# **ENVIRONMENTAL ASSESSMENT**

# RESISTANCE TRAINING FACILITY AIR FORCE SURVIVAL SCHOOL FAIRCHILD AIR FORCE BASE, WASHINGTON



# DEPARTMENT OF THE AIR FORCE AIR MOBILITY COMMAND FAIRCHILD AIR FORCE BASE, WASHINGTON

**JANUARY 2007** 

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Construction of a new Resistance Training Facility is proposed to replace current deteriorating facilities and to consolidate current dispersed training functions for Survival School Resistance Training operations. The proposed location is east of the current facility within the Resistance Training compound located in the southern portion of Fairchild Air Force Base. Tiein of existing utilities is planned including a new connection to the sanitary sewer. This environmental analysis assesses potential effects to environmental and infrastructure elements. One alternative was eliminated from detailed analysis due to proposed cost and potential effects to wetlands. Assessment of two alternatives, the proposed action and no action was completed. The result of the analysis is that no significant impacts would result from implementation of the Proposed Action or the No-Action Alternative. The Proposed Action is more preferred as it improves operations without incurring significant impacts. The No Action Alternative is not preferred due to increasing liability in cost to operate a deteriorating facility and not satisfying an identified need to upgrade the current sanitation service.					
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#### FINDING OF NO SIGNIFICANT IMPACT

# **RESISTANCE TRAINING FACILITY (RTF) FAIRCHILD AIR FORCE BASE, WASHINGTON**

Federal actions that potentially involve significant impacts to the environment must be reviewed in accordance with the National Environmental Policy Act and all other applicable environmental laws. The U.S. Air Force has completed an Environmental Assessment (EA) of the potential environmental consequences associated with the construction of the Resistance Training Facility (RTF) at Fairchild Air Force Base (FAFB). This Finding of No Significant Impact (FONSI) incorporates the EA by reference and summarizes the results of the evaluation.

#### Background

U.S. Air Force Survival School conducts Level-C Code of Conduct resistance training at Fairchild Air Force Base (FAFB). Training objectives include providing realistic, "third world" style resistance experience for instructors and soldiers. Current facilities are old and deteriorating and space limitations require that some of the training be conducted at other locations that the resistance training area. Currently the Resistance Training Facility operates with a septic tank/drain field which is expected to not meet the need of future mission operations.

#### **Proposed Action**

The proposed action consists of construction of a new facility located east of the current facility and within the bounds of the existing compound. Utilities would be connected to existing nearby infrastructure or placed in the ground to tie-in at the Survival School Complex to the north and west. The septic system would be decommissioned and new sewer lines would tie into the existing sewer main at Survival School Complex. The building facility is planned as a single story, concrete masonry structure with metal seam roof about 27,960 square feet. A 14,000 square foot asphalt parking area would accommodate personnel vehicles. Minimal landscaping is planned to conserve water and to fit with the operational context.

#### No-Action Alternative

The no-action alternative is to not construct the new Resistance Facility or tie-in to the sanitary sewer.

#### Anticipated Environmental Effects - Proposed Action

The proposed action and the no-action alternative have been reviewed in accordance with NEPA as implemented by the regulations of the Council on Environmental Quality and AFI 32-7061. The following summarizes the results of the attached EA.

Air Quality and Noise: Once in operation, the proposed action will not result in additional air pollution or noise. During construction, potential exists for minimal, short-term impacts to local air quality and increases in noise. Existing air permit thresholds for pollutants will not be exceeded during this period. Noise thresholds will not be exceeded during this period. In order to provide mitigation, the contractor is required to develop a dirt and dust control plan for the construction site, which aims to minimize airborne dust.

Water Resources: The proposed action would not result in an increase in storm water runoff. Increased area of impervious surface is inconsequential relative to the area in native soils.

No impact to water quality is anticipated. Sediment delivery to surface water bodies is not likely as there are no watercourses within the proposed construction site. Storm water is treated either by settlement and infiltration or by infiltration prior to entering the groundwater. A Stormwater Pollution Prevention Plan is required for every construction site which will provide mitigation during ground disturbance. The project site will be stabilized with vegetation upon completion. Hazardous waste will be disposed of in accordance with all regulations and laws to protect water quality.

**Geologic Resources:** Natural site productivity would be converted to hard infrastructure on less than one acre. The area and soils are suited for development. Adverse impacts would be minimized through design and best management practices.

**Biological Resources:** The proposed action would result in no net loss in existing habitat. The facility would be constructed in an existing fenced compound which is less desirable habitat that habitat in surround area. An unimproved area, the Wildlife Area is well removed from the construction site and would offer refuge from temporary disturbance. Restoration of excavations would be a net improvement as proposed best management practices incorporates weed control and restoration to native plants. There are no protected species or habitats in the project area.

**Cultural Resources:** There are no known cultural resources existing in the region of influence of the proposed project. The probability is low that undisturbed, significant archaeological resources, including human graves, will be discovered during construction. The Integrated Cultural Resources Management Plan (ICRMP) sets forth standard procedures that must be followed in the event any type of archaeological site is discovered during the course of earth-disturbing activity on base. With adherence to the ICRMP procedures, there will be no impacts to cultural resources.

**Infrastructure and Utilities:** The proposed action would result in the same level of traffic volume in the vicinity. New facilities will tie into existing infrastructure. It is anticipated that no new permits will be necessary and that increases in use can be easily accommodated with the existing infrastructure.

Land Use: The proposed action is compatible with the FAFB General Plan designation for Survival School and results in no change from existing use.

**Wastes and Hazardous Materials and Pollution Prevention:** There will be no increase in the use of hazardous materials or generation of hazardous waste with the proposed action. Therefore, no significant impacts are anticipated.

#### Safety and Occupational Health:

A minor beneficial effect is expected in safety and occupational health during the day to day operations of the proposed facility. Upgrade and design enhancements of the new facilities will enhance a safe work environment over the existing older facilities. No significant effects are anticipated during construction of the facility, since work will be performed in accordance with all applicable safety and occupational health standards.

#### Environmental Management (Environmental Restoration Program (ERP))

No sites of contaminated soils or groundwater have been identified by the ERP program to be of concern for the proposed action. Although ERP sites are present at FAFB, they are not located within the project site and offer no indirect hazard to the site. No significant negative effects are expected in relation to the Environmental Restoration Program.

**Indirect and Cumulative Impacts:** An analysis of the Proposed Action, in conjunction with other present and proposed activities, concluded that no significant cumulative environmental impacts would occur.

#### **Public Review**

A Notice of Availability for the Draft EA was published in the Fairchild Connection on January 19, 2007. The public comment period ended on 17 February 2007; no comments were received.

