team. The goal is to build mutual trust, effective communications, interoperability, and doctrinal familiarity.

Germany is an important ally of the United States and has provided aircrews to support recent combined force missions. The United States government, following discussions with the German government, recognized a need to provide training with enhanced realism and quality for German Air Force (GAF) Tornado aircrews. Holloman AFB had the capacity, Military Training Routes (MTRs), Military Operations Areas (MOAs), and ranges to provide the requested training. A Memorandum of Agreement was signed between the United States and German governments in May 1994, establishing the GAF Tactical Training Establishment (TTE) at Holloman AFB. The potential environmental effects of that action were assessed under NEPA and U.S. Air Force Regulations (Air Force, 1993. Proposed Beddown of the German Air Force PA-200 and an Additional AT-38 Training Unit at Holloman Air Force Base, New Mexico).

In May 1996, 12 Tornado aircraft were relocated to Holloman AFB. This action resulted in economies of scale, logistics, and cross training since it resulted in collocation of the German Tornados and the German F-4 training (conducted by the U.S. Air Force 20th Fighter Squadron) at Holloman AFB.

In 1995, two years after the beddown decision on the original 12 Tornados, discussions were held between the two countries about the potential expansion of GAF Tornado training in the United States. Because of the need to optimize use of previous infrastructure investments (e.g., maintenance facilities and aircraft hangars), Holloman AFB was considered to be the only feasible location for the Tornado beddown. On this basis, the U.S. Air Force is considering a proposed action under which the GAF TTE for GAF Tornado aircrews would be expanded at Holloman AFB.

PURPOSE AND NEED

In the international arena, the purpose of the proposed action is to further support a bilateral agreement between the governments of the United States and Germany. The proposed action demonstrates continued U.S. commitment to NATO allies, which is crucial as the U.S. military presence is reduced in Europe. The proposed GAF military training would serve to maintain cooperation between our countries and interoperability among our military forces. It provides a desert/mountainous terrain training location not otherwise available to GAF aircrews in Germany. The implementation of this action for the GAF capitalizes on the substantial infrastructure investments the GAF has already made at Holloman AFB. Collocating the initial, continuation, and advanced training programs at one location will allow Tornado expertise to be shared among students in different courses, which would enhance the training environment and produce better-trained students.

implementation of the proposed action would serve to meet the need to protect U.S.-German post-Cold War bilateral relations from possible degradation as a result of U.S. military force reductions in Europe. The proposed action would serve to meet the need to promote international agreements and demonstrate U.S. resolve to support internationally cooperative defense initiatives. The proposed action would provide GAF a consolidated Tornado training establishment capable of supporting needed new training, continuation of existing training requirements, and desert/mountainous terrain training. It would also provide means to improve logistics efficiency and enable economy of scale for the GAF by collocating these additional aircraft with existing GAF operations at Holloman AFB.

PROPOSED ACTION

A Final Environmental Impact Statement (FEIS) entitled "Proposed Expansion of German Air Force Operations at Holloman AFB, New Mexico" was prepared by the Air Force to analyze the potential impacts and aid in the decision of expanding the TTE to include the beddown of 30 additional GAF Tornado aircraft with associated operations and support personnel at Holloman AFB.

Expansion of the TTE would involve the beddown of an additional 30 Tornado aircraft and 640 personnel at Holloman AFB. Under the TTE expansion at Holloman AFB, five different training courses ranging from basic conversion training to the Fighter Weapon Instructor Course would be conducted. The Tornado aircrews would receive training in takeoffs and landings, the use of terrain-following radar for low-level navigation on Military Training Routes (MTRs), air-to-ground training on air-to-ground ranges, air-intercept training in Military Operations Areas (MOAs) and restricted airspace, and aerial refueling. Existing ranges and airspace would be used to achieve a majority of the training; however, current range capacity and capabilities provide a minimally acceptable level of training. These limitations led to three "training options" being considered as part of this action.

