



# United States Department of the Interior



BUREAU OF LAND MANAGEMENT  
Anchorage Field Office  
4700 BLM Road  
Anchorage, Alaska 99507-2591  
<http://www.blm.gov/ak>

## **UNAVCO GPS Station Right-of-Way Authorization** Determination of NEPA Adequacy, DOI-BLM-AK-A010-2013-0020-DNA

Case File, AA-93532

### **DECISION RECORD**

#### **Background**

The Plate Boundary Observatory (PBO) is the geodetic component of EarthScope, operated by UNAVCO, Inc. and funded by the National Science Foundation. PBO has a network of 1,100 permanent, continuously operating Global Positioning System (GPS) stations, many of which provide data in real-time. EarthScope provides a foundation for applied research throughout the United States that will contribute to the mitigation of risks from geological hazards, the development of natural resources, and the public's understanding of the dynamic Earth.

One of UNAVCO's GPS stations, "Site AC44," is located on Joint Base Elmendorf-Richardson (JBER) lands withdrawn for military purposes. At this particular site, the Bureau of Land Management (BLM) manages all surface natural resources for non-military uses. The BLM has responsibility for reviewing and authorizing all activities proposed for non-military purposes with concurrence from the military. Site AC44 was authorized by the U.S. Department of the Army in July 2008 (Army License No. DACA85-3-08-00067). However, the site has never been authorized by the BLM.

#### **Decision**

I have decided to authorize UNAVCO, Inc. a 20-year right-of-way grant for operation and maintenance of the GPS station known as "Site AC44." Consistent with the 2012 Environmental Assessment (EA) to which this action is tiered (see attached DNA), all *Required Operating Procedures, Environmental Protection Measures, and Other Conditions of the Proposed Action Alternative* identified in Section 2.3 of the 2012 EA will be utilized by UNAVCO, to the greatest extent feasible, in the operation and maintenance of the authorized communication sites (2012 EA, pp. 10-11). The Section 2.3 measures are reflected in the attached grant stipulations. Further, all applicable "Mitigation Measures" identified in Section 4.1.3 of the 2008 EA for UNAVCO's Farewell Mountain GPS station are also reflected in the grant stipulations. Deviations from these measures must be reviewed and approved by the Anchorage Field Office.

The selected action is essentially similar to, but not specifically a feature of, the previously selected alternatives analyzed in the 2008 and 2012 EAs cited in the DNA. Therefore, a new

Finding of No Significant Impact (FONSI) was necessary for this action (BLM 2008). I have determined that this action would not result in significant environmental impacts. The FONSI for this action is attached; no further environmental review is necessary.

### **Rationale for the Decision**

UNAVCO's Proposed Action is hereby authorized because it fulfills the objectives of the BLM's right-of-way program (43 CFR § 2801.2). The 2008 EA, 2012 EA, and 2013 DNA demonstrate that the right-of-way authorization can be granted and the communication site can be operated and maintained in a manner that protects the natural resources and prevents unnecessary and undue degradation of the public lands (43 CFR § 2801.2).

Additionally, authorization of this GPS station may help to further the scientific community's understanding of the earth's physical processes and deformation events and may play a role in mitigating future geologic hazards.

The Proposed Action has been reviewed by Anchorage Field Office staff and appropriate project environmental protection measures, as indicated in my decision (also attached), will be incorporated into the project's implementation.

### **Laws, Authorities, and Land Use Plan Conformance**

The Proposed Action is in conformance with the Ring of Fire Approved Resource Management Plan and Record of Decision (March 2008).

#### **I-2n: Rights-of-Way**

The BLM may issue rights-of-way for a variety of uses including but not limited to: roads, water pipelines, electric lines and communication sites under the authority of Title V of FLPMA.

### **Public Involvement, Consultation, and Coordination**

Anchorage Field Office staff coordinated with JBER Real Property personnel in the development of the DNA. As described in the DNA, the public involvement associated with the 2012 EA is adequate for the current Proposed Action at JBER. The 2012 EA was circulated for public review prior to a decision on the requested authorizations. No public comments were received. Given that no new information or circumstances have been identified and the fact that the current Proposed Action is identical to the 2012 EA Proposed Action, no additional public involvement is necessary for the current Proposed Action.

### **Appeal Opportunities**

This decision may be appealed to the Interior Board of Land Appeals, Office of the Secretary, in accordance with the regulations contained in 43 CFR § 4. To appeal you must file a notice of appeal at the BLM Anchorage Field Office, 4700 BLM Road, Anchorage, Alaska 99507, within 30 days from receipt of this decision. The appeal must be in writing and delivered in person, via the United States Postal Service mail system, or other common carrier, to the Anchorage Field

Office as noted above. *The BLM does not accept appeals by facsimile or email.* The appellant has the burden of showing that the decision appealed from is in error.