#### Availability

A copy of the Final EA is available from:

92 CES/CEV 100 W. Ent St. Suite 155 Fairchild AFB, WA 99011 (509) 247-2313

#### Conclusion

Based on the EA incorporated by reference and conducted in accordance with the requirements of NEPA, CEQ Regulations, and AFI 32-7061, I conclude that the Proposed Action will have no significant individual or cumulative impacts upon the environment. An Environmental Impact

Statement is not warranted and one will not be prepared. The signing of this FONSI completes the Environmental Impact Analysis Process under Air Force regulations.

#### **APPROVED BY:**

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RONALD R. DANIELS Deputy Base Civil Engineer 92 Civil Engineer Squadron Fairchild Air Force Base, WA 99011 (509) 247-2291

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# **COVER SHEET**

# ENVIRONMENTAL ASSESSMENT

# CONSTRUCT RESISTANCE TRAINING FACILITY FAIRCHILD AFB, WASHINGTON

**Responsible Agency:** Department of the Air Force, Air Mobility Command, Fairchild Air Force Base (AFB), Washington.

**Proposed Action:** Construct Resistance Training Facility (RTF). Project is located at Fairchild AFB, Spokane County, Washington.

**Contact Information:** Comments and inquiries regarding this document should be directed to: Joni Sasich, 100 W. Ent St., Fairchild AFB, WA 99011. Phone: (509) 247-8207.

Report Designation: Environmental Assessment

Public Review Period: Public review comments will be received through 17 February 2007.

**Abstract:** Construction of a new Resistance Training Facility is proposed to replace current deteriorating facilities and to consolidate current dispersed training functions for Survival School Resistance Training operations. The proposed location is east of the current facility within the Resistance Training compound located in the southern portion of Fairchild Air Force Base. Tiein of existing utilities is planned including a new connection to the sanitary sewer. This environmental analysis assesses potential effects to environmental and infrastructure elements. One alternative was eliminated from detailed analysis due to proposed cost and potential effects to wetlands. Assessment of two alternatives, the proposed action and no action was completed. The result of the analysis is that no significant impacts would result from implementation of the Proposed Action or the No-Action Alternative. The Proposed Action is more preferred as it improves operations without incurring significant impacts. The No Action Alternative is not preferred due to increasing liability in cost to operate a deteriorating facility and not satisfying an identified need to upgrade the current sanitation service.

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Appendix B Resistance Training Facility Site Layout

Appendix C Applicable Laws, Regulations, Policies, and Planning Criteria

# LIST OF ACRONYMS AND ABBREVIATIONS

AICUZ	Air Installation Compatible Use Zone
ARW	Air Refueling Wing
CAA	Clean Air Act
CFR	Code of Federal Regulations
CO	Carbon Monoxide
DRMO	Defense Reutilization and Marketing Office
EA	Environmental Assessment
EIAP	Environmental Impact Analysis Process
EIS	Environmental Impact Statement
EO	Executive Order
EOD	Explosive Ordinance Disposal
EPA	U.S. Environmental Protection Agency
FONSI	Finding of No Significant Impact
FAFB	Fairchild Air Force Base
MSL	Mean Sea Level
NAAQS	National Ambient Air Quality Standards
NEPA	National Environmental Policy Act
NOx	Nitrogen Oxides
NPDES	National Pollutant Discharge Elimination System
NPL	National Priority Listing
PM	Particulate Matter
POV	Privately Owned Vehicle
PPA	Pollution Prevention Act
RCRA	Resource Conservation and Recovery Act
RTF	Resistance Training Facility
TSD	Treatment, Storage and Disposal
USAF	United States Air Force

Resistance Training Facility Environmental Analysis Fairchild Air Force Base

# **Chapter 1: Purpose and Need for Action and Scope of Analysis**

# **1.1 Introduction and Background**

U.S. Air Force Survival School conducts Level-C Code of Conduct resistance training in combat survival at Fairchild Air Force Base (FAFB). The currently facilities are deteriorating and require upgrades. Also, there is a proposal to consolidate training that currently takes place in numerous buildings at the Resistance Training Camp. A new facility has been identified as the most expedient means to meet these needs. The Resistance Training Camp is located on the southern portion of FAFB between Marsh Road and Camp Road and the new facilities are proposed to be constructed near the existing facilities.

This environmental analysis will determine whether significant impacts would occur if the proposed action to construct a new facility were implemented. Included in the action is demolition of the existing facility and tie-in to existing utility infrastructure. If impacts are predicted, mitigation will be prescribed to reduce impacts below the level of significance or recommend the preparation of an Environmental Impact Statement to address unmitigated impacts or abandon the proposed action. This EA will also be used to guide the implementation of the proposed action consistent with laws, regulations, and U. S. Air Force standards for environmental stewardship.

Chapter 1 includes background information relevant to the proposed action, the purpose and need for the proposed action, an overview of the scope of the analysis and a summary of key environmental compliance requirements.

# 1.2 Purpose and Need for the Proposed Action

The new Resistance Training Facility (RTF) will provide an upgraded training facility which replace existing facilities that are deteriorating, consolidate training facilities, and upgrade utilities.

# 1.3 Objectives of the Action

The objective of this action is to provide consolidated training facilities that provide realistic, "third world" style resistance training experience for instructors and soldiers. This training is specialized and one of its kind in the nation.

# **1.4 Scope of the Environmental Assessment**

This Environmental Assessment (EA) will evaluate, to the fullest extent possible, the environmental consequences of the proposed action and alternatives on the affected environment, as well as possible cumulative impacts from other reasonably foreseeable actions. The data obtained through completion of the EA will in turn be utilized to assist

decision making authorities in making environmentally informed decisions. This EA is being completed in accordance with the requirements of the National Environmental Policy Act (NEPA) of 1969.

The evaluation will determine whether the proposed action will result in environmental impact significant enough to warrant preparation of an Environmental Impact Statement (EIS), or whether the action will qualify for a Finding of No Significant Impact (FONSI).

Resources to be considered include: air quality, water resources, noise, geologic resources, biological resources, cultural resources, infrastructure and utilities, land use, wastes and hazardous materials, safety and occupational health, and socioeconomic resources.

# 1.5 Summary of Key Environmental Compliance Requirements

#### National Environmental Policy Act of 1969 (NEPA), as amended

NEPA requires all Federal agencies to use a systematic, interdisciplinary approach in decision making which may have an impact on man's environment. Therefore, NEPA directs agencies to assess expected environmental impacts of all Federal actions and proposals. In turn, this data must be considered in the decision making process. Compliance with NEPA is accomplished through the guidance outlined in 32 CFR 989, Environmental Impact Analysis Process (EIAP).

#### **Other Environmental Statutes and Regulations**

To comply with NEPA, this analysis considers other relevant environmental statues and regulations. According to the Council on Environmental Quality regulations, requirements of NEPA must be integrated "with other planning and environmental review procedures required by law or by agency so that all such procedures run concurrently rather than consecutively." Appendix C contains examples of relevant laws, regulations, and other requirements that are often considered as part of the analysis.

