FINDING OF NO SIGNIFICANT IMPACT

Joe English Pond Campground
Electrical Upgrade
at New Boston Air Force Station, New Hampshire

The U.S. Air Force (USAF) at New Boston Air Station (NBAFS), New Hampshire proposes to install a new electrical system in the Joe English Pond Campground. The project includes installation of approximately 1,800 feet of buried conduit, installation of a new transformer with pad, demolition of existing transformer pad, installation of power pedestals for existing Recreational Vehicles (RVs) campsites and campground buildings.

Potential impacts to the natural and human environment associated with the Joe English Pond Campground Electrical Upgrade at NBAFS are assessed in the attached Environmental Assessment (EA) entitled "Environmental Assessment For Joe English Pond Campground Electrical Upgrade at New Boston Air Force Station, New Hampshire". The EA was prepared in accordance with specific tasks and procedures of the USAF Environmental Impact Analysis Process (EIAP; Air Force Instruction 32-7061), as it applies to the National Environmental Policy Act of 1969 (Public Law 91-190, 42 U.S.C. §§4321-4347).

The EA evaluates the environmental consequences of a proposed action (Joe English Pond Campground Electrical Upgrade), and the no-action alternative (i.e., using existing electrical system). The assessment evaluates the potential for impacts to air quality, noise levels, topography, geology, soils, water resources, ecological resources (including threatened and endangered species and wetlands), cultural resources, land use, recreation, visual resources, socioeconomics, and health and safety. Based on a comparison of alternatives, the proposed action is preferred over the other alternatives.

The Environmental Assessment (EA) and Draft Finding of No Significant Impact (FONSI) were both made available to the affected public for a 15-day public comment period. The affected public was notified by advertisements placed in the state's largest newspaper. The EA and FONSI were made available by placing on file in the town libraries in Amherst, Mont Vernon and New Boston, New Hampshire.

On the basis of the assessments presented in the EA, the proposed action would not result in any significant impacts to the environment.

Based upon these reviews and the assessments detailed in the EA, it has been determined that the proposed action would not have a significant effect on the human environment. Therefore, an Environmental Impact Statement will not be required nor prepared for Joe English Pond Campground Electrical Upgrade at New Boston Air Force Station, New Hampshire.

23 JUN 03

Date

STEPHEN F. SOVAIKO, Lt Col, USAF

Commander

Report Documentation Page

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ENVIRONMENTAL ASSESSMENT
FOR
JOE ENGLISH POND CAMPGROUND ELECTRICAL UPGRADE
AT NEW BOSTON AIR FORCE STATION, NEW HAMPSHIRE

Prepared by

23 SOPS/MAFCVN
U.S. Department of the Air Force
New Boston Air Force Station
New Hampshire

April 2003

TABLES

FIGURES

ACRONYMS AND ABBREVIATIONS

AFSCN	Air Force Satellite Control Network
ANL	Argonne National Laboratory
CFR	Code of Federal Regulations
CO	carbon monoxide
CTV	cable television
EA	environmental assessment
EIAP	environmental impact analysis process
EPA	Environmental Protection Agency
MSL	mean sea level
NAAQS	National Ambient Air Quality Standards
NASA	National Aeronautics and Space Administration
NATO	North Atlantic Treaty Organization
NBAFS	New Boston Air Station
NEPA	National Environmental Policy Act
NHDHR	New Hampshire Division of Historical Resources
NO_2	nitrogen dioxide
NPDES	National Pollutant Discharge Elimination System
O_3	ozone
OSHA	Occupational Health and Safety Act
PAL	Public Archaeology Laboratory, Inc.
Pb	lead
PES	Parsons Engineering Sciences, Inc.
$PM_{2.5}$	particulate matter with an aerodynamic diameter of 2.5 μm
PM_{10}	particulate matter with an aerodynamic diameter of 10 μm
SHPO	State Historic Preservation Officer
SO_2	sulfur dioxide
SOPS	Space Operations Squadron
SAAQS	State of New Hampshire Ambient Air Quality Standards
USAF	United States Air Force
UXO	unexploded ordnance

UNITS OF MEASURE

cm	centimeter(s)
dB	decibel(s)
dBA	unit of weighted sound-pressure level
ft	foot (feet)
h	hour(s)
ha	hectare(s)
in.	inch(es)
km	kilometer(s)
km^2	square kilometer(s)
kV	kilovolt
L_{dn}	day-night weighted equivalent sound level
L_{eq}	equivalent steady sound level
m	meter(s)
m^2	square meter(s)
m^3	cubic meter(s)
mi	mile(s)
mi^2	square mile(s)
mm	millimeter(s)
μm	micrometer(s)
yd^3	cubic yard(s)

ENVIRONMENTAL ASSESSMENT
FOR
ELECTRICAL SYSTEM UPGRADE IN THE JOE ENGLISH POND CAMPGROUND AT NEW BOSTON AIR STATION, NEW HAMPSHIRE

prepared by
23 SOPS/MAFCVN
U.S. Department of the Air Force
New Boston Air Force Station
New Hampshire

This Environmental Assessment (EA) was prepared in accordance with
* The National Environmental Policy Act (NEPA)
* The Council on Environmental Quality regulations for implementing NEPA
* 32 Code of Federal Regulations (CFR) Part 989, Environmental Impact Analysis Process (EIAP)
* AFI 32-7060, Interagency and Intergovernmental Coordination for Environmental Planning; and
* AFI 32-7061, The Environmental Impact Process

ABSTRACT

The proposed action evaluated in this Environmental Assessment (EA) is to install a new electrical system in the Joe English Pond Campground. The project includes installation of approximately 1,800 feet of buried conduit, installation of a new transformer with pad, demolition of existing transformer pad, and installation of power pedestals for existing Recreational Vehicles (RV) campsites and campground buildings. This EA evaluated the potential impacts to air quality, noise levels, topography, geology, soils, water resources, ecological resources, cultural resources, land use, recreation, visual resources, socioeconomics, and health and safety. On the basis of this assessment, it was determined that the proposed action would result in only minor to negligible localized, short-term, or temporary impacts to the environment as compared to the no-action alternative. The campground electrical upgrade would result in a negligible to minor incremental addition to impacts that have occurred from other activities.

1 PURPOSE AND NEED FOR THE PROPOSED ACTION

The proposed action evaluated in this environmental assessment (EA) is to install a new electrical system in the Joe English Pond Campground. The project includes installation of approximately 1,800 feet of buried conduit, installation of a new transformer with pad, demolition of existing transformer pad, and installation of power pedestals for existing RV campsites and campground buildings. This EA evaluates the environmental consequences of implementation of the proposed action. The no-action alternative (i.e., continued use of the existing electrical distribution system) was also assessed. This EA was prepared in accordance with specific tasks and procedures of the U.S. Air Force (USAF) Environmental Impact Analysis Process (EIAP), as it applies to the National Environmental Policy Act (NEPA) of 1969, 40 Code of Federal Regulations (CFR) Parts 1500-1508, as amended.

2 DESCRIPTION OF THE PROPOSED ACTION AND ALTERNATIVES

This section provides a brief description of the proposed action (Section 2.1), and the no-action alternative (Section 2.2.2).

2.1 Proposed Action

The proposed action evaluated in this EA is to install a new electrical system in the Joe English Pond Campground (see Map 1). The project includes installation of approximately 1,800 feet of buried conduit, installation of a new transformer with pad, demolition of existing transformer pad, and installation of power pedestals for existing RV campsites and campground buildings. This EA evaluates the environmental consequences of implementation of the proposed action.

Proposed installation would include creating approximately 1,800 feet of trench, 3 feet deep by approximately two feet wide for conduit burial. Conduit would be bedded in sand and backfilled. Excess soil would be disposed of elsewhere on the installation. A new transformer with 800 Amp distribution panel, cabinet and meter socket would be installed. The transformer will be placed on a 60 inch by 60 inch pad in the campground. Power pedestals will be installed at 12 existing improved campsites. Power will also be provided to an existing campground store and shower facility. The proposed electrical system is sized to provide enough capacity for any future modest campground expansion.

The existing direct burial cables would be abandoned in place and the existing transformer and pad would be disposed of off site.

The proposed action would require an Explosive Ordnance Disposal subsurface sweep of the areas to be excavated to a depth of at least 7 feet (excavation plus four feet) for Unexploded Ordnance (UXO). Any metal detected by EOD troops will be unearthed for a UXO determination. Live UXO would be detonated in-place with a C-4 explosive charge.

The proposed action is needed to support the electrical needs of modern RVs. The existing electrical system is not adequately sized to support modern RVs and the campground infrastructure.

2.2 Alternative to the Proposed Action

2.2.2 No-Action Alternative

The no action alternative would be to continue using the existing electrical system in the campground.

Map 1, Proposed Joe English[illegible]ond Electric Upgrade
New Boston Air Force Station 2003

Electric line

Roads

★ Inelegible Archeological Site

New Boston Air Force Station
23 SOPS/MAFCVN
Stephen Najjar, Natural Resources Planner
March 26, 2003

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S

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3 AFFECTED ENVIRONMENT

This section presents a general description of NBAFS and the resources that could be affected by the proposed electrical system upgrade. The descriptive material is drawn mostly from various EAs and natural resources reports that pertain to the NBAFS (e.g., ANL 1990, 1997, 1999; PES 1995, 1996).

3.1 Location, History, and Current Mission

NBAFS is located in south-central New Hampshire about 19 km (12 mi) west of Manchester. The 1,144-ha (2,826-acre) site is located within the towns of New Boston, Amherst, and Mont Vernon in Hillsborough County (Figure 2).