If you wish to file a petition pursuant to regulation 43 CFR § 4.21 (58 FR 4939, January 19, 1993) for a stay of the effectiveness of this decision during the time that your appeal is being reviewed by the Board, the petition for a stay must accompany your notice of appeal. Except as otherwise provided by law or other pertinent regulation, a petition for a stay of decision pending appeal shall show sufficient justification based on the following standards: (a) The relative harm to the parties if the stay is granted or denied, (b) The likelihood of the appellant's success on the merits, (c) The likelihood of immediate and irreparable harm if the stay is not granted, and (d) Whether the public interest favors granting the stay.

Copies of the notice of appeal and petition for a stay must also be submitted to each party named in this decision and to the Interior Board of Land Appeals and to the Office of the Solicitor (see 43 CFR § 4.413); Office of the Regional Solicitor, Alaska Region, U.S. Department of the Interior, 4230 University Drive, Suite 300, Anchorage, Alaska 99508; at the same time the original documents are filed with this office. If you request a stay, you have the burden of proof to demonstrate that a stay should be granted.

*/s/ Alan Bittner*

August 6, 2013

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Alan Bittner  
Anchorage Field Manager

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Date

**Attachments**

Exhibit A: Terms and Stipulations

Exhibit B: Required Operating Procedures, Environmental Protection Measures, and Other Conditions

Determination of NEPA Adequacy Worksheet, DOI-BLM-AK-A010-2013-0020-DNA

Finding of No Significant Impact, August, 2013

**Terms and Stipulations for Right of Way Lease AA-93532  
UNAVCO, Inc., Plate Boundary Observatory**

**I. General Terms**

During construction, operation, maintenance, and termination of the project you must:

- (a) To the extent practicable, comply with all existing and subsequently enacted, issued, or amended Federal laws and regulations and state laws and regulations applicable to the authorized use;
- (b) Rebuild and repair roads, fences, and established trails destroyed or damaged by the project;
- (c) Do everything reasonable to prevent and suppress wildfires on or in the immediate vicinity of the right-of-way area;
- (d) Not discriminate against any employee or applicant for employment during any phase of the project because of race, creed, color, sex, or national origin. You must also require subcontractors to not discriminate;
- (e) Pay monitoring fees and rent (if applicable) as described in 43 CFR § 2805.16 and 43 CFR § 2806;
- (f) If BLM requires, obtain, and/or certify that you have obtained, a surety bond or other acceptable security to cover any losses, damages, or injury to human health, the environment, and property in connection with your use and occupancy of the right-of-way, including terminating the grant, and to secure all obligations imposed by the grant and applicable laws and regulations. If you plan to use hazardous materials in the operation of your grant, you must provide a bond that covers liability for damages or injuries resulting from releases or discharges of hazardous materials. BLM may require a bond, an increase or decrease in the value of an existing bond, or other acceptable security at any time during the term of the grant;
- (g) Assume full liability if third parties are injured or damages occur to property on or near the right-of-way as specified in 43 CFR § 2807.12;
- (h) Comply with project-specific terms, conditions, and stipulations, including requirements to:
  - (1) Restore, revegetate, and curtail erosion or conduct any other rehabilitation measure BLM determines necessary;
  - (2) Ensure that activities in connection with the Lease comply with air and water quality standards or related facility siting standards contained in applicable Federal or state law or regulations;
  - (3) Control or prevent damage to:
    - (i) Scenic, aesthetic, cultural, and environmental values, including fish and wildlife habitat;
    - (ii) Public and private property; and
    - (iii) Public health and safety;
  - (4) Ensure that you construct, operate, maintain, and terminate the facilities on the lands in the right-of-way in a manner consistent with the grant;

- (5) When the state standards are more stringent than Federal standards, comply with state standards for public health and safety, environmental protection, and siting, constructing, operating, and maintaining any facilities and improvements on the right-of-way; and
- (i) Immediately notify all Federal, state, tribal, and local agencies of any release or discharge of hazardous material reportable to such entity under applicable law. You must also notify BLM at the same time, and send BLM a copy of any written notification you prepared;
  - (j) Not dispose of or store hazardous material on your right-of-way, except as provided by the terms, conditions, and stipulations of your grant;
  - (k) Certify your compliance with all requirements of the Emergency Planning and Community Right-to-Know Act of 1986, 42 U.S.C. 11001 et seq., when you receive, assign, renew, amend, or terminate your grant;
  - (l) Control and remove any release or discharge of hazardous material on or near the right-of-way arising in connection with your use and occupancy of the right-of-way, whether or not the release or discharge is authorized under the grant. You must also remediate and restore lands and resources affected by the release or discharge to BLM's satisfaction and to the satisfaction of any other Federal, state, tribal, or local agency having jurisdiction over the land, resource, or hazardous material;
  - (m) Comply with all liability and indemnification provisions and stipulations in the grant;
  - (n) As BLM directs, provide diagrams or maps showing the location of any constructed facility; and
  - (o) Comply with all other stipulations that BLM may require.