# **Chapter 2: Description of Proposed Action and Alternatives**

# **2.1 Introduction**

The proposed action is to provide a single building, one-story, slab-on-grade, divided into three areas: administrative, quiet training, and noisy training. The facility will be occupied by up to 40 permanent personnel and 94 to 116 transient, training personnel. The concept design of the compound calls for a building facility of about 27,960 square feet (s.f.) with the following:

- 1) Exterior building materials will include painted, load-bearing 8" concrete masonry units (CMU) and standing seam metal roof.
- 2) Interior finishes will include sealed concrete, vinyl, ceramic tile or carpet.
- 3) Landscaping will be minimal and will include a yard behind the building with a 10-foot high earth-berm enclosure for outdoor training.
- 4) An asphalt-paved parking lot (approximately 14,000 s.f.) for 41 cars.
- 5) Domestic and irrigation water will be obtained by tapping the existing water line near the site.
- 6) A new sewer line and communications lines will be buried and routed to connect with existing utilities.

# 2.2 Selection Criteria for Alternatives

Viable alternatives must consider requirements including safety, cost effectiveness, efficiency, Survival School operations, and compatibility with other FAFB operations. Environmental criteria considered must include: air quality, water resources, geologic resources, biological resources, cultural resources, infrastructure and utilities, land use, noise, wastes and hazardous materials, pollution prevention, socioeconomic resources, safety and occupational health; and environmental management.

#### 2.3 Alternatives Considered but Eliminated from Detailed Study

An alternative that considered routing sanitary sewer north of the new facility to the pumping station along Pumphouse Road was eliminated. This alternative crosses an extensive area of good condition wetlands and would have required extensive analysis and mitigation and was a more costly option that the alternatives analyzed in detail. A mitigation sequencing analysis report documents the process for eliminating this alternative and is in Appendix A.

# 2.4 Description of Alternatives

There are two alternatives, the proposed alternative (preferred) and the No Action alternative.

**Proposed Alternative (preferred)**. General elements of the proposed alternative are listed in Section 2.1. This alternative is preferred over the alternative that was eliminated from detailed study (See Section 2.3 and Appendix A). Sanitary sewer and communications are routed along Artillery Road and connect with existing infrastructure near Building 1258 along Thorpe Road (see Figure 1 below).

Figure 1. Proposed Alternative (preferred) – Resistance Training Facility and Buried Utilities Location



The No Action alternative serves as a baseline against which other alternatives can be evaluated. This alternative is required under the Council on Environmental Quality regulations. Under the No Action alternative, the new facilities would not be constructed. AETC Survival School would continue operations using existing facilities.

# **Chapter 3: Affected Environment**

#### 3.1 Introduction

Fairchild AFB is an Air Mobility Command (AMC) Base located in Spokane County, eastern Washington, approximately 12 miles west of the city of Spokane. Communities located near the base include Airway Heights and Medical Lake. Fairchild AFB consists of a main installation and several satellite installations located elsewhere west of Spokane. The main installation consists of 4,216 acres and 1,353 buildings. Fairchild AFB is a tanker hub, 92 Air Refueling Wing (92ARW), and operates currently 35 KC-135 aircraft with 56 aircrews. FAFB personnel average about 4500 military and civilians. In addition to 92 ARW, 15 tenant units, including Air Education and Training Command (AETC) Survival School, 141<sup>st</sup> Air Refueling Wing, and Washington Air National Guard (WANG) occupy the Base. Survival School occupies 127 acres and conducts training at FAFB as well as on other private, state, and federal lands.

# 3.2 Air Quality and Noise

# Air Quality

Of the six criteria pollutants identified by the U.S. Environmental Protection Agency (EPA), two are of concern in Spokane County, specifically carbon dioxide (CO) and particulate matter (PM). Motor vehicles are the largest contributors to CO, with the highest concentrations occurring during the winter months. PM comes from a variety of sources including dust from unpaved and paved roadways, construction activities, gas and diesel engines, and indoor/outdoor burning.

Spokane County is within the Eastern Washington-Northern Idaho Interstate (EWNII) Air Quality Control Region. Spokane County is classified as being in attainment with all criteria pollutants (USEPA 2004b). CO and PM Attainment Plans rely on control strategies for tracking vehicle miles traveled; vehicle emissions inspection and maintenance programs; oxygenated fuels; transportation conformity; control measures for residential wood combustion and control strategies for windblown dust. The Spokane County Air Pollution Control Authority works with FAFB in monitoring and implementing the installation's stationary source permits and emissions inventory. Emissions from mobile sources are not tracked on FAFB. FAFB is classified as a synthetic minor pollution source and has voluntary limits on air emissions. There are various stationary combustion sources at FAFB, mostly from boilers and generators; volatile sources from organic liquids, and miscellaneous particulate sources from abrasive blasting, woodworking equipment, and a dust collection system designed to capture emissions from a firing range.

Regional wind patterns generally transport air pollutants eastward from FAFB toward the Spokane Valley. Winter months have the highest incidences of degraded air quality due to wood burning stoves and vehicular emissions. These emissions are exacerbated by temperature inversions, stagnant air reduces air quality, and valley topography.

#### Noise

Locally, noise sources are general construction, vehicular movement along Interstate 90, U.S. Route 2 and secondary commuter roads, and aircraft at FAFB, and Spokane International Airport. Other sources with varying frequency are the Spokane Raceway along Hayford Road and firing range activities on FAFB and along the Spokane River. Residential development is increasing in the area, mostly of rural character although several large high density housing areas are under construction within five miles of FAFB and within ½ mile of Spokane Raceway. Highest density housing is located in the communities of Medical Lake and Airway Heights located about 2 miles from FAFB. FAFB is currently updating the Air Installation Compatible Use Zone study that identifies the range of noise impacts to local communities relative to training flight operations (e2m 2006).

Noise is associated with resistance training. The environment produced during training is realistic and there are yells and screams and other sounds that may be heard coming from within the facility compound. These noises are currently mitigated by the remoteness of the facility to other activities and facilities on FAFB.

# 3.3 Water Resources

Fairchild Air Force Base is located at the hydrologic head of three watershed basins; the Lower Spokane River, Hangman Creek, and the Palouse River. FAFB contains several open drainage ditches, storm water detention ponds/swales, and isolated wetlands. The topography is nearly flat to undulating with no indication that surface runoff is conveyed by surface flow to stream channels within these watersheds. The primary function of surface water features on the Base is temporary containment of storm water and groundwater recharge. The general area is represented by varying depths of groundwater perched by hard basalt bedrock or lenses of clay in surficial glacial melt water deposits. Depths range from 5 -40 feet. Two deep aquifers are the primary source of water to surrounding communities, residences, and agriculture. Well depths range from 100-200 and 400-500 feet.