As one of the worldwide network of satellite command and control stations of the Air Force Satellite Control Network (AFSCN), the current mission of NBAFS is to serve as a remote tracking station for military and communications satellites. The 23 Space Operations Squadron (SOPS) at NBAFS provides launch, operation, and on-orbit support for more than 100 military satellites, communication satellites, North Atlantic Treaty Organization (NATO) and other allied nation satellites, and for National Aeronautics and Space Administration (NASA) Space Shuttle missions.

From 1941 until 1956 the site (then known as the New Boston Bombing and Gunnery Range) was used as an air-to-ground bombing and strafing range. The USAF acquired rights to the site in 1957 for use as a satellite tracking station. In 1959, the 6594th Instrumentation Squadron was activated at NBAFS. Squadron activities began in 1960 with use of mobile radar units until the permanent facilities were constructed and in operation by 1964. In the early 1960s, the Operations Area was cleared of unexploded ordnance (UXO) before the permanent facilities for the satellite-tracking mission were constructed. The site was formerly under the jurisdiction of the USAF Systems Command, and moved under the USAF Space Command in 1987 (PES 1995). As mentioned, the satellite tracking mission is conducted from the Operations Area. The remainder of NBAFS supports military training exercises, recreation, and natural resource management (ANL 2000).

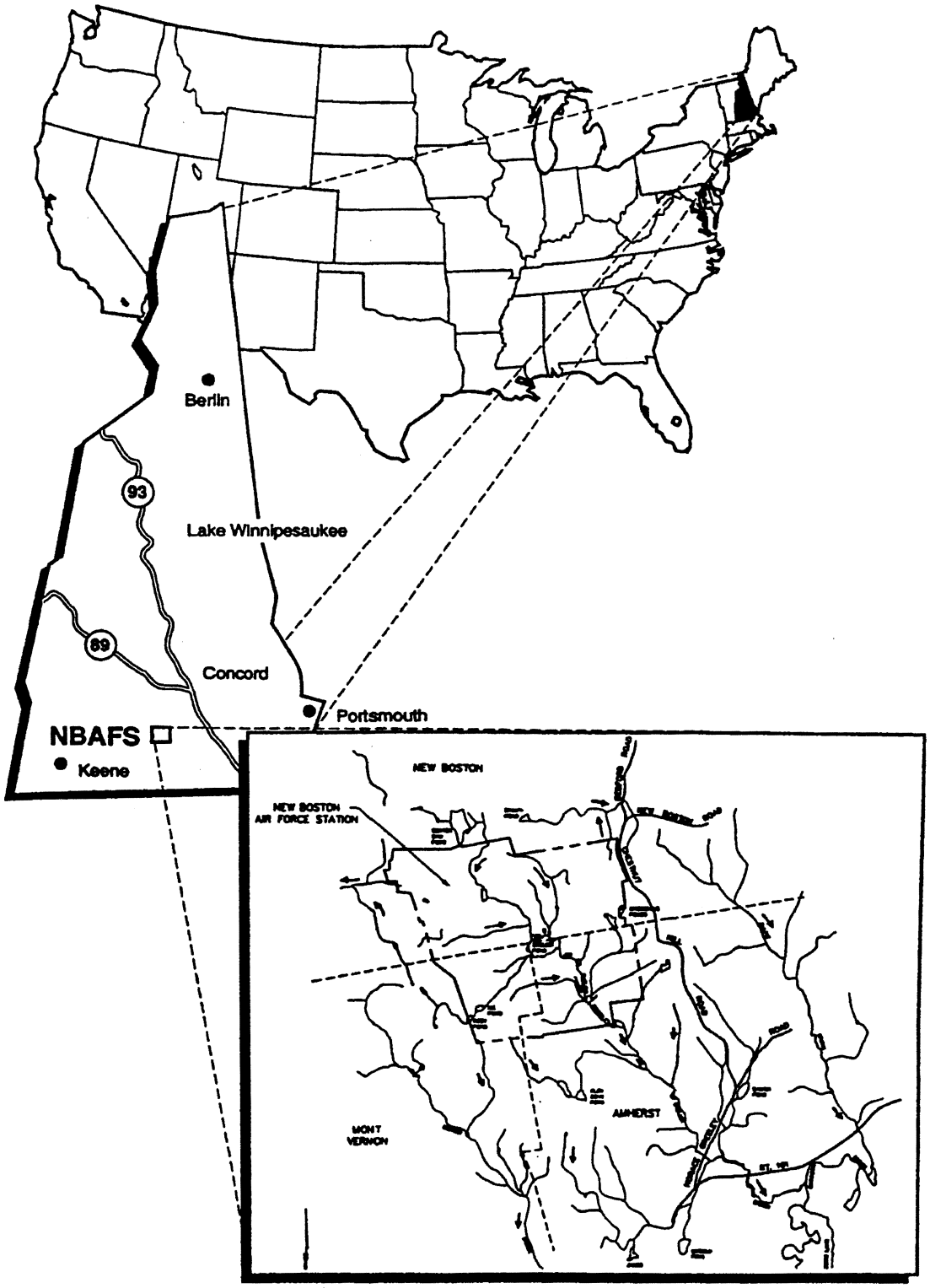

Figure 2 Location of New Boston Air Station, New Hampshire (Source: ENSR 1993)

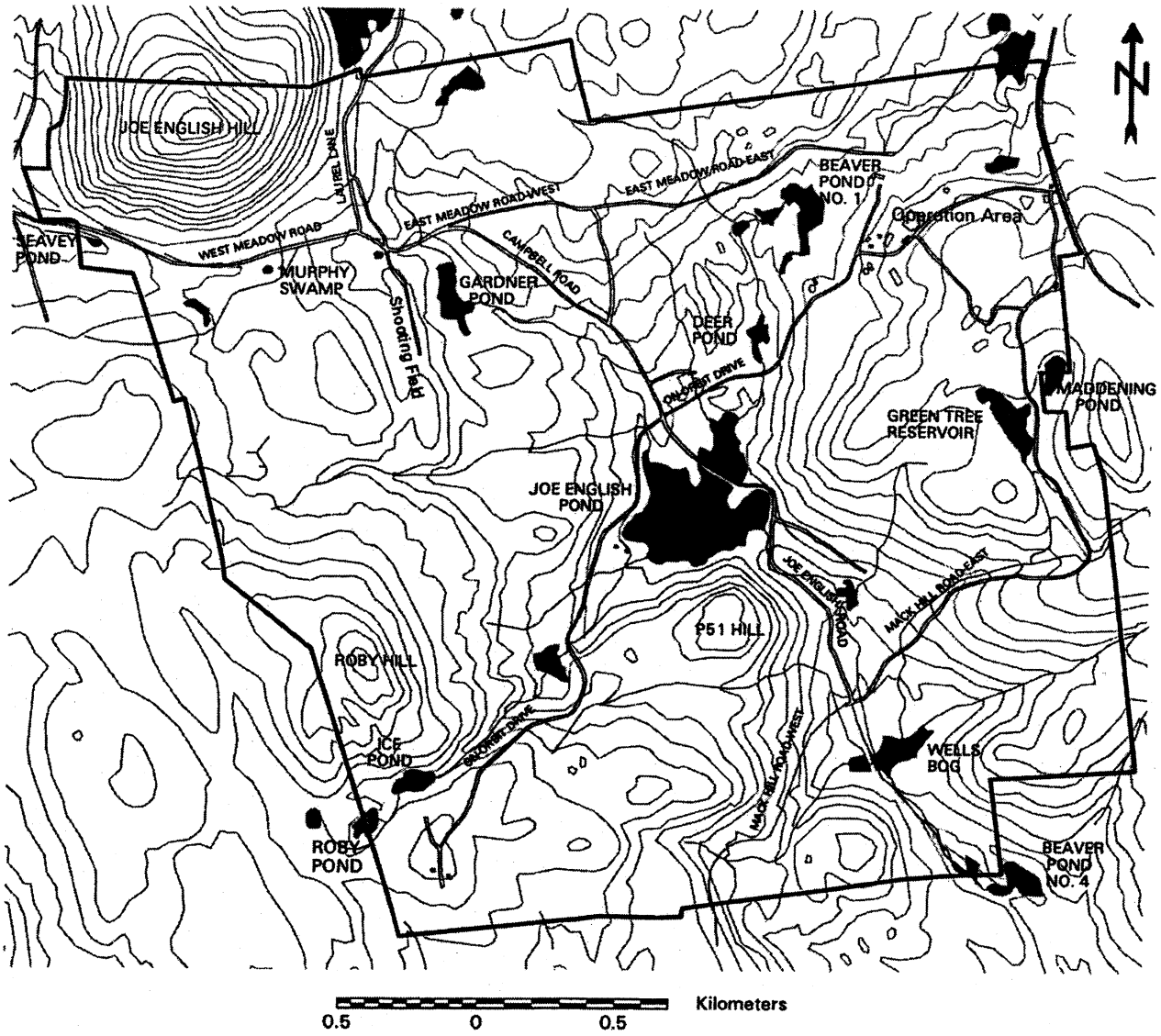

Figure 3 Station Boundaries, Roads, Facilities, and Natural Features on New Boston Air Station, New Hampshire (Source: ANL 1997)

3.2 Climate, Air Quality, and Noise

3.2.1 Climate

The region around the NBAFS is characterized by a humid continental climate. Precipitation is distributed throughout the year, with no particular wet or dry season. Coastal storms can be a serious weather hazard in southeastern New Hampshire, decreasing in importance northward (Ruffner 1985). Such storms generate very strong winds and heavy rain or snow. Storms of tropical origin affect or threaten New Hampshire about once every 2 to 3 years. Thunderstorms occur 15 to 30 times per year. Ice storms occur in the winter but are usually of short duration. However, a few widespread and prolonged ice storms have occurred. Based on the data for the 9,130 km^2 (3,530 mi^2) area that includes the NBAFS, less than two tornadoes occur per year. The localized area effected by a tornado averages only 0.29 km^2 (0.11 mi^2; Ramsdell and Andrews 1986) (ANL 2000).