## II. Stipulations

- A. Wastewater must be managed in accordance with Title 18 Alaska Administrative Code, Chapter 72, (18 AAC 72) Wastewater Disposal. Wastewater is defined as Human Waste (sewage), and Gray Water (water which has been used for personal hygiene, washing clothing or equipment, or sanitizing cooking and eating materials). If the standards for Pit Privies found at 18 AAC 72.030 cannot be met, all wastewater must be collected and transported to a state approved disposal facility. Upon closure of the campsite the Pit Privy must be completely backfilled with the surface area covered and re-graded to approximate original appearance;
- B. Non-Hazardous Solid Waste (trash/refuse) will be back hauled from the area and disposed in an approved waste disposal site;
- C. Fuel Handling and Storage: Fuel shall be stored at least 150 feet from surface waters. Fuel and other petroleum products and hazardous materials shall be stored in containers designed to hold that product, identified with the owner's name, the contents and date of purchase (e.g. NSEDC, Coleman Fuel, 2006). All fuel spills will be cleaned up immediately, taking precedence over all other matters, except the health and safety of personnel. Spills will be cleaned up utilizing absorbent pads or other Alaska State DEC approved methods. Fuel storage in excess of 55 gallons and/or fuel storage containers that are situated where a spill may reach a water body or watercourse requires secondary containment. Secondary containment is defined as a diked, impermeable impoundment capable of containing 110 percent of the volume of the largest independent container. As

soon as possible, but not later than 24 hours, notice of any such discharge as defined in Alaska Statute Title 18, Chapter 75, Article 2, will be given to: The Authorized Officer at 1-800-437-7021. Such other Federal and State officials as are required by law to be given such notice including Alaska Department of Environmental Conservation at (907) 478-9300;

- D. All operations shall be conducted in such a manner as to avoid damage or disturbance to any prehistoric or historic sites or modern camp sites. The Archaeological Resource Protection Act prohibits the excavation, removal, damage, or disturbance of any archaeological resource located on public lands. Violation of this law could result in the imposition of both civil and criminal penalties of the violator. Should any historic or prehistoric site be located during the course of operations under this Right of Way Grant, the applicant shall immediately cease activities and notify the BLM authorized officer;
- E. The public access to the area shall be restricted by a locked fence and signage regarding safety if humans are exposed to potentially unsafe Radio Frequency safety limits as determined by the Authorized Officer;
- F. BLM has the authority to inspect exterior and interior of communications facilities on public lands to ensure compliance with terms and condition of the Right of Way Lease;
- G. Protection of Survey Corner and Boundary Line Markers

Evidence of the Public Land Survey System (PLSS) and related Federal property boundaries will be identified and protected prior to commencement of any ground-disturbing activity. This will be accomplished by contacting BLM Cadastral Survey to coordinate data research, evidence examination and evaluation, and locating, referencing or protecting monuments of the PLSS and related land boundary markers from destruction. In the event of obliteration or disturbance of the Federal boundary evidence the responsible party shall immediately report the incident, in writing, to the Authorizing Official. BLM Cadastral Survey will determine how the marker is to be restored. The responsible party shall pay for all survey, investigation, penalties, and administrative costs.

#### H. Non-Native Invasive Plant Prevention and Mitigation

All vehicles, transport equipment used in access, construction, maintenance and operations of project must be thoroughly cleaned prior to moving equipment across or onto BLM managed lands. Washing and/or brushing equipment to remove material that can contain weed seeds or other propagates helps to insure equipment that is being transported across or onto BLM managed lands are weed and weed seed free. High pressure washing is recommended to treat the insides of bumpers, wheel wells, undercarriages, inside belly plates, excavating blades, buckets, tracks, rollers, drills, buckets, shovels, any digging tools, etc., to remove potential weeds, seeds, and soil carrying weed propagules, and vegetative material.

Early detection, rapid response mitigates ecological damage from invasive species. Should a development or occupancy and use have invasive plant infestations prior to development or use, proponents must confer with the land administrator to develop an invasive plant treatment plan to eliminate and/or prevent the propagation of the species.

Site reclamation must be implemented as soon as possible after construction using the original duff layer. This original duff layer is to be removed and set aside upon initial site disturbance, and replaced on disturbed areas in lieu of revegetation with non-local materials.