To support this beddown, construction affecting approximately 96 acres at the base would be required. The proposed action would result in changes in use of airspace and munitions. Airspace use would increase in most affected airspace. The training, would require installing a Television Ordnance Scoring Systems (TOSS) at the Oscura and Red Rio target complexes on White Sands Missile Range (WSMR) and also at the selected training option site (see Training Options and Decision discussions below). Live munitions deliveries would be restricted to the existing Red Rio Live Drop Target (LDT). Supersonic operations, limited to approximately 24 sorties per year for "maintenance check" purposes, would be conducted in designated WSMR supersonic airspace (above 10,000 feet mean sea level [MSL]). The proposed action would make use of the airspace modifications to the existing Air Launched Cruise Missile (ALCM) routes, the Talon MOA expansion, and the aerial refueling anchor, AR-X652, in southern New Mexico and west Texas if these modifications are approved by the Federal Aviation Administration (FAA). If these airspace modifications are not implemented, existing airspace would be used. Differences in airspace availability and use are taken into account in the FEIS which analyzes the environmental impacts of using the proposed modified airspace, as well as the impacts of using existing airspace if the proposed modifications are not approved by the FAA.

TRAINING OPTIONS

Under the proposed action, three training options were considered and evaluated in the FEIS:

West Otero Mesa Training Option. Under this, the preferred training option, a new target complex (NTC) would be established on the West Otero Mesa portion of McGregor Range. The NTC would be used for air-to-ground training in the delivery of inert/subscale munitions. This option would include the installation of a TOSS at the NTC.

Tularosa Basin Training Option. Under this option, an NTC would be established in the Tularosa Basin portion of McGregor Range. This NTC would be used for air-to-ground training in the delivery of inert/subscale munitions. This option would also include the installation of a TOSS at the NTC.

Existing Range Training Option. Under this option, all air-to-ground training would occur on existing ranges.

NO ACTION ALTERNATIVE.

Under the no action alternative, no change in TTE aircraft and personnel at Holloman AFB would occur. No construction would be required to support this alternative. In addition, no change in airspace use or munitions use would occur.

DECISION

The CEQ regulations implementing NEPA require RODs to specify the alternative or alternatives considered to be environmentally preferable. As between the proposed action and the no action alternative, the no action alternative is environmentally preferable in the sense that the no action alternative would result in no environmental impacts beyond the baseline conditions. However, pursuant to the CEQ regulations, this ROD also identifies and discusses preferences among alternatives based on relevant factors including economic and technical considerations and, agency statutory missions, including any essential considerations of national policy balanced by the agency in making its decision. After considering the preferences associated with the proposed action and its training options, as well as the no action alternative, and their potential environmental consequences, I have decided to implement the proposed action with the preferred West Otero Mesa training option (this combination is referred to hereafter as the selected action). In making this decision, I have considered the economic and technical factors associated with the proposed action, the various training options, and the no action alternative, the mission of the U.S. Air Force and the national policy matters discussed above. I have also considered the opinions and suggestions that were offered by the public, state and federal agencies and other government representatives from the affected communities in making this decision. I decided on this selected action for a number of operational and environmental reasons.

The West Otero Mesa training option provides the maximum training opportunity for both the GAF and U.S. Air Force. In addition to the greater opportunity for training, this option also provides for the greatest training versatility and efficiency. Finally, NTC construction on the West Otero Mesa will disturb a significantly smaller geographical area compared to the Tularosa Basin training option and will involve a fraction of the cost.

The Tularosa Basin training option was not selected because the layout of the terrain would result in a 20 percent reduction in training efficiency compared to the West Otero Mesa training option. This alternative would also require extensive site disturbance to prepare for and construct the NTC, which would increase costs by several million dollars.

The Existing Range training option provides only minimally adequate training for GAF aircrews and does not have the training benefits and efficiencies of the other options. In addition, the increased range use from this option has the potential to significantly degrade current U.S. Air Force operations and training.

The No Action alternative would not provide the training, proficiency, and combined action capabilities needed to achieve the military-to-military strategy and goals.