3.2.2 Air Quality

The State of New Hampshire Ambient Air Quality Standards (SAAQS) are identical to the National Ambient Air Quality Standards (NAAQS) for six criteria air pollutants: sulfur oxides (as sulfur dioxide [SO_2]), particulate matter with aerodynamic diameters of $\leq$10 μm and equal to 2.5 μm (PM_{10} and $PM_{2.5}$ respectively), carbon monoxide (CO), ozone (O_3), nitrogen dioxide (NO_2), and lead (Pb) (Sanborn 1998). In 1996, New Hampshire discontinued Pb monitoring because Pb concentrations were well below the NAAQS and at the lowest levels of the detection limit (Argonne 2000). As of November 4, 2002, Hillsborough County (which includes NBAFS) was designated as an attainment area for all criteria pollutants, except ozone. New Boston AFS is located in two Ozone non-attainment areas, Boston-Lawrence-Worcester (E. MA), MA-NH Serious and Manchester NH (Marginal)(source http://www.epa.gov/air/oaqps/greenbk/oindex.html).

Permitted air pollution sources at NBAFS include two backup generators at the power plant (Building 157) and 15 boilers located in various buildings in the Operations Area.

3.2.3 Noise

Currently, no quantitative noise-limit regulations exist in New Hampshire (ANL 1999). The U.S. Environmental Protection Agency (EPA) guidelines recommend an L_{dn} (the day-night

weighted equivalent sound level) of 55 dBA[1], which is considered sufficient to protect the public from the effect of broad-band environmental noise in typically quiet outdoor and residential areas (EPA 1974). For protection against hearing loss in the general population from non-impulsive noise, the EPA guidelines recommend an L_{eq}[2] of 70 dBA or less per day over a 40-year period.

No noise monitoring data are available from the area around the NBAFS site. However, the acoustic environment around the NBAFS site can be considered that of a rural location, having typical residual sound levels of approximately 30 to 35 dBA (Liebich and Cristoforo 1988).

3.3 Topography, Geology, and Soils

NBAFS is located within an area of hilly and mountainous terrain. The main physiographic features on NBAFS are Chestnut Hill in the northeastern section, Roby Hill in the southwestern section, and Joe English Hill in the northwestern section. Within the center of the station is Joe English Pond (Figure 3).

The bedrock geology underlying NBAFS consists of Pre-Quaternary metamorphic and igneous rocks. Generally, the bedrock is buried beneath glacial drift. Till is the dominant surficial deposit, composed of an unsorted to poorly sorted mixture of clay, silt, sand, pebble, cobbles, gravel, and boulders. However, swamp deposits and recent alluvium is also present. Glacial striations and drumlins (elongate or oval hills) are present throughout the area, providing evidence of the general north to south glacial movement. Chestnut Hill is one such glacial feature, a drumlin (PES 1995).

Over 90 percent of the soils on NBAFS were formed in glacial till; the remainder formed in outwash plains, kame terraces, or stream valleys. Soils formed in glacial till tend to be fine-textured and dense and contain many stones. Soils covering about one-half of NBAFS are classified as stony or very stony. The soils at NBAFS tend to be highly resistant to erosion if stabilized by vegetative cover. However, the soils have moderate to extreme erosion potential in

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[1] dBA is a unit of weighted sound-pressure level, measured by the use of the metering characteristics and the "A" weighting specified in the *American Standard Specification for Sound Level Meters ANSI SI.4-1983* and *Amendment S1.4A-1985* (Acoustical Society of America 1983, 1985).

[2] L_{eq} is the equivalent steady sound level that, if continuous during a specific time period, would contain the same total energy as the actual time-varying sound. For example, L_{eq}(1-h) is the 1-hour equivalent sound level.

bare areas due to the fine texture of the soils and steep slopes present in portions of NBAFS. Activities that disturb or remove vegetation are likely to increase the erosion hazard, particularly on slopes (ENSR 1993).

3.4 Water Resources

Most of NBAFS is located within the Joe English Brook watershed. The station contains a number of open waters and stream segments (intermittent and perennial; Figure 3). Most surface water drains into Joe English Pond or Brook and eventually exits the installation in the South East corner.

The major aquifer system at NBAFS is in the bedrock. Groundwater levels at NBAFS range from 22 m (73 ft) below land surface to flowing artesian conditions near Joe English Pond. Six wells have been drilled into the groundwater at NBAFS for potable water (only five are currently used). Four other wells have been drilled for non-potable grounding wells used for the satellite-tracking facilities (PES 1995).

No Federal Emergency Management Agency data are available for floodplains within NBAFS (PES 1995). However, major flood events (i.e., 100- to 500-year flood) would principally affect areas associated with Joe English Pond and Joe English Brook (PES 1995).

The only permitted water pollution point source is the station wastewater treatment plant. Sanitary wastewater from the Operations Area is collected by a sewer system and routed to the station's wastewater treatment plant. The plant provides primary treatment and extended aeration treatment and disinfection. Discharges from the wastewater treatment plant are then discharged through a National Pollutant Discharge Elimination System (NPDES) permitted outfall to a hillside, where it eventually discharges into Beaver Pond No. 1.

3.5 Ecological Resources

The NBAFS has been identified as a Category I installation by both the New Hampshire Department of Fish and Game and the U.S. Fish and Wildlife Service. This classification indicates that the NBAFS has suitable habitat for conserving and managing fish and wildlife. An Integrated Natural Resource Management Plan has been prepared to guide management of the natural resources of NBAFS using an ecosystem approach. The relatively high biodiversity

supported on NBAFS is attributable to the presence of generally undisturbed lands throughout much of the site and to the types of low-impact activities that occur on the station (ANL 1997).

Three ecological surveys have been conducted to determine the habitats and biotic composition of NBAFS, wetland delineation (PES 1996), biodiversity survey (ANL 1997) and a bat survey (ANL 2002). The following discussion of ecological resources emphasizes those resources that may be affected by the proposed action.

NBAFS habitat is primarily mature deciduous, coniferous and mixed forests. A 1996 installation wide inventory determined Northern red oak (*Quercus rubra*) is the dominant deciduous species in the forest with 22 percent of the basal area. Red maple (*Acer rubrum*) was dominant in overall number of stems with 24 percent compared to 20.7 percent for red oak. Other common species include black birch (*Betula lenta*), white birch (*Betula papyrifera*), black oak (*Quercus velutina*) American beech (*Fagus grandifolia*). Eastern white pine (*Pinus strobus*) and Eastern hemlock (*Tsuga canandensis*) are the two dominant coniferous species found on the installation. Eastern white pine accounts for 24 percent of the basal are of all trees and 13 percent of stems, hemlock accounts for 16 percent of basal area and 14 percent of the stems.

Commonly encountered species include mourning dove, blue jay, hermit thrush, black-capped chickadee, American robin, rufous-sided towhee, dark-eyed junco, house finch, raccoon, coyote, Eastern chipmunk, woodchuck, red squirrel, red-backed vole, fisher, and white-tailed deer.

The threatened, endangered, and rare species known to occur on NBAFS are listed in Table A.1[3] (Appendix A). A discussion of these species and the eight rare natural communities that occur at NBAFS is provided in ANL (1997) and summarized in ANL (1999). Two state listed wildlife species have been documented in terrestrial habitats on the installation. The state listed (threatened) Eastern hognose snake (*Heterodon platyhinos*) has been well documented throughout the installation. The small-footed bat (*Myotis leibii*) was documented on the installation during a bat inventory conducted during summer 2002.

[3] The species listing status and ranking codes for these species are presented in Table A.2 (Appendix A).

3.6 Cultural Resources

Archaeological investigations within the Merrimack River system have documented prehistoric sites dating from the Early Archaic period (8,000 to 5,500 B.C.), with very limited evidence for sites dating from the earlier Paleo-Indian period (10,500 to 8,000 B.C.). The streams and wetlands present at NBAFS and its high natural resource potential made it a suitable location for both temporary single-purpose foraging locations and possible multi-component campsites (i.e., sites containing evidence of several occupational periods). Two prehistoric sites and four isolated finds were recorded at NBAFS during subsurface testing (PAL 1993).

Twenty-eight historic sites occur on NBAFS (22 rural homesteads, 3 industrial complexes, and 3 civic sites [road, school, and trash dump]; Watford 1988; PAL 1993). These sites are distributed widely throughout NBAFS; although, 12 are clustered along the roads at the base of Joe English Hill. Twenty-six of these sites have been recommended as potentially eligible for listing on the *National Register of Historic Places* (PAL 1993) because of their potential to contain information important to the history of the area (Criterion D, as identified in 36 CFR 60.4). Further evaluation is required before a formal eligibility determination can be made (ANL 1999).

The State Historic Preservation Officer (SHPO) within the New Hampshire Division of Historical Resources (NHDHR) has indicated that seven buildings within the Operations Area may contribute to a historic district that is potentially eligible for listing on the *National Register of Historic Places* (Muller 1998)

Past activities at NBAFS have resulted in some impacts to cultural resources. Evidence of looting, erosion, and other damaging activities has been reported at several of the sites potentially eligible for listing on the *National Register of Historic Places* (PAL 1993; Loflin and Grumet 1996). The specific causes of the damages and time that they occurred are not known.

3.7 Land Use, Recreation, and Visual Resources

Facilities that support the satellite-tracking operations at NBAFS occupy about 17.7 ha (44 acres) of the 1,144 ha (2,826 acre) site (ANL 1997). Over the years, NBAFS has been restoring the remainder of the land to a natural state, while maintaining a proper balance between natural resource enhancements and recreational and military training use of the station. Facilities located within the Operations Area include three enclosed satellite dish antennae, satellite-

control buildings, and satellite-tracking and communications buildings. Support facilities include maintenance and administration buildings, a fire station, and storage facilities. Enlisted housing dormitories and several home structures are also present. The unimproved portions of NBAFS are not used to actively support mission operations (ANL 1999).