The southern portion of FAFB is characterized by a mosaic of wetlands, well drained mounds in a mosaic with shallow soils and bedrock outcrop, and vernal pools. No natural stream channels occur. An irrigation ditch built in the 1930's to convey water onto the lands, now

FAFB remains as a linear feature on the landscape. Occasional groundwater and ponded runoff collects in this ditch but there is no indication that water is transported in this ditch for any distance. This area has a low ability to absorb precipitation. Storm water runoff is often ponded in depressional areas and seasonally throughout the area.

The FAFB Storm Water Pollution Prevention Plan (SWPPP) was written to identify existing and potential sources of storm water pollution. The current systems are in compliance with all state and federal storm water regulations. As an Air Force and Base standard, a site SWPPP is required for all construction activities.

FAFB has a contract with the City of Spokane for treatment of sanitary sewage. The sewage is routed to the Spokane Regional Wastewater Treatment Facility located on the Aubrey L. White Parkway adjacent to the Spokane River. Treated water (tertiary treatment) is then discharged into the Spokane River. Much of the Spokane River presently violates Washington State water quality standards for various pollutants from many different sources. Currently, Total Maximum Daily Load (TMDL) plans are in place to clean up the Spokane River water. TMDLs for dissolved oxygen and PCBs are currently in place, while TMDLs will most likely be developed for chromium and temperature.

#### 3.4 Geologic Resources

General topography of FAFB is flat and the average elevation is approximately 2340 feet. Fairchild is located on an intermountain plain and is situated on the channeled scablands of the Columbia Basin. To the south of the Base, the terrain blends into the rolling, deep loess topography of the Palouse that extends southward to the Snake River. The channeled scablands where formed from catastrophic floods during ice dam breaks in glacial times and are a major part of the landscape from the Spokane area southwestward to Moses Lake and as far south as the Columbia River.

Soils in the channeled scablands can be quite variable and contrasting. Typically soils consist of shallow regolith underlain by basalt bedrock with a thin layer of volcanic ash influenced loess on the surface. Deeper soils occur associated with glacial flood and melt water deposits of sand, silts, and clays. Remnant clayey lacustrine materials or deeply weathered basalt bedrock often perch water tables in the area.

The proposed project area includes 4 different soil map units (NRCS 2006): Alecanyon-Cheney complex, very stony, 0-8 percent slopes; Caldwell silt loam, 0-3 percent slopes; Cheney-Uhlig complex, 0-8 percent slopes, and Rockly-Deno complex, 0-8 percent slopes. Soil characteristics are quite varied with depths ranging from 18 to over 60 inches. Soil textures range from medium to coarse. Soil drainage ranges from well drained to poorly drained.

# 3.5 Biological Resources

Improved and semi-improved areas make up 80% of FAFB and are mostly found in the northern portion of the base. Non-native landscaping and groundcover in the improved areas

have removed much of the historic vegetative cover. The semi-improved areas are primarily composed of mowed non-native and native grasses. The remaining 1,000 acres is undeveloped land that contains open grass fields, stands of ponderosa pines, wetland areas, native grassland and shrubs, and areas of mixed native and non-native grasses and invasive weeds.

The proposed project area is within the area predominantly of undeveloped land and offers the highest amount of biological diversity at FAFB. The habitat types are short grass prairie, ponderosa pine-savanna, and isolated wet areas. The vegetation on drier sites is native bunchgrasses and forbs dominated by bluebunch wheatgrass, Idaho fescue, and oatgrass and forbs and wetter sites are predominantly introduced grasses such as canary reedgrass with some native grasses and forbs such as bentgrass and buttercup. Within the 1000 acres, there are about 212 acres of wetlands. Roads cross the area and vegetation is mowed along the road shoulders. The overall habitat condition ranges from poor to good with a smaller amount being in the good range. Invasive weeds have become a dominant ecological disturbance in the area.

The project area lies south and west of an area identified as the "Wildlife Area" and is within the general area roamed by a resident herd of deer, occasional coyote, and other small mammals such as voles, marmot, pocket gophers, and mice. The project area lies east of an area identified for protection of the federally listed (threatened) species, Spalding's catchfly *(Silene spaldingii)*. Vernal pools exist in the "protection" area as well. Migratory birds and raptors common to eastern Washington frequent the area.

A rare plant survey conducted in the undeveloped section of the Base in 1991 by Nature Conservancy found no other federally or state listed species with the proposed project area. Subsequent surveys by Washington State Department of Natural Resources have identified other listed species associated with the vernal pools to the east of the project area. A 1995 small mammals and birds survey conducted by Eastern Washington University did not identify any federally or state listed animal species with in the area.

Several species, designated as Federal species of concern, state candidate species, state monitor species, or state sensitive species have been sighted or are known to occur near or on FAFB. Most of the bird species are migratory in nature. These species include: golden eagle, burrowing owl, grasshopper sparrow, western bluebird, red-necked grebe, great blue heron, turkey vulture, Caspian tern, black tern, and osprey. The white-tailed jackrabbit, a state candidate species, is known to occur adjacent to FAFB but has not been sighted for many years on the Base. Columbian ground squirrel and American badger, both being carefully monitored by the Washington Department of Fish and Wildlife, have been documented as occurring at FAFB but recent surveys (EWU 2005) have not indicated their presence on Base.

# 3.6 Cultural Resources

Cultural resources include prehistoric and historical archaeological sites, buildings, structures, districts, artifacts, objects, or any other physical evidence of human activity considered important to a culture, subculture, or community for scientific, traditional, or religious

purposes. Five complete historical and archaeological surveys of installation lands have been completed at Fairchild AFB. Findings include six archaeological sites, one of which may be eligible for nomination to the National Register of Historic Places. Two WWII and two Cold War buildings may be eligible for inclusion in the National Register. One additional WWII building is eligible for nomination to the National Register. None of these sites or structures are located in the region of influence of the proposed project. There are no documented sites or areas of known cultural importance to local Native American tribes on base holdings and the potential for discovery of such sites is low. The probability is also low that undisturbed, significant archaeological resources, including human graves, will be discovered on Fairchild AFB during future construction.

An irrigation ditch constructed in the 1930's to convey water to lands now FAFB is still visible as a linear feature running northeast/southwest and crosses Artillery Road. This ditch is located within the project area and is considered historically interesting but is not recognized as a historic resource under Section 106 National Historic Preservation Act (NHP).

# 3.7 Infrastructure and Utilities

Infrastructure consists of the systems and physical structures that enable a populace to function. On FAFB infrastructure includes a transportation network, utilities, communications, airfield and support buildings, water supply, sanitary systems and wastewater, administrative and maintenance buildings, and solid waste disposal.