The FEIS provides analyses of the potential environmental consequences of the proposed action and the training options considered, as well as the No Action alternative. All practical means to avoid or minimize environmental harm from the alternative selected have been evaluated and are being adopted. The findings, as discussed below, indicate that potential environmental impacts would include increased aircraft-related noise in some portions of the affected airspace, overflight disturbance to land use, and slight to moderate impacts to biological resources. I believe the FEIS-specified mitigation measures will avoid or adequately minimize these potential impacts.

SELECTED ACTION IMPACTS

The following summarizes the anticipated impacts from the selected action:

Airspace Use and Management: The selected action does not require any modifications to existing airspace. However, the training would use the airspace modifications considered under the previously assessed ALCM/Talon action, if approved by the FAA. Overall, assessment of each affected airspace unit found that the projected number of sorties will result in little change to the FY00 daily average sortie levels for each area. Implementation of the selected action will have little effect on use and will not affect management of this airspace.

Noise: Implementation of the selected action will result in an increase in noise levels in the vicinity of Holloman AFB, compared to the FY00 projected baseline. The area contained within the 65 decibel (dB) day-night average sound level contour around the base will increase by about 12 percent. The average noise levels in areas underlying MTRs and MOAs will range from 35 dB to 59 dB. Higher average noise levels will prevail beneath restricted airspace, particularly in the vicinity of target complexes within WSMR, McGregor, and Melrose Range. Overall average noise levels in these areas will be 63 dB or less, although average noise levels will reach 80 dB at the individual target complexes. Average noise levels will be 62 dB along the centerline of flight patterns used during routine training on the target complexes. Noise levels will drop off rapidly with distance from the centerline of these flight patterns, falling to levels under 45 dB within one mile of the centerline.

In most areas, average noise levels will change by 2 dB or less from the baseline levels that would otherwise prevail in FY00. This difference will not be perceptible to most people. Noticeable changes in average noise levels between 5 and 7 dB will be limited to areas under IR-192/194, portions of IR-134/195, and in a portion of IR-113 underlying Pecos MOA.

Land Use: Land use patterns at Holloman AFB and the surrounding vicinity will remain unchanged under the selected action. Projected increases in noise exposure at the base will not result in an appreciable increase in noise exposure for on-base housing and community services. The use of surrounding off-base areas that are undeveloped or used for livestock grazing will be unaffected. The White Sands National Monument area exposed to 65 dB or higher will increase less than two square miles.

In general, areas under the affected airspace will receive less than one additional sortie a day, resulting in imperceptible or minor increases in day-night average sound levels of 1 to 3 dB. Some areas (in Eddy and Otero counties in New Mexico, and Hudspeth County in west Texas) will experience noticeable increases in sound levels of 5 to 7 dB. Average noise levels will not exceed 62 dB outside of restricted airspace. Typical low-level overflights will be short in duration. Some wilderness users may be startled by aircraft noise. These projected changes in the noise environment are not expected to result in any changes in land use.

The 5,120-acre NTC will be located on the currently withdrawn public land on McGregor Range. Construction of the NTC will disturb 1,104 acres. 1,024 of those acres will remain disturbed through continued use of the NTC (i.e., bombing and maintenance). Portions of McGregor Range are currently open to the public for grazing and recreation. However, under the selected action the 5,120 acres comprising the impact area of the NTC will no longer be accessible to the general public. In addition, training activities on the NTC will require that portions of areas south of State Road 506 be closed to the public for approximately 60 hours per week, from Monday through Friday. State Road 506 itself would not be closed. Access by ranchers to grazing area and by the public for recreation will generally be unconstrained by air-to-ground activity from Friday afternoon through Sunday each week and early mornings on weekdays. Licensed deer and antelope hunting will continue to be scheduled on the Range through coordination between New Mexico Department of Game and Fish and the U.S. Army. Establishment of the NTC on West Otero Mesa will reduce available grazing land by about two percent. Noise levels in areas beyond the NTC impact area are considered compatible with existing grazing activities on McGregor Range. Noise levels at the nearest residence, which is east of the NTC, will be about 43 dB, a level compatible with residential use.