Recreational use of NBAFS is restricted primarily to active and retired military staff and their families and certain members of the public. Numerous active and passive outdoor recreational opportunities are available at NBAFS, including nature watching, fishing, swimming, camping, hiking, rock climbing, hunting, archery, boating, cross-country skiing, ice fishing, ice skating, sledding, and snowmobiling (ANL 1990).

The land immediately surrounding NBAFS is heavily wooded, representing some of the least developed and most rural portions of New Boston, Amherst, and Mont Vernon. However, the primary land use designated for the area is low-density residential use (PES 1995). Low-density, single-family homes on parcels typically over one acre; undeveloped lands; and several active farms (particularly along Chestnut Hill Road and Joe English Road) occur in the immediate vicinity of NBAFS. A computer software company is located opposite the main entrance to the station (ANL 1999).

Because of the limited land area required to support satellite-tracking operations, most of NBAFS provides a natural setting (e.g., the forests, hills, wetlands, and ponds). Visual resources are therefore rated as excellent, with scenic vistas evident from the station's higher elevations.

3.8 Socioeconomics

About 150 people are employed by NBAFS (12 military and the remainder civilian or civilian contract employees; PES 1995). Although rural in character, the three communities that surround NBAFS have experienced population growth because of their location within one of the most rapidly expanding areas of New England. To accommodate this growth, residential development is expected to continue in the neighborhoods surrounding NBAFS. The communities that surround NBAFS represent three of the most affluent communities of the state (all three are ranked in the top 25 of 234 communities in terms of median household income; PES 1995).

4 ENVIRONMENTAL IMPACTS OF THE PROPOSED ACTION AND ALTERNATIVES

4.1 Environmental Consequences of the Proposed Action

Potential impacts from the proposed alternative that were evaluated in this EA include: (1) air quality impacts; including noise increases; (2) disturbance of land, streams, and wetlands from, wildfire training; (3) land use alterations and limitations; (4) habitat modification; and (5) damage to subsurface archaeological resources. Contruction contractors would have to comply with all Federal, State, and local regulations pertaining to the environment (e.g., air, noise, solid wastes, water;). Adherence to these regulations would mitigate the potential for adverse impacts. Nevertheless, some environmental impacts would be unavoidable. The following sections discuss these potential environmental impacts and their significance.

4.1.1 Air Quality and Noise

Localized, short-term air quality impacts that could occur with construction include the generation of fugitive dust, and exhaust emissions. The potential impacts on ambient air quality in the vicinity of the NBAFS site would be minor and of short duration. No violations of applicable federal and state ambient air quality standards are expected.

General conformity under the Clean Air Act, Section 176 has been evaluated for the project described in this Environmental Assessment according to the requirements of 40 CFR 93, Subpart B. The requirements of this rule are not applicable to this action because the action is an exempt action under 40 CFR 93.153(c).

Noise impacts would occur from the use of machinery and vehicles. Work would occur mostly during weekday daytime hours, thus much of the equipment noise would be masked by background noises. Noise impacts associated with project activities would be minor and of short duration. Mitigating measures include ensuring work is scheduled during normal weekday work hours and ensuring the equipment noise controls are functional.

4.1.2 Topography, Geology, and Soils

Erosion would be negligible due to the short-term exposure of open soils and use of Best Management Practices (BMPs) during construction. Vegetation would be expected to reestablish quickly after seeding with grass.

4.1.3 Water Resources

Localized minor to negligible increases in turbidity and sedimentation of surface waters in the construction vicinity could occur. The major source for these impacts would be runoff from exposed soil, particularly during inclement weather, erosion control practices required to meet BMP standards would mitigate any potentially adverse impacts. No long-term degradation in water resources is expected to result from the implementation of the proposed action.

The project would not be expected to affect groundwater resources (e.g., change the depth to groundwater, alter groundwater flow direction, affect groundwater recharge, or impact groundwater quality).

4.1.4 Ecological Resources

Impacts to ecological resources would be limited primarily to the immediate construction area. Dust and other particulates and noise associated with the project, which could affect adjacent vegetation, would be produced over a short period of time and would be confined to the construction area.

4.1.4.1 Vegetation

Vegetation communities consisting primarily of maintained lawn would be disturbed. No natural vegetation communities would be expected to be disturbed.

4.1.4.2 Fish and Wildlife

The proposed installation of the electrical system would have a negligible impact on wildlife. Wildlife in the immediate construction area would be disturbed during the project by noise, visual disturbances from equipment, and personnel. These disturbances could cause short distance movements of wildlife, scare birds off their nests, or otherwise disrupt normal wildlife activities.

Rare wildlife species and neotropical migrant bird species (afforded protection under the Migratory Bird Treaty Act) are distributed widely across the station and could occur in the construction area. Several rare and state listed species occur in terrestrial habitats throughout the installation including whip-poor-will, Eastern pipistrelle, Blanding's turtle, and northern leopard frog. Individuals of these species in the immediate project area could be disturbed during the project. Any impacts that would occur would be minor, and would not jeopardize the survival of these species at NBAFS. Unintentional take of migratory birds due to replacement of the electrical system would be prevented by not working during the nesting season.

Impacts to aquatic and wetland habitats and biota are expected to be temporary, minor, and indirect. No direct impacts (e.g., dredge or fill activities) to jurisdictional wetlands would occur.

4.1.4.3 Threatened and Endangered Species

No known federally listed plant species or wildlife species occur on the installation. One state listed species has been identified near the proposed construction in terrestrial habitats. The E. hognose snake (*Heterodon platirhinos*), state listed threatened was identified near the construction site during 2002.

E. hognose snake could be affected by construction in the event a snake was caught in a trench that was backfilled or run over by construction vehicles. All personnel would be briefed on the snake's appearance and asked to ensure avoidance. Individual snakes would be expected to move away from construction activities.

4.1.5 Cultural Resources

The proposed construction could impact known cultural resources. Historic Site 11 is located within the construction area. The site contains the remains of five drylaid fieldstone foundation walls, probably those of a house (PAL, 1993). Historic maps of the site indicate W. Marshall as resident in 1858 and J. Campbell in 1892. Records also show the site had been abandoned when the military acquired the property in 1942 (PAL 1993). The site has been severely impacted, probably through motorized grading associated with the building of On-Orbit Drive. The impact to soil and architectural elements has severely limited the information content of this site (PAL 1993).

In the event advertent discovery of archeological resources during construction the installation Natural Resources Planner will be contacted for appropriate action.

4.1.6 Land Use, Recreation, and Visual Resources

The proposed project would result in a localized minor short-term loss followed by a long-term minor net gain in recreational resources. This would not conflict with any plans or goals for recreational or natural resource management at NBAFS.

4.1.7 Socioeconomics

The nature and duration of the proposed project would not cause any significant adverse socioeconomic impacts to the local population, labor force, or economy. Construction would involve a small short duration contactor work force, impacts on the capacities of public services (e.g., schools, police, fire protection) would not occur. The project would provide negligible employment benefits and associated increase in cash flow to the local economy.

Executive Order 12898, "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations" (February 11, 1994), requires federal agencies to identify and address, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority and low-income populations. No environmental justice impacts would be expected to either minority or low-income populations, since the proposed project would have no impact on the population immediately surrounding NBAFS.

4.1.8 Health and Safety

Health and safety issues related to the project routinely center on the potential or perceived effects from exposure hazardous materials or equipment related injuries. All construction would be expected to follow all safety related USAF regulations.

4.2 Environmental Consequences of the No-Action Alternative

Under the no-action alternative, installation of a new electrical system would not occur. Taking no action would be equivalent to maintaining the existing environment. The impacts

associated with the electrical system upgrade described in Section 4.1 (proposed action) would not occur. NBAFS would continue to have an outdated and potentially unsafe campground electrical system.

4.3 Adverse Effects that Cannot be Avoided if the Project Is Implemented

Implementation of the proposed alternative (Electrical System Upgrade) should not result in any long-term adverse environmental impacts.

Although no significant air quality impacts are anticipated if the project is implemented, fugitive dust and engine exhaust emissions would be released during project activities. All air quality impacts would be short-lived and limited to the immediate project surroundings.

Despite the implementation of control measures, some unavoidable increases in soil erosion could result from project activities, especially during heavy rains. Turbidity and suspended solids in nearby surface water bodies could temporarily increase.

The potential would exist, albeit small, for serious injuries or fatalities to workers during the project.

4.4 Irreversible and Irretrievable Commitment of Resources

Resources that would be committed irreversibly or irretrievably from up would include materials that could not be recovered or recycled and materials or resources that would be consumed or reduced to irrecoverable forms. Use of fuel, oil, and other materials during construction execution would constitute an irreversible and irretrievable commitment of those resources.

4.5 Relationship between Short-Term Uses and Long-Term Productivity

This section evaluates the effect of the proposed short-term use of the environment for the electrical system upgrade on the long-term productivity of this same land and its resources. Electrical system upgrade will provide safe and modern access to electric service for campers than the current system condition. Most adverse impacts to the environment would be temporary (e.g. increased noise).

4.6 Cumulative and Incremental Impacts

Cumulative impacts are those impacts to the environment that result from the incremental effect of the proposed project when added to other past, present, and reasonably foreseeable future actions, regardless of what agency or person undertakes such actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time (ANL 2000). No adverse cumulative effects are anticipated for either the proposed or alternative action.