The site of the proposed action is a relatively undeveloped area. A water line is located paralleling Marsh Road. The existing sanitation facilities are a septic tank and drainfield. The nearest sanitary sewer junction is at Thorpe Road or at the pump station on Pumphouse Road. The nearest communications lines are at the main compound for Survival School. Electric power is currently delivered to the existing facility.



Figure 2. Existing Infrastructure near and within Project Area

# 3.8 Land Use

Land use refers to real property classifications of conditions and uses either present or in planned future goals. The objective of land use planning is to ensure orderly growth and compatible uses.

Locally, Fairchild AFB is surrounded primarily by agricultural uses, with increasing residential development. The nearest town, Airway Heights, is approximately two miles to the east. State Route 2 moves local and regional traffic from the City of Spokane and Airway Heights to local roads, to FAFB and to the west.

FAFB land use classifications are: airfield/industrial, community, administrative, open space, outdoor recreation, training, Survival School Area, and Washington Air National Guard. Constraints to land uses are safety zones around potentially explosive areas, wetlands, threatened and endangered species and habitats, cultural resources, and other areas that present public hazards such as contamination sites. Table 1 summarizes the various existing and planned land uses and their area on FAFB. Figure 3 shows the locations of land use classifications for FAFB.

Land Use Category	<b>Current Use (acres)</b>	Planned Future Use
		(acres)
Administrative	83	242
Airfield, Maintenance, Industrial,	2022	2082
Training		
Community	473	742
Outdoor Recreation	203	113
Survival School	90	238
WA Air National Guard	65	107
Wetlands	212	212
Conservation Area	72	72

#### Table 1. Current Land Use/Constraints at FAFB

FAFB main installation is about 4216 acres. The area designated for future use is 3808 acres. The remaining 408 acres is occupied by roads, the "wildlife area", and other lands available for development. The proposed project area is within the Survival School land use designation and Industrial land use designation. As Table 1 illustrates, Survival School has many acres available to expand operations.



**Figure 3. FAFB Land Use Classifications and Proposed Resistance Training Facility Location** 

# 3.9 Wastes, Pollution Prevention, and Hazardous Materials

Hazardous material is defined as any substance with physical properties of ignitability, corrosively, reactivity, or toxicity that could cause an increase in mortality, serious

irreversible illness, and incapacitating reversible illness or that might pose a substantial threat to human health or the environment.

Hazardous materials and waste at FAFB include flammable solvents, fuels and lubricants, paint/coating, stripping chemicals, waste oils and solvents, contaminated fuels and lubricants, waste paint-related materials, disposal of legacy building materials such as asbestos and lead based paint. FAFB produces more than 1,000 kg of hazardous waste per month and is considered a large quantity hazardous waste generator. Approximately 75 percent of wastes are generated from aircraft maintenance activities, 10 percent from motor vehicle maintenance activities, 10 percent from civil engineering activities, and 5 percent from other sources. There are 187 satellite accumulation points on the installation and one 90 day accumulation site. Waste containers are picked up and transported to an off-installation licensed Treatment, Storage, and Disposal Facility.

**Hazardous Materials**. Air Force Instruction (AFI) 32-7086, *Hazardous Materials Management* establishes procedures and standards governing procurement, issuance, use or disposal of hazardous materials and tracking and recording keeping for public safety and for compliance with all laws and regulations. FAFB monitors environmental permits, storage, spill prevention and response.

**Hazardous Waste**. AFI 32-7042, *Solid and Hazardous Waste Compliance* directs roles and responsibilities with waste stream management including planning, training, emergency response, and pollution prevention. Hazardous wastes generated at FAFB include flammable solvents, contaminated solids, stripping chemicals, used oils, waste paint-related materials, and other miscellaneous items.

Hazardous and toxic material procurements on FAFB are approved and tracked by the appropriate members of the hazardous materials team. Base Supply personnel receive, inspect, distribute, and track hazardous materials. In 1996, a "pharmacy" system for the distribution of hazardous materials was implemented at FAFB. The purpose of the pharmacy system is to minimize and control the use of hazardous materials in order to minimize the generation of hazardous wastes. In addition, current inventories of hazardous materials are assessed to determine if less-toxic alternatives exist. Bench stock quantities of materials are distributed to authorized recipients on an as needed basis. Any unused portions of the hazardous materials are returned to the issue point to be made available for other users.

**Pollution Prevention**. AFI 32-7080, *Pollution Prevention Program*, implements the regulatory mandates in the Emergency Planning and Community Right-to Know Act, Pollution Prevention Act of 1990; EO 12856, Federal Acquisition, Recycling, and Waste Prevention; and EO 12902, Energy Efficiency and Water Conservation at Federal Facilities. Various plans prescribe management actions including a waste-reduction program; the NPDES permit program, and spill prevention control and countermeasures.

Asbestos and Lead Base Paint Containing Materials. AFI 32-1052, Facilities Asbestos management provides direction for asbestos management at USAF installations. Various policies and regulations including the Residential lead-base paint hazard Reduction Act of 1992 provide direction on management of lead base paints and materials containing lead base

paint. Procedures are in place to test and abate on all proposed project sites where these materials are suspected.

# 3.10 Safety and Occupational Health

All applicable standards, such as those required by the Occupational Safety and Health Act (OSHA) are strictly followed at FAFB. Base personnel are regularly briefed on hazards and safety concerns existing in their particular workplace. All contractors performing construction activities are responsible for following ground safety and OSHA regulations. Industrial hygiene programs monitor human exposure to hazardous materials and safety equipment and procedures are continually inspected.

There are several areas at FAFB that are constrained by explosive clear zones. These zones are associated with the Alert Area, Explosive Combat Aircraft parking, Explosive Ordnance Disposal (EOD) and the Munitions Storage Area. The proposed project area is positioned between but not within two explosive arcs, one for the Munitions Storage Area and one for the EOD area. The building facility is at least <sup>1</sup>/<sub>4</sub> mile away from either arc perimeter.

Range sites on FAFB contain various munitions, unexploded ordnance (UXO), and Chemical Agent Identification Sets (CAIS). Surface disposal sites have been removed. However, munitions, UXO, and CAIS still can be found below the ground surface near and adjacent to range sites.

# 3.11 Environmental Management (Environmental Restoration Program)

The purpose of the Air Force Environmental Restoration Program (ERP) is to identify, characterize, and evaluate past disposal sites and remediate contamination on its installations as needed to control migration of contaminants and potential hazards to ecological resources, human health, and the environment in accordance with CERCLA requirements. A total of 37 ERP sites are present at Fairchild AFB. Fairchild AFB requires specific procedures be followed if contaminated soil is discovered during excavation.

No contamination of groundwater or soils has been identified within the proposed project area. Processes are well in place to survey, abate, and protect from exposure to humans or further exposure to the environment if unanticipated contamination is encountered.