Air Quality: Implementation of the selected action will result in temporary, construction-related emissions at Holloman AFB, the Red Rio target complex on WSMR, and the West Otero Mesa NTC on McGregor Range. The annual cleanup and routine maintenance operations at the existing ranges and at the selected NTC will result in emissions related to temporary, construction-type activities. These emissions will be short-term and controlled through common construction practices. Changes will occur in emissions from vehicle operations and stationary sources at Holloman AFB, but are not expected to result in significant air quality impacts. The proposed increase in airspace use for the selected action will result in increased emissions; however these increases will be well below criteria pollutant limit levels. None of these air emission changes will lead to nonconformance with the U.S. Environmental Protection Agency's (EPA's) Conformity Rule or noncompliance with the Clean Air Act.

Biological Resources: Implementation of the selected action will affect biological resources through facilities construction, changes in aircraft operations in affected airspace, and delivery of ordnance against existing and proposed targets.

On-base facility construction will result in the disturbance of 96 acres within or immediately adjacent to the developed area of Holloman AFB. Most of this area has been previously disturbed. About 15 acres of relatively undisturbed habitat immediately adjacent to the existing munitions area will be disturbed. This area has burrows that may be used by burrowing owls for nesting. Burrowing owl nests are also present in areas that will be disturbed by construction near the runway apron. No impact to jurisdictional wetlands will occur at Holloman AFB. Waters of the U.S. on Holloman AFB may be disturbed during improvement of the stormwater drainage system.

Construction of the TOSS at Red Rio and Oscura impact areas and use of Red Rio, Oscura, and Melrose Range will result in low adverse impact to biological resources. Less than 10 acres will be disturbed on Red Rio from installation of the TOSS components and fiber-optic cable. Most of this area will be a narrow linear disturbance for the fiber-optic cable immediately adjacent to existing roads. Therefore, a narrow strip of vegetation will be lost; much of which has been previously modified from construction, use, and maintenance of the existing roads. Once construction is complete, animal use of the area should be similar to pre-construction levels. Use of the existing targets and ranges will result in loss of an additional 3.4 acres of vegetation on Red Rio and a very limited amount of vegetation on Oscura and Melrose Range. Overflights, ordnance use, and flare use on Red Rio, Oscura, and Melrose Range will result in continued low impact to wildlife. No impacts to protected and sensitive species or to wetlands are expected from use of the existing ranges.

Construction and use of the selected NTC under the West Otero Mesa training option will likely result in impacts to some biological resources and habitat due to the disturbance of 1,104 acres of shortgrass and desert scrub habitat. Habitat in the immediate vicinity of the NTC may be reduced due to startle from ordnance delivery and overflights. Protected and sensitive species may be affected by construction and use of the West Otero Mesa NTC. The U.S. Fish and Wildlife Service issued a Biological Opinion on 8 May 1998 relating to threatened or endangered species impacts from the proposed action. The Biological Opinion determined that the action is not likely to adversely affect or will have no effect on the Interior least tern, Piping plover, Whooping crane, Swift fox, Mexican gray wolf, Jaguar, and Black footed ferret. In addition the Opinion specified that the proposed action may adversely affect the American peregrine falcon, the Mexican spotted owl, the southwestern willow flycatcher, the Northern aplomado falcon, and the bald eagle. A non-jeopardy opinion was issued contingent upon the U.S. Air Force implementing reasonable and prudent measures. These measures are outlined in the Mitigations Section of the ROD. The Air Force is committed to implementing these measures to ensure that potential adverse impacts will be minimized.

Up to 46,000 linear feet of dry streambeds tentatively delineated by the Corps of Engineers as Waters of the U.S. could be disturbed by construction or ordnance delivery on the NTC. Some water developments, which support domestic animals grazing on Otero Mesa as well as wildlife, exist within the NTC impact area. Final design of the NTC would include moving these water developments out of the impact area avoiding potential Waters of the U.S. as much as possible. If necessary, permitting under Section 404 of the Clean Water Act would be accomplished.