The potential impact on ambient air quality from emissions (e.g., fugitive dust, and engine exhaust emissions) would be a negligible short-term increase in emissions occurring from other activities at NBAFS and within Hillsborough County. However, emissions associated with the proposed action would be mostly confined to the immediate project area since most emissions would be released near ground level. Emission rates would be low, so potential impacts on ambient air quality would be minor. Under the proposed action, some equipment noise could be detectable. However, these activities would occur infrequently, so cumulative noise impacts would be localized and temporary in nature.

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6 LIST OF PREPARERS

Name	Education/Experience	Contribution
Stephen Najjar	MS Natural Resources 7 Years Natural Resources Management	Responsible for all phases of EA preparation
Capt Raymond Tramposch	BS Computer Science and Engineering Communications Officer USAF, 7 years	Engineering/Editing

7 AGENCIES, ORGANIZATIONS, AND PERSONS CONTACTED

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Concord NH 03302-2043

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Fish and Wildlife Service
70 Commercial St
Concord NH 03301

APPENDIX A, LISTED AND RARE SPECIES ON NEW BOSTON AIR STATION

Table A.1 Federally Listed, State Listed, and Rare Species of Plants and Animals Found on New Boston Air Station, New Hampshire.[a]

Common Name	Scientific Name	Federal Status	State Status	State Rank
Plants				
Fern-leaved false foxglove	*Aureolaria pedicularia* var *intercedens*	-[b]	LE	S1
Moths				
No common name	*Aphareta purpurea*	-	-	S2
Orange-spotted idia	*Idia diminuendis*	-	-	S2S4
Butterflies and Skippers				
Appalachian brown	*Satyrodes appalachia*	-	-	S1?
Delaware skipper	*Atrytone logan*	-	-	S3S4
Mulberry wing	*Poanes massasoit*	-	-	S1S3
Little glassywing	*Pompeius verna*	-	-	SU
Reptiles				
Blanding's turtle	*Emydoidea blandingii*	-	-	S3
Eastern hognose snake	*Heterodon platirhinos*	-	LT	S2
Birds				
Pied-billed grebe	*Podilymbus podiceps*	-	LE	S1B/ZN
American bittern	*Botaurus lentiginosus*	-	-	S3B
Osprey	*Pandion haliaetus*	-	LT	S2B/ZN
Bald eagle	*Haliaeetus leucocephalus*	LT	LE	S1
Northern harrier	*Circus cyaneus*	-	LT	S2B
Cooper's hawk	*Accipiter cooperi*	-	LT	S2B/ZN
Whip-poor-will	*Caprimulgus vociferus*	-	-	S3B
Mammals				
Small footed bat	*Myotis leibii*		LE	S1
Eastern pipistrelle	*Pipistrellus subflavus*			S1N/SUB

[a] Federal and state listing status codes and state ranks are defined in Table A.2 (Appendix A). State ranks do not confer any official or legal status to a species. These ranks are assigned by the New Hampshire Natural Heritage Inventory to provide information on the population status of species within the state.

[b] A dash (-) indicates that the status is not applicable to that species. A question mark (?) indicates that the status shown is expected, but not known with certainty.

Source: ANL (1997), modified Jan 03.

Table A.2 Species Listing Status and Ranking Codes Used by the Federal Government and the State of New Hampshire.

Federal Listing Status Codes[1]

LE Listed as Endangered Species in the List of Endangered and Threatened Wildlife and Plants under the provisions of the Endangered Species Act. Defined as any species which is in danger of extinction throughout all or a significant portion of its range.

PE Proposed for addition to the List of Endangered and Threatened Wildlife and Plants as Endangered Species.

LT Listed as Threatened Species. Defined as any species which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range.

PT Proposed for listing as Threatened Species.

C Candidate Species for addition to the list of Endangered and Threatened Wildlife and Plants. Taxa for which the USFWS currently has substantial information on hand to support the biological appropriateness of proposing to list the species as endangered or threatened.

LTSA Threatened due to similarity of appearance.

NL Not currently listed, nor currently being considered for addition to the List of Endangered and Threatened Wildlife and Plants.

State Listing Status Codes[2]

LE Endangered; those native species whose prospects for survival in New Hampshire are in immediate danger because of a loss or change in habitat, over-exploitation, predation, competition, disease, disturbance or contamination. Assistance is needed to ensure continued existence as a viable component of the State's wildlife community.

LT Threatened; those species which may become endangered if conditions surrounding them begin, or continue to deteriorate.

SC Special concern; those species which do not meet the definition of threatened or endangered species but, because of their beauty, commercial value, excessive collecting, or other factors, require monitoring or regulation.

State Rank Codes[3]

S1 Critically imperiled because of extreme rarity (5 or fewer occurrences, or very few remaining individuals), or because of some factor of its biology making it especially vulnerable to extinction.

S2 Imperiled because of rarity (6 to 20 occurrences), or because of other factors demonstrably making it very vulnerable to extinction throughout its range.

S3 Either very rare and local throughout its range, or found locally (even abundantly at some of its locations) in a restricted range, or vulnerable to extinction throughout its range because of other factors; in the range of 21 to 100 occurrences.

S4 Apparently secure, though it may be quite rare in parts of its range, especially at the periphery.

Table A.2 (continued).

State Rank Codes[3] (continued)

S5 Demonstrably secure, though it may be quite rare in parts of its range, especially at the periphery.

SU Possibly in peril, but status uncertain; more information needed.

SH Historically known; may be rediscovered.

State Rank Modifiers

A Accidental in the state; including species (usually birds or butterflies) recorded very infrequently, hundreds or thousands of miles outside their usual range.

B Breeding status for a migratory species. Example: S1B, SZN - breeding occurrences for the species are ranked S1 (critically imperiled) in the state, nonbreeding occurrences are not ranked in the state.

E An exotic established in the state; may be native in nearby regions.

N Non-breeding status for a migratory species. Example: S1B,SZN - breeding occurrences for the species are ranked S1 (critically imperiled) in the state, non-breeding occurrences are not ranked in the state.

Z Ranking not applicable.

? Ranking suspected, but uncertain.

[1]List maintained by the U.S. Fish and Wildlife Service.

[2]List maintained by the New Hampshire Department of Fish and Game

[3] State species ranking codes do not confer any official or legal status to a species. These ranks are developed by the New Hampshire Natural Heritage Inventory to provide information on the population status of species within the state.

APPENDIX B, REQUEST FOR ENVIRONMENTAL IMPACT ANALYSIS (AF FORM 813)

REQUEST FOR ENVIRONMENTAL IMPACT ANALYSIS

Report Control Symbol RCS:

INSTRUCTIONS: *Section I to be completed by Proponent; Sections II and III to be completed by Environmental Planning Function. Continue on separate sheets as necessary. Reference appropriate item number(s).*

SECTION I - PROPONENT INFORMATION

1. TO *(Environmental Planning Function)*	2. FROM *(Proponent organization and functional address symbol)*	2a. TELEPHONE NO.
MAFCVN	MAFS	2452

3. TITLE OF PROPOSED ACTION
Replace existing underground electrical distribution system at the Joe English Pond Campground

4. PURPOSE AND NEED FOR ACTION *(Identify decision to be made and need date)*
Existing electrical system is not able to meet load requirements of modern recreational vehicles.

5. DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES *(DOPAA) (Provide sufficient details for evaluation of the total action.)*
Replace electrical system, no action.

6. PROPONENT APPROVAL *(Name and Grade)*	6a. SIGNATURE	6b. DATE
Raymond J. Tramposch, Capt, USAF		20030430

SECTION II - PRELIMINARY ENVIRONMENTAL SURVEY. *(Check appropriate box and describe potential environmental effects including cumulative effects.) (+ = positive effect; 0 = no effect; - = adverse effect; U = unknown effect)*	+	0	-	U
7. AIR INSTALLATION COMPATIBLE USE ZONE/LAND USE *(Noise, accident potential, encroachment, etc.)*				
8. AIR QUALITY *(Emissions, attainment status, state implementation plan, etc.)*		X		
9. WATER RESOURCES *(Quality, quantity, source, etc.)*		X		
10. SAFETY AND OCCUPATIONAL HEALTH *(Asbestos/radiation/chemical exposure, explosives safety quantity-distance, bird/wildlife aircraft hazard, etc.)*		X		
11. HAZARDOUS MATERIALS/WASTE *(Use/storage/generation, solid waste, etc.)*		SW		
12. BIOLOGICAL RESOURCES *(Wetlands/floodplains, threatened or endangered species, etc.)*		X		
13. CULTURAL RESOURCES *(Native American burial sites, archaeological, historical, etc.)*			X	
14. GEOLOGY AND SOILS *(Topography, minerals, geothermal, Installation Restoration Program, seismicity, etc.)*		X		
15. SOCIOECONOMIC *(Employment/population projections, school and local fiscal impacts, etc.)*		X		
16. OTHER *(Potential impacts not addressed above.)*				

SECTION III - ENVIRONMENTAL ANALYSIS DETERMINATION

17.
- [ ] PROPOSED ACTION QUALIFIES FOR CATEGORICAL EXCLUSION (CATEX) # _____ ; OR
- [X] PROPOSED ACTION DOES NOT QUALIFY FOR A CATEX; FURTHER ENVIRONMENTAL ANALYSIS IS REQUIRED.

18. REMARKS
State listed Eastern Hognose in the general area and one ineligible cultural resources site is general area.

19. ENVIRONMENTAL PLANNING FUNCTION CERTIFICATION *(Name and Grade)*	19a. SIGNATURE	19b. DATE
Stephen Najjar, GS-11		20030430

APPENDIX C CORRESPONDENCE

DEPARTMENT OF THE AIR FORCE

50TH SPACE WING (AFSPC)

5 May 2003

MEMORANDUM FOR 23 SOPS/MAFCVN

FROM: 50 SW/JA

SUBJECT: Legal Review of Environmental Assessment (EA) and Finding Of No Significant Impact (FONSI) For Joe English Pond Campground Electrical Upgrade At New Boston Air Force Station (NBAFS)

1. PURPOSE/SUMMARY OF CONCLUSIONS AND RECOMMENDATION: We have been asked to provide a legal review of the proposed EA and FONSI for Joe English Pond Campground Electrical Upgrade at NBAFS. We find the documents legally sufficient and recommend the commander sign the FONSI after the public comment period has expired.