# 3.12 Socioeconomics

Socioeconomics are defined as the basic attributes and resources associated with the human environment, particularly population and economic activity. Federal Actions to "Address Environmental Justice in Minority Populations and Low-Income Populations" directs Federal agencies to address environmental and human health conditions in minority and low-income communities. The general purposes of this Executive Order are:

- To focus attention of Federal agencies on the human health and environmental conditions in minority communities and low-income communities with the goal of achieving environmental justice;
- To foster non-discrimination in Federal programs that substantially affect human health or the environment; and
- To give minority communities and low-income communities greater opportunities for public participation in and access to public information on matters relating to human health and the environment.

Described below are two categories, social and economic condition and environmental justice.

**Social and Economic Condition**. FAFB is approximately 12 miles west of Spokane, Washington, in Spokane County. Population of Spokane County in 2000 was 417,939 (U.S. Census Bureau 2000). Between 1990 and 2000, Washington's population increased by 21 percent. In the same period of time, Spokane grew by 16 percent. The top industry is education, healthcare, and social services. Pubic administration is the second highest area of industry, regionally. And as would be expected, there is a larger portion of the population in the Spokane area employed by the Armed Forces compared with the State.

In 2000, the unemployment rate for the region was 4.6 percent which was slightly higher than for the State at 4.1 percent. The region has a lower median household income and per capita income and a higher percentage of individuals below the poverty threshold than for the State. Education level is slightly higher for the region than for the state average.

FAFB is the largest employer in the Inland Northwest and employs approximately 5,400 military and civilian employees. The annual payroll of FAFB is approximately \$203 million and it is estimated that FAFB indirectly creates an additional 2,150 jobs and \$82 million in payroll from support jobs throughout the community.

**Environmental Justice.** The following was indicated following as a result of the 2000 Census. Areas within and nearest FAFB have the highest population of African Americans than for the Spokane area or the State. The area southeast of FAFB had the highest percentage of individuals below the poverty level and the lowest per capita income.

# **Chapter 4: Environmental Consequences**

# 4.1 Introduction

This section describes the anticipated environmental consequences or impacts that could result from implementing the proposed action. The significance of an action is analyzed in several contexts including several scales as needed, short term and long term impacts, direct and indirect impacts, and cumulative impacts.

# 4.2 Air Quality and Noise

The environmental consequences to local and regional air quality conditions as a result of the proposed action is determined based upon the increases in regulated pollutant emissions relative to existing conditions and ambient air quality. A significant impact would be found if the action led to one or more of the following: 1) cause or contribute to a violation; 2) expose sensitive receptors to increased pollutant concentrations; 3) represent an increase of 10 percent or more of an affected emissions inventory; or 4) delay attainment or exceed any evaluation criteria established by a state implementation plan.

Noise impact analysis typically evaluates potential changes to the existing noise environment that would result from implementation of a proposed action. Potential changes in the noise environment can be beneficial or adverse.

# 4.2.1 Proposed Alternative

Regulated pollutant emissions from the proposed action would not contribute to or affect local or regional attainment status. The proposed action will temporarily result in a slight increase in air pollutant levels in the vicinity during construction activities. Off-site and on-site effects from dust will be abated through dust control measures during construction such as the use of tackifiers and watering of bare soil areas. Fugitive dust situations will be rare and readily dissipated by the westerly flow of winds normal for the area during the construction season. The proposed action has a no net increase in commuter and personal vehicular emissions regionally. There is no net increase in personnel commuting to the facility. Temporary increases in commuter traffic may occur as a result of construction workers traveling to the construction site.

Considering surround land use and proposed land use by Spokane County and that this facility will have no long term increased emissions, no cumulative effects are anticipated.

It can be concluded that construction and operations of a new RTF facility will not have adverse impacts to air quality.

A short term impact to the noise environment will occur during construction from heavy equipment. No net increase in noise associated with training exercises conducted at the new facility are anticipated as operations will be conducted as they are presently. No long term impact to health or quality of life from noise is anticipated with this action.

# 4.2.2 No Action Alternative

The No Action alternative will result in unchanged conditions at FAFB. The base will continue to operate in compliance with all permits, with minimal impact to air quality.

# 4.3 Water Resources

Evaluation criteria for impacts on water resources are based on water availability, water quality, and impacts to beneficial uses. Standards are established by federal and state law.

# 4.3.1 Proposed Alternative

*Surface Water Quality*: Storm water runoff from construction activities will disperse and infiltrate into open fields adjacent to the project site. Sediment from runoff from bare soil areas and stockpiles will be contained to control the amount of storm water sediment released during construction. Specific design will be documented in the project Storm Water Pollution Prevention Plan. After construction, parking areas are paved reducing erosion and sediment. Runoff will be dispersed and naturally infiltrated. There are no surface watercourses that connect to streams or waters of the State flowing from FAFB or specifically, the project site. There are no wetlands in proximity of the proposed facility construction area. No short term or long term, direct impacts will occur as a result of the proposed action.

*Water Availability.* Water is supplied by wells located along the Spokane River and pumped to FAFB. Water availability from these wells is expected to be adequate with the additional demand of personnel and the additional mission activities expected in the immediate future. FAFB has been undergoing a water conservation effort and has realized a decrease from 6 million gallons to 4 million gallons in the last several years. This decrease suggests that there is at least <u>a</u> 2 million gallon surplus capacity which is ample supply for existing uses and proposed uses in the near future. There will be only a slight increase in irrigation demand in the short term for landscaping establishment. Landscape plants will be selected for their drought tolerance to reduce irrigation demand over the long term.

*Groundwater.* The proposed action would likely have no effect on area aquifers. Although FAFB does have a well in the area aquifer, the main supply of water comes from the Hangman aquifer upstream from the Spokane River. The West Plains well is only used as an emergency supply. The previous section demonstrated that the wells along the Spokane River have adequate capacity to supply the Bases needs. Increases in groundwater recharge associated with increased impervious surfaces would be expected to be minor or cause a slight elevation seasonally. Water quality should not be affected adversely as storm water flow is filtered through soil material prior to reaching the water table. Activities associated with Resistance Training to not indicate a hazard for groundwater contamination.

*Wetlands.* There are no wetlands within or adjacent to the proposed RTC facility. Tie-in of buried utilities will be constructed in the road shoulder of Artillery Road. A portion of Artillery Road is a legacy road built on an old rail grade prior to Fairchild AFB ownership. The rail grade bisects several wet areas. The buried lines although utilizing the road should will pass adjacent to less than a ½ acre of these wet areas. An analysis and consultation was conducted and is documented in Appendix B. In summary, the

amount of area is within the Army Corp regulations meeting nationwide permit guidelines and would comply with criteria for Nationwide Permit 12. The hydrology on Fairchild has been determined as isolated. This determination relieves federal regulatory jurisdiction of the Army Corps (according to Swancc 2001). Local regulatory representatives with Washington Department of Ecology and U.S. Army Corps of Engineers have been consulted and both entities have concurred with non-significance (Merker 2005 and Erkel 2005). A mitigation plan was prepared to determine best management practices during and after construction. Construction excavation presents an additional beneficial impact for ecological diversity in that control of invasive plants will be incorporated in the construction plan and the site will be restored with native plants.