Archaeological, Cultural, and Historical Resources: One archaeological resource, a prehistoric artifact scatter with features (HAR-361), has been identified in the selected action on-base construction. This resource has not been determined to be potentially eligible for listing on the National Register of Historic Places. No prehistoric or historic archaeological resources have been identified within the remainder of the disturbed area on Holloman AFB. No Native American traditional cultural properties (e.g., sacred sites) have been identified on Holloman AFB, and no potentially significant historic buildings on Holloman AFB will be adversely affected by the selected action.

Installation of TOSS components at the Red Rio target complex will require earth disturbance. The U.S. Air Force is in the process of completing a cultural resources survey in the potentially affected area. Preliminary observations suggest that cultural resources may exist in the affected area, but that these resources could be avoided through project redesign.

The West Otero Mesa NTC construction area contains a total of nine archaeological sites that are considered eligible for listing on the National Register or have undetermined eligibility. No historic architectural resources or Native American traditional cultural properties have been identified within the West Otero Mesa NTC area.

Noise-induced vibration as a result of the increased number of subsonic flights within the affected airspace is unlikely to result in significant physical damage to cultural resources. It is highly unlikely that surface or subsurface prehistoric and historic archaeological sites will be adversely affected. Physical damage to historic architectural resources also is not expected.

The U.S. Air Force has consulted with Native American groups who live beneath the affected airspace. This consultation is intended to elicit the tribes' concerns and comments regarding potential adverse impacts that would result from subsonic flights associated with the selected action. This consultation is continuing as part of Air Force government to government relationship with those group.

Supersonic flight will be conducted for "maintenance check" flights, and confined to supersonic airspace within White Sands Missile Range restricted airspace. The number of additional supersonic flights (approximately 24 per year, all above 10,000 feet MSL) is small compared to existing use of this airspace, and is unlikely to result in any impact to archaeological, cultural, or historic resources.

Water Resources: Project-related construction will result in earth disturbance that could affect water resources. Increased use of inert munitions on the existing ranges will not substantially increase soil disturbance. Increased use of live munitions at the Red Rio live drop target (LDT) will result in additional soil disturbance in that area. The potential for impact is limited due to the small amount of surface water in this area. The use of inert/subscale munitions, and periodic maintenance of the target areas, firebreak roads, and access roads will result in continuing soil disturbance at the NTC. Past experience on existing ranges is that soil disturbance from the use of inert/subscale munitions is small, and localized around individual targets. The ephemeral washes draining the selected NTC site are not significant contributors to local surface water supply. As a result, no effect on surface water quality is expected to result from implementation of the selected action.

Hazardous Materials and Waste Management: Implementation of the selected action will result in increased use of hazardous materials, as well as increased medical and hazardous waste disposal requirements at Holloman AFB. The only hazardous materials generated by range operations will be spent batteries from the proposed TOSS components and batteries removed from target vehicles. Batteries will be recycled by the Defense Reutilization and Marketing Office (DRMO) at Holloman AFB. No significant impact on hazardous materials and waste management practices is expected.

Implementation of the selected action will result in soil disturbances in the vicinity of a site at Holloman AFB which has been identified under the Installation Restoration Program (IRP). Past activities in the vicinity of this site (IRP Site 59) have resulted in soil contamination from spilled fuel. Prior to construction, the specific work area will be over-excavated and backfilled with clean soil. The excavated soil will be contained and transported to an off-base, permitted disposal facility.

Munitions use will increase at the Oscura, Red Rio, McGregor, and Melrose Ranges. Nonhazardous ordnance residue and target area scrap will be collected and recycled through

DRMO at Holloman AFB. Approximately 150,000 additional pounds of nonhazardous ordnance residue and target area scrap generated each year will be disposed by DRMO.

Socioeconomics: Increases in personnel levels and construction expenditures will have a generally positive impact on local socioeconomic conditions by increasing the number of households and reducing the unemployment rate. It is anticipated that after construction is complete, Otero County will have increased employment by an estimated 730 jobs, with 640 direct GAF personnel and 90 additional secondary jobs. The GAF jobs will be at Holloman AFB. Consistent with existing location patterns; it is anticipated that almost all of the secondary job growth would be in Alamogordo.