2. BACKGROUND: The EA and FONSI detail the facts; therefore, they are incorporated herein by reference.

3. ISSUES: Whether the FONSI is legally sufficient? Whether the EA is legally sufficient?

4. APPLICABLE LAW: While there are several governing documents concerning the environmental impact analysis process, the Air force mainly relies upon the *National Environmental Policy Act of 1969 (NEPA)* (42 U.S.C. 4321 *et seq.*), as implemented by 32 CFR 989 *et seq.*, the *Council On Environmental* Quality (CEQ) *Regulations* (40 CFR 1500-1508), and AFI 32-7061, *Environmental Impact Analysis Process*, 24 Jan 95.

5. LEGAL ANALYSIS:

a. 32 CFR 989.15 addresses the requirements of a FONSI. A FONSI must summarize the EA or, preferably, have it attached and incorporated by reference, and must note any other environmental documents related to the action. The proposed FONSI incorporates the EA by reference. The EPF must make the EA and unsigned FONSI available to the affected public and provide the EA and unsigned FONSI to organizations and individuals requesting them and to whomever the proponent or the EPF has reason to believe is interested in the action. (32 CFR 989.15(e)). Before the FONSI is signed and action is implemented, the EPF should allow sufficient time to receive comments from the public. The current FONSI fulfills this requirement.

b. An EA briefly discusses the need for the proposed action, reasonable alternatives to the proposed action, the affected environment, the environmental impacts of the proposed action and alternatives (including the no-action alternative), and a listing of agencies and persons consulted during preparation. The proposed EA meets these requirements.

c. 40 CFR 93.153 requires, "(a) Conformity determinations for Federal actions related to transportation plans, programs, and projects developed, funded, or approved under title 23 U.S.C. must meet the procedures set forth in this subpart; (b) For Federal actions not covered by paragraph (a) of this section, a conformity determination is required for each pollutant where the total of direct and indirect emissions in a nonattainment or maintenance area caused by a Federal action would equal or exceed any

of the rates in paragraphs (b)(1) or (2) of this section." NBAFS is located in two Ozone non-attainment areas. Because NBAFS emissions are below the listed levels, the waiver in 40 CFR 93.153(c) applies.

d. Under the National Historic Preservation Act (NHPA) (16 U.S.C. 470a, *et seq.*), federal agencies are encouraged to coordinate any compliance with NHPA Section 106 Consultation, with any steps taken to meet the requirements of NEPA. Agencies must consider the potential effects of their undertakings on historic properties as early as possible in the NEPA process, and plan their public participation, analysis, and review in such a way that they can meet the purposes and requirements of both statutes in a timely and efficient manner. NBAFS has 28 historic sites, 26 of those sites have been listed as potentially eligible for listing on the National register of Historic Places. Historical Site 11 is located in the proposed construction area. NBAFS has sought section 106 Consultation from the State Historic Preservation Officer.

6. CONCLUSION: We find the FONSI and EA legally sufficient.

7. RECOMMENDATIONS: Once the public comment period has expired, we recommend the commander sign the FONSI.

CANDACE L. HUNSTIGER, Capt, USAF
Chief, Environmental Law

Concur

CARLOS L. MCDADE, Lt Col, USAF
Staff Judge Advocate

DEPARTMENT OF THE AIR FORCE
50TH SPACE WING (AFSPC)

APR 2 5 2003

MEMORANDUM FOR NEW HAMPSHIRE DEPARTMENT OF FISH AND GAME
ATTN: MR. WILLIAM S. BARTLETT, JR.
EXECUTIVE DIRECTOR
2 HAZEN DRIVE
CONCORD NH 03301

FROM: 23 SOPS/CC
317 Chestnut Hill Road
New Boston AFS NH 03070-5125

SUBJECT: Preparation of an Environmental Assessment (EA) for Campground Electric Upgrade at New Boston Air Force Station (NBAFS), New Hampshire

1. I am requesting information from your office regarding state-listed threatened and endangered plant and animal species that may occur on or in the vicinity of NBAFS, NH (Atch 1).

2. The United States Air Force (USAF) is planning an upgrade to the Joe English Pond Campground electrical distribution system. The proposed project would include trenching, installing buried conduits, and backfilling. An Unexploded Ordnance (UXO) sweep would be conducted prior to trenching, and UXO found would be detonated in place.

3. NBAFS is a satellite tracking station that occupies approximately 2,836 acres in Hillsborough county of south-central New Hampshire. The station is predominantly undeveloped forest with a mix of deciduous and coniferous trees that varies in species dominance and seral stage across the site. State-listed species found on NBAFS during a two-year biodiversity survey conducted from 1994–1996 included the fern-leaved false foxglove (*Aureolaria pedicularia* var *intercedens*), pied-billed grebe (*Podilymbus podiceps*), osprey (*Pandion haliaetus*), bald eagle (*Haliaeetus leucocephalus*), northern harrier (*Circus cyaneus*), Cooper's hawk (*Accipiter cooperi*), eastern hognose snake (*Heterodon platirhinos*) and small-footed bat (*Myotis leibii*). The bald eagle and northern harrier were not observed to use station habitat, but were observed in flight over the site during fall migration. Recently, a bald eagle was observed during the winter feeding on a deer carcass at Joe English Pond in the central portion of the station. See Atch 3 for a complete list of protected and rare species and natural communities found on NBAFS. Bat data is not included in attached table; this data was collected during summer 2002 and is currently unpublished.

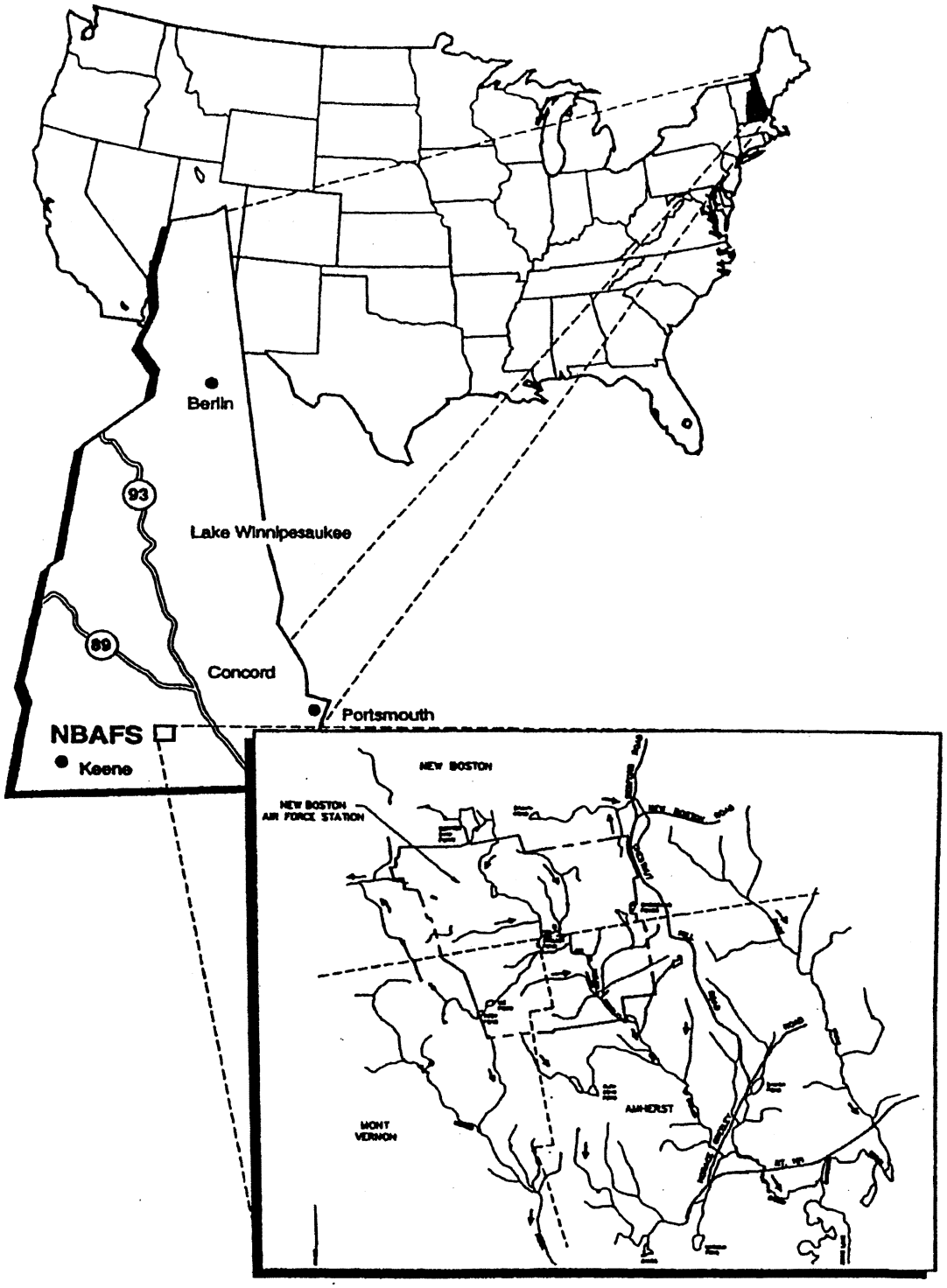
4. The Eastern hognose snake has been documented in the project area. NBAFS will ensure contractors check all trenches for snakes before backfilling to prevent accidental takes. Please advise if any additional measures should be implemented to protect the Eastern hognose.