During construction of the tie-in utility line, there is a higher potential for groundwater contamination. To minimize this risk, the contractor will be required to prepare and implement a Storm Water Pollution Prevention Plan prior to construction. This plan will require approval from the Environmental Flight, to ensure compliance with appropriate regulations. Such a plan requires the use of best management practices to protect water quality. When the above stipulations are met, there should be no significant water quality impacts during construction.

# 4.3.2 No-Action Alternative

The water quality and availability will remain the same as baseline conditions. There will be no potential for water quality impacts, since no such activity will occur. FAFB will continue to comply with local, state, and federal regulations.

# 4.4 Geologic Resources

# 4.4.1 Proposed Alternative

The proposed action will result in considerable ground disturbance. Potential impacts will be mitigated by use of best management practices including weed control and revegetation. All construction activities are guided by Base Construction Standards which include environmental protection standards. The general area is flat lying which minimizes hazard and increases potential for compliance.

Earthwork will be planned and conducted in a manner to minimize duration of exposure of unprotected soils. Work will be conducted in accordance with best management practices for erosion control, as outlined by the Storm Water Pollution Prevention Plan for the proposed project. Landscaping of exposed surfaces following completion of construction will minimize the potential for erosion. For these reasons, no significant geologic, physiographic, or soil impacts are anticipated as a result of the proposed activities. A positive effect is anticipated in weed control. An area inundated by noxious weeds will be converted to hard infrastructure and irrigated landscape reducing the amount of area contributing to weed seed dispersal by thirty acres.

#### 4.4.2 No-Action Alternative

The No Action alternative results in no change in existing geologic resources.

#### 4.5 Biological Resources

# 4.5.1 Proposed Alternative

Construction and location of the new RTF will result in conversion of unimproved, highly disturbed, dry grassland that is in poor ecological condition. The new facility will be constructed within an existing cyclone fence that is at least six feet high. Existing human activities within the compound most likely discourage animals from using the area. In comparison in adjacent areas surrounding the facility, much of the area is unimproved, some providing good forage and security habitat. The buried utility tie-in is located along a road that receives frequent traffic. Construction activities may present an increase in disturbance but will be no longer than for a 3 month period during summer months. Animals have adequate area to the south to displace their activities during construction. Vegetative diversity will be enhanced as the area is restored to native plants and weeds are controlled.

There are no known federally or state listed species occurring in the project area (Nature Conservancy 1994, DNR 2005, EWU 2005). There are no known nest sites of protected species within the region of influence of construction noise. No significant adverse effects to wildlife or vegetation are anticipated as a result of the proposed action of the existing condition.

# 4.5.2 No-Action Alternative

The No Action alternative results in no change in existing biologic resources.

#### 4.6 Cultural Resources

Impacts on cultural resources are addressed under Section 106 of the National Historic Preservation Act and 36 CFR 800. Adverse impacts on cultural resources might include physical alteration, damage, or destruction of all or part of a resource; alteration of characteristics of the surrounding environment that contribute to the resource's significance; introduction of visual or audible elements that are out of character with the property or that alter its setting; neglect of the resource to the extent that it deteriorates or is destroyed; or the sale, or transfer, or lease of the property out of agency ownership without adequate legally enforceable restrictions or conditions to ensure preservation of the property's historic significance.

# 4.6.1 Proposed Alternative

No National Register of Historic Places (NRHP) eligible archaeological resources have been documented within or near the region of influence of the proposed project. According to the FAFB Integrated Cultural Resources Management Plan (ICRMP), the probability is low that undisturbed, significant archaeological resources, including human graves, will be discovered during future construction. The ICRMP sets forth standard procedures that must be followed in the event any type of archaeological site is discovered during the course of earth-disturbing activity on base. The proposed action is not expected to result in any effects to archaeological resources on FAFB.

No NRHP-eligible historic resources are located within the region of influence of the proposed structure. The proposed action will not result in the demolition or alteration of any historic properties or structures. The will be no potential impacts to historic structures.

There are no documented sites or areas of known cultural importance to local Native American tribes at FAFB. Potential is low for discovery of such sites. The proposed action will be implemented in accordance with the Fairchild AFB ICRMP, which specifies notification procedures applicable to Native American groups. The proposed action is not anticipated to impact Native American concerns.

# 4.6.2 No-Action Alternative

There will be no potential effects relating to cultural resources if the no-action alternative is chosen. No earth-moving will be completed; therefore, no unknown cultural resources could potentially be discovered. FAFB will continue to be managed as outlined in the ICRMP.

# 4.7 Infrastructure and Utilities

Effects on infrastructure are evaluated based on their potential for disruption or improvement of existing levels of service and additional needs for energy and water consumption, sanitary sewer and wastewater systems, and transportation patterns and circulation. An effect might be considered adverse if a proposed action exceeds capacity of the infrastructure or utility.

# 4.7.1 Proposed Alternative

The proposed action constructs a 27,960 square feet single story building and 14,000 square feet of paved parking. This new facility will support up to 40 permanent personnel and 94 to 116 transient, training personnel. The facility will be tied-in with existing utilities. The current septic system will be decommissioned and sanitary sewer will be connected to the existing sewer lines near the main Survival School complex. Figure 2 illustrates existing utilities and infrastructure in and adjacent to the project area.

*Sanitary Sewer:* An upgrade and lining of the sanitary sewer system to be completed in 2007 will decrease substantial amounts of groundwater infiltration which will increase the amount of available volume capacity of the system. It is likely that this infiltration is far more significant in volume than the slight increase anticipated by the new hook up to the RTF. An overall benefit will be appreciated as maintenance efforts associated with the current septic system will no longer be needed.

*Transportation Network.* The new RTF will have no net change in commuting traffic that existing. Traffic flow and volume may change in perceptively due to consolidation of training to the facility from being dispersed over the Survival School complex. The road network is more than ample to accommodate traffic flow between Survival School facilities and to the rest of the Base.

*Water.* There will be an increase in use of water for irrigation of additional landscaping at the new facility. Demand from human consumption should remain the same. Increases for irrigation will be higher in the first two years in order to establish landscaping and the decrease as water demand decreases from the xerophytic plantings.

*Solid Waste*. There will be no net increase in solid waste on FAFB from this new facility. Operations and number of personnel remains the same as the existing use.