In accordance with Executive Order 12,898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*, February 11, 1994, the FEIS identifies and analyzes the effects of the proposed action and alternatives on minority and low-income populations. The selected action will not result in disproportionately high and adverse environmental effects on minority or low-income populations.

Under the selected action, cattle grazing will be excluded from 5,120-acre impact area on the West Otero Mesa. It is estimated that this loss represents a decline in annual agricultural production of approximately \$50,000, with a loss of employment of about 0.5 jobs annually.

A broad area beyond Holloman AFB will experience changes in overflight due to implementation of the selected action. These changes in overflight will not directly affect socioeconomic resources. Given the rural nature of the areas and the relatively sporadic nature of overflights, the changes in overflight frequency that will result under the selected action are not expected to produce measurable impacts on the economic value of the underlying land.

Transportation: Implementation of the selected action will result in increased traffic near Holloman AFB and the City of Alamogordo. However, the level of service for all roadway segments will be unchanged.

Utilities: Under the selected action, the demand on water supply, wastewater treatment, solid waste disposal, electrical supply, and natural gas supply will be within existing levels of service.

Soils: Impacts to soils will arise primarily through earth disturbance during construction at Holloman AFB, the Red Rio target complex, and at the selected action West Otero Mesa NTC. The on-base existing munitions storage area addition will disturb 15 acres of previously undisturbed soils. Construction associated with the other on-base areas and the Red Rio target complex will occur in previously disturbed soils; therefore, little additional impact to soils is expected.

The increase in use of inert/subscale munitions at existing target complexes (Red Rio and Oscura on WSMR, and the target complex on Melrose Range) will be a fraction of existing use. Increased inert/subscale munitions use at these locations will not substantially increase soil disturbance. Use of the Red Rio LDT will increase substantially, and is expected to increase the area of vegetation loss. This will increase soil erosion in the area. Also, past use of the LDT has led to trace amounts of residue from uncombusted explosive ordnance. The increased use of live ordnance on the LDT could lead to additional trace amounts of soil contamination.

Use of the selected NTC will disturb soil by the use of inert/subscale munitions, as well as periodic maintenance of the surface. During construction, the net combined wind and water soil loss, in the

absence of mitigation measures, could reach 14 tons/acre/year at the West Otero Mesa NTC site, depending on erosion-control measures that may be applied. Following site development and stabilization, net soil loss is projected to be approximately six tons per year.

Safety: Implementation of the selected action will not adversely affect safety. The increased number of flying hours associated with the selected action will not result in a statistically significant increase in the overall risk of an aircraft mishap. Data on bird-aircraft strike hazards indicate no significant change in bird-aircraft strike risk. There will be an increase in munition use and handling over current conditions. Range operating procedures that have ensured safe operation in the past will continue to do so in the future, and no significant impact to safety is expected to occur due to implementation of the selected action.

CUMULATIVE IMPACTS

The Air Force evaluated the potential net environmental impacts due to the incremental impacts of the action when added to other past, present, currently planned and reasonably foreseeable future actions that overlap the selected action geographically and temporally. Training flight activities associated with the selected action are expected to commence in the first quarter of FY00, and thus, FY00 is used as the projected "baseline" from which to analyze environmental impacts. However, because Holloman AFB is an active military installation that undergoes continuous change in mission and in training requirements, and because changes in U.S. Air Force missions unrelated to the selected action are anticipated to occur in the region of influence (ROI) between FY 95 and FY00, FY95 conditions were used as a point of reference for purposes of analyzing cumulative impacts. The FY95 point of reference represents a "snapshot" of the environmental resources associated with Holloman AFB and areas affected by activities and training flights from the base. This comparison indicates that for most resources, no significant cumulative impacts are expected following implementation of the proposed action. These resources are: airspace management, air quality, archaeological, cultural and historical resources, water resources, hazardous material and waste management, safety, utilities, transportation, and soils. The comparison indicates that cumulative impacts are expected for noise, land use, biological resources, and socioeconomic resources. These impacts include a cumulative increase in aircraft overflights and increased noise levels on coincident route IR-178. This will in turn, increase the chance of disturbance and annoyance in residential and recreational areas underlying affected airspace. It will also increase potential for overflight of federally listed species and other sensitive resources. Positive cumulative socioeconomic impacts will arise from various deployment projects being considered for Otero County. The local economy is expected to be able to provide for and benefit from the services needed for the construction personnel and the level of growth associated with these projects.