5. The USAF has determined that the project requires preparation of an EA. Based on the information presented above, the USAF does not expect the proposed action to have any impact on state-listed species. I would appreciate, however, if you would forward any information or concerns you may have regarding impacts on any such species or other ecological resources. The USAF will use the information you provide in preparing the EA.

6. If you have any questions, contact Mr. Stephen Najjar, Natural Resources Planner, at (603) 471-2426.

STEPHEN F. SOVAIKO, Lt Col, USAF
Commander

Attachments:
1. Location of NBAFS
2. Map 1, Project Area
3. Listed and Rare Species and Communities on NBAFS



Attachment 1

Map 1, Proposed Joe English . ,nd Electric Upgrade
New Boston Air Force Station 2003

Electric line
Roads
★ Inelegible Archeological Site

New Boston Air Force Station
23 SOPS/MAFCVN
Stephen Najjar, Natural Resources Planner
March 26, 2003

N
W E
S

0 50 100 200 300 400 Feet

Federally Listed, State-Listed, and Rare Species of Plants and Animals and Rare Natural Communities Found on New Boston Air Force Station, New Hampshire, 1994 to 1996[1]

Common Name	Scientific Name	Federal Status[1]	State Status[1]	State Rank[1]	Number of Observations[2]
Natural Communities[3]					
Black Gum - Red Maple Basin Swamp	NA[4]	--	--	S1S2	1
Coastal/Southern Dwarf Shrub Bog and Acidic Fen	NA	--	--	S1/S2	1
Hardwood-Conifer Basin Swamp and Coastal/Southern Dwarf Shrub Bog	NA	--	--	SU/S1	1
Coastal/ Southern Acidic Fen	NA	--	--	S2	1
Transitional/ Appalachian Acidic Talus Woodland	NA	--	--	S3	1
Dry Transitional Oak-White Pine Forest	NA	--	--	S3S4	1
Southern Acidic Rocky Summit Community	NA	--	--	S3S4	1
Oak-Pine Rocky Summit Woodland Community	NA	--	--	SU	1
Plants					
Fern-leaved false foxglove	*Aureolaria pedicularia* var *intercedens*	--	LE	S1	>100
Moths					
No common name	*Aphareta purpurea*	--	--	S2	1
Orange-spotted idia	*Idia diminuendis*	--	--	S2S4	1
Butterflies and Skippers					
Appalachian brown	*Satyrodes appalachia*	--	--	S1?	7
Delaware skipper	*Atrytone logan*	--	--	S3S4	1
Mulberry wing	*Poanes massasoit*	--	--	S1S3	4
Little glassywing	*Pompeius verna*	--	--	SU	1
Reptiles					
Blanding's turtle	*Emydoidea blandingii*	--	--	S3	4
Eastern hognose snake	*Heterodon platirhinos*	--	--	S2	1
Birds[5]					
Pied-billed grebe	*Podilymbus podiceps*	--	LE	S1B/ZN	10
American bittern	*Botaurus lentiginosus*	--	--	S3B	2
Osprey	*Pandion haliaetus*	--	LT	S2B/ZN	57
Bald eagle	*Haliaeetus leucocephalus*	LT	LE	S1	5

Listed and Rare Communities and Species of NBAFS (continued)

Common Name	Scientific Name	Federal Status[1]	State Status[1]	State Rank[1]	Number of Observations[2]
Birds (continued)					
Northern harrier	*Circus cyaneus*	--	LT	S2B	8
Cooper's hawk	*Accipiter cooperi*	--	LT	S2B/ZN	9
Whip-poor-will	*Caprimulgus vociferus*	--	--	S3B	6

Source: *Biodiversity Survey of New Boston Air Station*, Argonne National Laboratory (1997).

[1] State ranks do not confer any official or legal status to a species. These ranks are assigned by the New Hampshire Natural Heritage Inventory to provide information on the population status of species within the State.

[2] Number of observations is the number of individuals encountered in surveys. For plants, this is the estimated size of populations observed. For moths, butterflies, and skippers, this is the number of individuals collected or seen. For birds, this is the number of times individuals of the species was observed and it is possible that the same individual was seen and counted more than once.

[3] Some natural communities on NBAFS exhibited characteristics of more than one community type. Where this occurred, the name and rank of both communities are listed separately. Natural communities are not assigned a Federal or State status.

[4] NA = not applicable.

[5] Some bird species found on NBAFS that are considered rare in New Hampshire only as breeders are not included in this table because they were not observed during the breeding season.

DEPARTMENT OF THE AIR FORCE
50TH SPACE WING (AFSPC)

APR 25 2003

MEMORANDUM FOR UNITED STATES DEPARTMENT OF INTERIOR
UNITED STATES FISH AND WILDLIFE SERVICE
ATTN: MR. MICHAEL BARTLETT
FIELD SUPERVISOR
70 COMMERCIAL STREET SUITE 300
CONCORD NH 03301

FROM: 23 SOPS/CC
317 Chestnut Hill Road
New Boston AFS NH 03070-5125

SUBJECT: Preparation of an Environmental Assessment (EA) for Campground Electric Upgrade at New Boston Air Force Station (NBAFS), New Hampshire

1. I am requesting information from your office regarding federally-listed threatened and endangered plant and animal species that may occur on or in the vicinity of NBAFS, NH (Atch 1).

2. The United States Air Force (USAF) is planning an upgrade to the Joe English Pond campground electrical distribution system. The proposed project would include trenching, installing buried conduits, and backfilling. An Unexploded Ordnance (UXO) sweep would be conducted prior to trenching, and UXO found would be detonated in place.

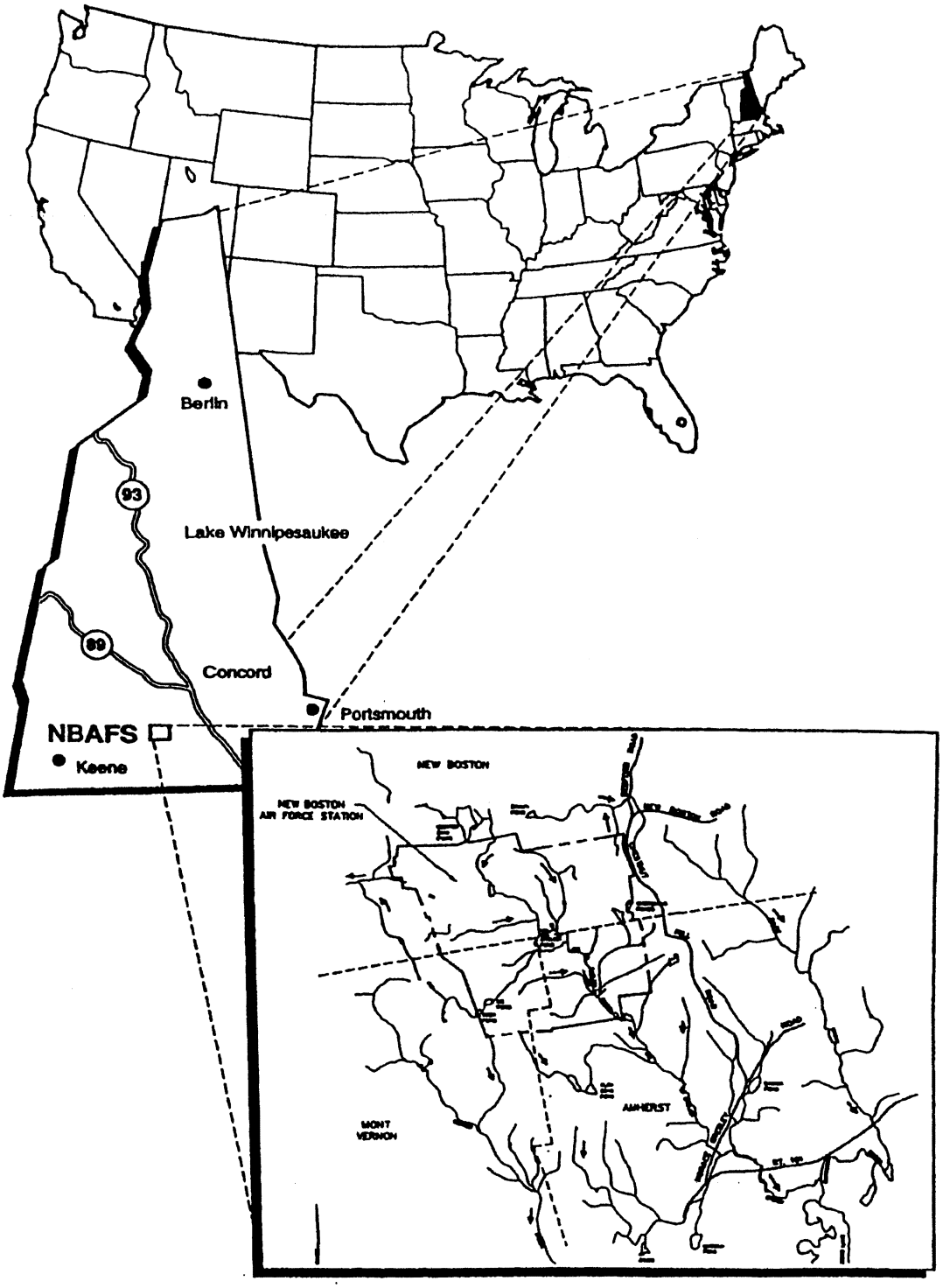
3. NBAFS is a satellite tracking station that occupies approximately 2,836 acres in Hillsborough county of south-central New Hampshire. The station is predominantly undeveloped forest with a mix of deciduous and coniferous trees that varies in species dominance and seral stage across the site. State-listed species found on NBAFS during a two-year biodiversity survey conducted from 1994–1996 included the fern-leaved false foxglove (*Aureolaria pedicularia* var *intercedens*), pied-billed grebe (*Podilymbus podiceps*), osprey (*Pandion haliaetus*), bald eagle (*Haliaeetus leucocephalus*), northern harrier (*Circus cyaneus*), Cooper's hawk (*Accipiter cooperi*), eastern hognose snake (*Heterodon platirhinos*) and small-footed bat (*Myotis leibii*). The bald eagle and northern harrier were not observed to use station habitat, but were observed in flight over the site during fall migration. Recently, a bald eagle was observed during the winter feeding on a deer carcass at Joe English Pond in the central portion of the station. See Atch 3 for a complete list of protected and rare species and natural communities found on NBAFS. Bat data is not included in attached table; this data was collected during summer 2002 and is currently unpublished.