*Other Utilities.* The facilities will tie into existing electrical, communications, and natural gas utilities. No net increase in demand is anticipated.

**Building Infrastructure.** Construction of new building infrastructure greatly increases efficiency and mission effectiveness. New design and floor plan supports efficient use of space and consolidation of uses. The new facility may provide for more flexibility in uses of space currently used for training.

# 4.7.2 No-Action Alternative

All FAFB infrastructure conditions will remain the same as existing. There is a potential for an adverse effect to operations as current facilities are deteriorating. The current septic system is at capacity and may present an expensive reconstruction need in the future.

# 4.8 Land Use

The significance of potential land use impacts is based on the level of land resource sensitivity and compatibility with the proposed action. In general, a land use impact would be significant

if it were to be inconsistent or in noncompliance with existing land use or stewardship plans or policies, preclude the viability of existing land use, or conflict with planning criteria established to ensure the safety and protection of human life and property.

# 4.8.1 Proposed Alternative

Area within the existing Resistance Training compound will be utilized for the new RTF facility. The proposed action is compatible with the Base General Plan (92ARW 2005) as the area is zoned for future use by Survival School. See Figure 3 in Section 3.8.

The proposed location is in a remote area of the base. Objectives for secure operations and training are met by this location.

# 4.8.2 No-Action Alternative

No action will result in any changes to current land use.

# **4.9** Wastes, Pollution Prevention, Hazardous Materials and Environmental Restoration Program

Impacts on hazardous materials and waste management would be considered significant if the proposed action resulted in noncompliance with applicable Federal and state regulations, or increased the amounts generated or procured beyond FAFB capacity to obtain permits or for disposal or the action exposed humans or the environment to adverse impact from contaminated ERP sites.

# 4.9.1 Proposed Alternative

*Hazardous Materials and Waste and Pollution Prevention*. The proposed action will not require procurement and disposal of hazardous materials such as oils, fuel, paints, and solvents. Some construction materials may contain hazardous materials although it is anticipated that the amount of these materials are minimal during construction and use is temporary.

Survival School as other FAFB tenants will be required to follow all FAFB and Air Force environment management policies governing the procurement, use, and disposal of hazardous materials. These polices are in place to safeguard the public, personnel, and the environment.

Asbestos Containing Materials (ACM) and Lead-Based Paint (LBP). Specifications for the proposed construction and Air Force regulations prohibit the use of ACM and LBP for new construction. New facilities at RTF would not contain these materials.

*Environmental Restoration Program.* There are no ERP sites identified within or adjacent to the proposed project area. With all sites on military bases, contractors must prepare a health and safety plan to identify potential hazards. Base construction standards also require contractors to stop work and request an investigation if suspicious materials are uncovered. The only hazard identified is the potential for lead in spent small arms munitions in soils. The amounts are thought to be very small and not a significant health or safety hazard.

During construction of the facility, there is a slight chance that a hazardous materials spill could occur. As a precautionary measure, the construction contractor will be trained to take immediate action to contain any spill. The contractor will then be required to contact the Environmental Flight. The contractor will be held liable for the cleanup of any spill that may occur, in accordance with applicable regulations.

# 4.9.2 No-Action Alternative

No change from existing practices will occur. Existing management procedures would continue to be followed.

# 4.10 Safety and Occupational Health

# 4.10.1 Proposed Alternative

There are no different major safety and occupational health consequences related to the proposed action than occur with existing RT operations. Construction contractors are trained so that work will be performed in accordance with safety and occupational health standards, such as those required by the Occupational Safety and Health Act (OSHA). The contractor will be required to submit a site specific safety and health plan, as described in the Army Corps of Engineers Manual 385-1-1, *Safety and Health Requirements*.

There is a possible benefit in safety and occupational health during the day to day operations of the proposed facility. Consolidation of functions and operations in new, state-of-the-art facilities optimizes the opportunity to provide a safe working environment.

# 4.10.2 No-Action Alternative

No change occurs in the existing work environment for either FAFB personnel or Survival School personnel.

# 4.11 Indirect and Cumulative Impacts

Cumulative impacts are the incremental effects of an action when added to other past, present, and reasonably foreseeable future actions, regardless of what agency or person undertakes

such other actions. Actions may be direct or indirect. The degree and kind of impact may be different depending on the length of time the impact occurs or the extent of area the impact is exhibited; in other words, time and space. Generally, assessing impacts to water resources require assessment of several geographic scales and often long spans of time. In contrast, impacts to infrastructure can be observed within a short time frame and over a smaller geographic area.

# 4.11.1 Proposed Alternative

Construction of the new RTF facility conforms with land use plans for the area. The entire FAFB mission or transfer of ownership may warrant a change in use but this action is not a reasonable prediction. The FAFB General Plan was developed to minimize adverse impacts to future land use decisions. This proposed action is in compliance with the vision of the FAFB General Plan for the area.

Storm water management is a challenge in portions of FAFB and in the Airway Heights area, in general; particularly with increasing development. In Chapter 4, the direct effects of developing a facility with impervious surfaces increases challenges to runoff management. The location of the RTF is in a remote, undeveloped area of FAFB and private lands are in agricultural uses currently. Lands adjacent to the Base in this area are not a focus for development and growth. Thus it is not likely that cumulative impacts of increases in peak flow would occur as a result of the addition of the new RTF.

The area of development planned is within an existing fence and compound. No indirect effects are anticipated to biological diversity or wildlife habitat over the existing situation. Currently, there are ample land areas for wildlife species currently residing on Base.

Increases in use of infrastructure, utilities, services, and other resources will be accommodated within the existing framework of policies and regulations and asset capacity without significant impact. FAFB General Plan (92ARW 2005) identifies capacity to expand and assimilate new operations.

# 4.11.2 No Action Alternative

No change in the existing operations would result in status quo or a negative impact to operations of Survival Training. An indirect effect of increased burden on other facilities to function as training facilities may result as Survival School mission changes or expands.

# **Chapter 5: List of Preparers**

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92 CES/CEVC	Fairchild AFB WA
92 CES/CEC	Fairchild AFB WA
92 CES/CEVC	Fairchild AFB WA
92 ARW/SEG	Fairchild AFB WA
92 CES/CEVN	Fairchild AFB WA
	92 ADS/SGGB 92 CES/CEVR 92 CES/CEVR 92 CES/CEV 92 CES/CEOE 92 ARW/JA 92 CES/CEVC 92 CES/CEVC 92 CES/CEVC 92 CES/CEVC 92 ARW/SEG 92 CES/CEVN

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# Appendix A

Mitigation Sequencing Plan November 2006

# <u>Appendix B</u>

Resistance Training Facility Proposed Site Layout

# Appendix C

Applicable Laws, Regulations, Policies, and Planning Criteria