MITIGATION MEASURES

The Air Force is committed to implementing all practicable means to avoid or minimize environmental harm resulting from the TTE expansion at Holloman AFB. For the selected action, the following mitigations have been identified:

Noise

a) FAA, U.S. Air Force, and GAF regulations specify minimum altitudes and avoidance distances aircraft must adhere to when flying over specific types of structures, settlements, or categories of land. For example, U.S. Air Force regulations require aircrews flying over sparsely populated areas to avoid persons, vessels, vehicles and structures by at least 500 feet. GAF regulations increase some of these avoidance distances further. Even with these avoidance distances, it is

possible that there may be perceptible increases in noise levels for some rural residents. Typical low-level overflights will be short in duration, and in accordance with applicable regulations.

b) The Air Force maintains a process to identify and avoid noise-sensitive areas as identified by affected individuals. Areas identified under this process are avoided by greater distances than the prescribed minimum avoidance criteria to minimize noise levels. These avoidance areas include those currently agreed to involving National Park Service lands.

Biological Resources

a) Field evaluations of the specific site construction areas will be performed to avoid or minimize impacts.

b) The Air Force will evaluate the location of the existing and potential burrowing owl nest sites in relation to construction activities and implement appropriate mitigations (e.g., construct artificial nest burrows).

c) Water developments on the NTC will be moved to an area immediately outside of the impact area to ensure continuity of water supply for grazing stock and wildlife.

d) In addition, construction and operational restrictions identified and mitigations agreed to during the Endangered Species Act consultation with the U.S. Fish and Wildlife Service (USFWS) will be implemented to ensure that potential adverse impacts will be minimized. These mitigations are outlined in detail in the Final Biological Opinion, issued by the U.S. Fish and Wildlife Service on 8 May 1998.

1. Over a ten-year period, the Air Force will coordinate an endangered species interagency survey and monitoring team. The team will focus its attentions on the lands overflowed by MTRs, VR 176, IR-134/195, IR-192/194, and IR-102/141. Not all lands under the subject MTRs will necessarily be field surveyed, but will be initially considered by the interagency team to determine which locations require what level of survey/monitoring effort (if any) for the subject species. The interagency team will reevaluate and redirect (as necessary) the project every two years, and refocus the survey and monitoring effort (as necessary) to accommodate changing conditions and new information.

2. The U. S. Air Force will restrict aircraft operations from March 1 to July 1 each year on specific portions of VR 176 to a single reduced-width corridor laid out within the MTR's existing lateral boundaries. During this time, aircraft will not fly lower than 500 feet AGL within this corridor. In addition, known peregrine falcon and bald eagle nest sites that are within the reduced-width corridor will be avoided 1 mile laterally and 1600 feet AGL. Outside of this corridor and within all other MTRs identified in the USFWS biological opinion, threatened and endangered species habitat will be avoided as described in the Terms and Conditions of the biological opinion and listed herein.

a) The Air Force will restrict Low-level flights over peregrine falcon nest sites from March 1 - August 15 of each year. All known nest habitat will be avoided by 1 mile laterally and 1600 feet AGL during the March 1 - August 15 breeding season

b) The Air Force will restrict low-level overflights during the Mexican spotted owl breeding season (March 1 - August 31 of each year) over known PACs and identified

nest/roost habitat. All known PACs and owl nest sites once they are adequately surveyed and defined, will be avoided by 2900 feet laterally (which is equivalent to 600 acres) and 1600 feet AGL.