4. The USAF has determined that the project requires preparation of an EA. Based on the information presented above, the USAF does not expect the proposed action to have any impact on federally-listed species. I would appreciate, however, if you would forward any information or concerns you may have regarding impacts on any such species including birds protected by the Migratory Bird Treaty Act or other ecological resources. The USAF will use the information you provide in preparing the EA.

5. If you have any questions, contact Mr. Stephen Najjar, Natural Resources Planner, at (603) 471-2426.

STEPHEN F. SOVAIKO, Lt Col, USAF
Commander

Attachments:
1. Location of NBAFS
2. Map 1, Project Area
3. Listed and Rare Species and Communities on NBAFS



Attachment 1

Map 1, Proposed Joe English . ,nd Electric Upgrade
New Boston Air Force Station 2003

Electric line
Roads
★ Inelegible Archeological Site

New Boston Air Force Station
23 SOPS/MAFCVN
Stephen Najjar, Natural Resources Planner
March 26, 2003

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Federally Listed, State-Listed, and Rare Species of Plants and Animals and Rare Natural Communities Found on New Boston Air Force Station, New Hampshire, 1994 to 1996[1]

Common Name	Scientific Name	Federal Status[1]	State Status[1]	State Rank[1]	Number of Observations[2]
Natural Communities[3]					
Black Gum - Red Maple Basin Swamp	NA[4]	--	--	S1S2	1
Coastal/Southern Dwarf Shrub Bog and Acidic Fen	NA	--	--	S1/S2	1
Hardwood-Conifer Basin Swamp and Coastal/Southern Dwarf Shrub Bog	NA	--	--	SU/S1	1
Coastal/ Southern Acidic Fen	NA	--	--	S2	1
Transitional/ Appalachian Acidic Talus Woodland	NA	--	--	S3	1
Dry Transitional Oak-White Pine Forest	NA	--	--	S3S4	1
Southern Acidic Rocky Summit Community	NA	--	--	S3S4	1
Oak-Pine Rocky Summit Woodland Community	NA	--	--	SU	1
Plants					
Fern-leaved false foxglove	*Aureolaria pedicularia* var *intercedens*	--	LE	S1	>100
Moths					
No common name	*Aphareta purpurea*	--	--	S2	1
Orange-spotted idia	*Idia diminuendis*	--	--	S2S4	1
Butterflies and Skippers					
Appalachian brown	*Satyrodes appalachia*	--	--	S1?	7
Delaware skipper	*Atrytone logan*	--	--	S3S4	1
Mulberry wing	*Poanes massasoit*	--	--	S1S3	4
Little glassywing	*Pompeius verna*	--	--	SU	1
Reptiles					
Blanding's turtle	*Emydoidea blandingii*	--	--	S3	4
Eastern hognose snake	*Heterodon platirhinos*	--	--	S2	1
Birds[5]					
Pied-billed grebe	*Podilymbus podiceps*	--	LE	S1B/ZN	10
American bittern	*Botaurus lentiginosus*	--	--	S3B	2
Osprey	*Pandion haliaetus*	--	LT	S2B/ZN	57
Bald eagle	*Haliaeetus leucocephalus*	LT	LE	S1	5

Listed and Rare Communities and Species of NBAFS (continued)

Common Name	Scientific Name	Federal Status[1]	State Status[1]	State Rank[1]	Number of Observations[2]
Birds (continued)					
Northern harrier	*Circus cyaneus*	--	LT	S2B	8
Cooper's hawk	*Accipiter cooperi*	--	LT	S2B/ZN	9
Whip-poor-will	*Caprimulgus vociferus*	--	--	S3B	6

Source: *Biodiversity Survey of New Boston Air Station*, Argonne National Laboratory (1997).

[1] State ranks do not confer any official or legal status to a species. These ranks are assigned by the New Hampshire Natural Heritage Inventory to provide information on the population status of species within the State.

[2] Number of observations is the number of individuals encountered in surveys. For plants, this is the estimated size of populations observed. For moths, butterflies, and skippers, this is the number of individuals collected or seen. For birds, this is the number of times individuals of the species was observed and it is possible that the same individual was seen and counted more than once.

[3] Some natural communities on NBAFS exhibited characteristics of more than one community type. Where this occurred, the name and rank of both communities are listed separately. Natural communities are not assigned a Federal or State status.

[4] NA = not applicable.

[5] Some bird species found on NBAFS that are considered rare in New Hampshire only as breeders are not included in this table because they were not observed during the breeding season.

DEPARTMENT OF THE AIR FORCE
50TH SPACE WING (AFSPC)

APR 25 2003

MEMORANDUM FOR NEW HAMPSHIRE DEPARTMENT OF CULTURAL AFFAIRS
NEW HAMPSHIRE DIVISION OF HISTORICAL RESOURCES
ATTN: MR. JAMES MCCONAHA
STATE HISTORIC PRESERVATION OFFICER
19 PILLSBURY STREET BOX 2043
CONCORD NH 03302-2043

FROM: 23 SOPS/CC
317 Chestnut Hill Road
New Boston AFS NH 03070-5125

SUBJECT: Preparation of an Environmental Assessment (EA) for Campground Electrical Upgrade at New Boston Air Force Station (NBAFS), New Hampshire

1. Pursuant to Section 106 of the National Historic Preservation Act of 1966, as amended, we are requesting comments from your office regarding the United States Air Force (USAF) proposal to upgrade the electrical distribution at the Joe English Pond Campground at NBAFS in Hillsborough County, NH. The replacement of the existing electrical system is necessary because it cannot support the high amperage requirements for modern motor homes that frequent the campground.

2. The proposed action includes the installation of new electrical conduit throughout the existing campground. An Unexploded Ordnance (UXO) sweep would be conducted prior to trenching, and UXO found would be detonated in place. The trench for the electric conduit would run along existing roadbed and in developed campground areas. The proposed route will pass near one historic site, HS 11, which was recommended not eligible for listing on the National Register of Historic Places due to a lack of integrity by Public Archaeology Lab (PAL) in 1993 (see Atch). The entire project will be confined to a highly disturbed area formerly used for bombing from 1942-1956. Any archeological resources disturbed would be assumed to have no historical context because of prior disturbance. NBAFS would rebury any artifacts in the trench or in another site within the installation.

3. On the basis of the enclosed information, we request your concurrence that the proposed Joe English Pond Campground Electric Upgrade will result in a finding of no historic properties affected. If you have any questions regarding this matter, please contact Mr. Stephen Najjar, Natural Resources Planner, at (603) 471-2426.

STEPHEN F. SOVAIKO, Lt Col, USAF
Commander

Attachment:
Map 1, Project Area

Map 1, Proposed Joe English Pond Electric Upgrade
New Boston Air Force Station 2003

Electric line

Roads

★ Inelegible Archeological Site

New Boston Air Force Station
23 SOPS/MAFCVN
Stephen Najjar, Natural Resources Planner
March 26, 2003

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NEW HAMPSHIRE DIVISION OF HISTORICAL RESOURCES
State of New Hampshire, Department of Cultural Resources
19 Pillsbury Street, P.O. Box 2043, Concord, NH 03302-2043
TDD Access: Relay NH 1-800-735-2964
http://webster.state.nh.us/nhdhr
603-271-3483
603-271-3558
FAX 603-271-3433
preservation@nhdhr.state.nh.us

May 29, 2003

Stephen F. Sovaiko, Lt. Col., USAF
Commander
c/o Stephen Najjar, Natural Resources Planner
Department of the Air Force
50th Space Wing (AFSPC)
319 Chestnut Hill Road
New Boston Air Force Station, NH 03070-5125

RE: Campground Electrical Upgrade, New Boston Air Station, NH

Dear Commander Sovaiko:

In accordance with the National Historic Preservation Act of 1966 (P.L. 89-655), as amended, and as implemented by regulations of the Federal Advisory Council on Historic Preservation ("36 CFR Part 800: Protection of Historic Properties"), the New Hampshire Division of Historical Resources/State Historic Preservation Office has reviewed the undertaking referenced above to identify potential effects on properties listed, or potentially eligible for listing, in the National Register of Historic Places.

Based upon the information currently available, it has been determined that there are no known properties of architectural, historical, archaeological, engineering, or cultural significance within the area of the undertaking's potential impact and no identification or evaluative studies are recommended. Future use of this segment line of railroad may require review by this office.

If any other resources are discovered or affected as a result of project planning or implementation, the Division of Historical Resources is to be consulted on the need for appropriate evaluative studies, determinations of National Register eligibility, and mitigative measures (redesign, resource protection, or data recovery) as required by federal law and regulations.

For the purpose of compliance with the Advisory Council on Historic Preservation procedures (36 CFR 800), I request that this determination be construed as a finding of "No Objection".

Sincerely,

James McConaha
State Historic Preservation Officer

JM:EF:dg