- c) The Air Force will restrict low-level overflights over known bald eagle nest sites, roost and wintering sites by (a) re-routing aircraft on MTRs 1 mile laterally or 2000 feet AGL during the bald eagle breeding season; (b) avoiding large water bodies and bald eagle winter concentration areas by 2000 feet AGL from October 1 through March 1 of each year; (c) avoid known roost sites by a minimum of 1000 feet AGL from October 1 through March 1 of each year.
 - d) The Air Force will restrict low-level overflights over known flycatcher sites and critical habitat from April 15 through September 1 of each year.
3. The Air Force will participate in a study to monitor the occupancy of a sufficient number of Mexican spotted owl protected activity centers (PAC) under VR-176. The purpose of this study will be to determine if occupancy by owls or nest success of PACs is adversely impacted by overflights.
 4. The Air Force will, within one year of construction of the new target complex) survey the NTC site, including the safety area to determine the presence of Aplomado falcons.

It is understood that the restrictions described in the Biological Opinion's Terms and conditions will be applied to new sites if discovered, or removed if the characterization of existing sites change. If these restrictions combine to impose unacceptable mission constraints, the U.S. Air Force reserves the right to re-approach the U.S. Fish and Wildlife service to seek resolution.

Archaeological, Cultural, and Historical Resources.

- a) If the proposed construction at Holloman AFB cannot avoid the archaeological resource identified, the resource's significance will be formally evaluated. If the resource is eligible for listing on the National Register of Historic Places, appropriate mitigation will be performed, in consultation with the New Mexico State Historic Preservation Office (SHPO) and in accordance with the National Historic Preservation Act (NHPA).
- b) For any off-base sites eligible for listing on the National Register that would be impacted by the selected action, mitigation will be implemented in accordance with the NHPA, in consultation with the New Mexico SHPO, and in accordance with a Memorandum of Understanding between the U.S. Air Force and Fort Bliss.
- c) Although no Native American traditional cultural properties have been identified within the West Otero Mesa NTC area, the U.S. Air Force will continue to conduct government-to-government communication with the Mescalero Apache.
- d) The Air Force will continue to conduct government-to-government communication with the Mescalero Apache, Acoma, Ramah Navajo, Alamo Navajo, Laguna, and Zuni concerning the effects of aircraft overflights on traditional cultural properties of concern to these Native American reservations.

Soils and Water Resources

- a) Construction activities at Holloman AFB, the Red Rio impact area, and the selected NTC will employ standard practices for control of runoff and infiltration as required by Federal and State

laws, regulations, and permits. Appropriate erosion control measures will be used to minimize sediment loading in the vicinity of the LDT and NTC.

b) Portions of the existing wildlife and livestock water supply distribution system at the West Otero Mesa NTC site will be relocated. This will facilitate construction and avoid negative impacts on this water resource. Any relocation will be coordinated with the Bureau of Land Management.

In addition to above the Air Force is committed to cooperation and coordination with the Bureau of Land Management (BLM) as set for the in the May 26, 1998, Memorandum of Understanding (MOU) between the BLM and the Air Force with regard to activities and impacts associated with the West Otero Mesa training option.

CONCLUSION:

I have considered the potential environmental consequences of the proposed action, the No Action alternative, and cumulative effects that overlap with the proposal in schedule and geography. I have taken into consideration these environmental factors as well as economic and technical considerations, national policy, and the U. S. Air Force mission in reaching my decision to proceed with the TTE expansion at Holloman AFB.

This record of decision is made in consideration of the matters discussed herein, the Final Environmental Impact Statement for the Proposed Expansion of German Air Force (GAF) Operations at Holloman Air Force Base (AFB), New Mexico, and the Council on Environmental Quality National Environmental Policy Act Regulations, 40 CFR Part 1505.

5/29/98
DATE

PHILLIP P. UPSCHULTE
Acting Assistant Secretary
(Manpower, Reserve Affairs,
Installations & Environment)