Certified weed-free mulch, hay or straw is required in areas needing mulch. Sources for weed free mulch can be found by calling the Plant materials Center: 907-7 45-4469. Revegetation Guidance can be found at:

[http://www.dnr.state.ak/ag/pmcweb/PMC\\_reveg](http://www.dnr.state.ak/ag/pmcweb/PMC_reveg)

Useful websites:

Homer Soil and Water Conservation District  
<http://www.homerswcd.org/invasives/invasivepg.htm>

US Department of Agriculture & Alaska Natural Heritage Program  
<http://akweeds.uaa.alaska.edu/>

USDA Natural Resources Conservation Service  
<http://plants.usda.gov/java/noxiousDriver>

US Fish and Wildlife Service  
<http://www.fws.gov/invasives/>

Alaska committee for Noxious and Invasive Plants Management  
<http://www.uaf.edu/ces/cnipm/>

- I. The United States shall retain all rights stated in 43 CFR 2805.15.

**Required Operating Procedures, Environmental Protection Measures, and Other  
Conditions of the Proposed Action Alternative for Right of Way Lease AA-93532  
UNAVCO, Inc., Plate Boundary Observatory**

**Project Design Features**

The following design features have been excerpted from Section 2.3 of the 2012 *Joint Base Elmendorf – Richardson Communication Site Authorizations Environmental Assessment* (DOI-BLM-AK-A010-2012-0013-EA). These design features will be used to minimize adverse impacts associated with the proposed action.

*Cultural Resources*

- In the event of inadvertent discovery of cultural resources or human remains, all construction activities must cease and the BLM Archaeologist must be notified immediately.

*Hazardous Materials*

- Spill response kits and properly trained response personnel will be available on site during all installation activities
- The use of drip pans under parked equipment is encouraged to mitigate damage caused by spills.

*Recreation Resources*

- Avoid development near hiking trails or trailhead/parking access.
- Avoid development near popular hunting and fishing parking and access areas.
- Avoid construction during moose draw tag hunts in unit 14C from September 6- January 15 (per 2012 regulations, subject to change).
- Avoid development in or near Hill berg Ski Area on old Elmendorf or Arctic Valley Ski Area on old Fort Richardson.
- Avoid proximity to stream corridors that support local fisheries.

*Vegetation Resources*

- Effectively integrate invasive species prevention, control and management activities into the existing communication tower sites as well as proposed new tower site(s).
- Integrate invasive species prevention, detection and control activities into all on-the-ground activities on and near the proposed communication site towers.
- Use best management practices to avoid the introduction of new and spread of known existing non-native invasive species as described in the BLM Alaska Invasive Species Management Policy (BLM 2010).
- All vehicles, transport equipment used in access, construction, maintenance and operations of project must be thoroughly cleaned prior to moving equipment and gear from point of origin to project site.
- Only certified weed free products, including gravel, top soil, seed mixes, mulch and sedimentation control devices are allowed.

- Integrated pest management activities including early detection rapid response, prompt revegetation of disturbed sites, ongoing monitoring and weed treatment should be employed to maintain the natural diversity and ecological site health.

### *Visual Resources*

- Avoid ridgetop placement or "sky lining" of communications towers.
- Exhaust all possible co-location options before proposing new facilities.
- Avoid hauling excess earth cut or fill, utilize curvilinear or topographical sloping, retain existing rock and vegetation formations whenever possible, irregular rock cut techniques, and prohibit dumping or sloughing of material downslope.
- Retain as much existing vegetation as possible, use vegetation to screen development from view, scalloped and irregular edging versus straight lines, and feather and thin edges of cleared areas.
- Repeat line, form, color, and texture. Minimize the number of structures, use earth-tone colors, use self-weathering materials, use natural stone, bury all or part of the structure, use paint finishes with low reflectivity, employ native building materials, and use naturally appearing forms to complement landscape character.
- Avoid colors that cause the most contrast, choose colors two to three shades darker than background colors, achieve best blending with surrounding landscape in all seasons, galvanized steel on utility structures should be darkened to prevent glare, and color (hue) is most effective within 1,000 feet. Grey is usually the best choice for lattice and/or monopole towers where the background may be a view of the sky.
- For new roads, trails, and utility corridors, identify all possible alternative alignments first, select the most feasible for the proposed project, use topography to hide manmade changes, analyze soil stability, determine revegetation plan, evaluate hydrologic condition and erosion potential, use curvilinear landscape route selection, avoid fall-line cuts and bisection ridge tops, avoid valley bottoms, and hug vegetation lines.
- Reclamation and restoration will be required as part of all proposed action design packages.
- Restore all areas of disturbance as closely as possible to previous conditions, mulch cleared areas, furrow slopes, use planting holes on cut/fill slopes to retain water, choose native plant species; fertilize, mulch, and water vegetation; replace soil, brush, rocks, forest debris, etc. over the disturbed area. Require the contractor to water vegetation for specified timeframe.

### **Mitigation Measures**

The following mitigation measures have been excerpted from Section 4.1.3 of the *Continuous Global Positioning System Station, UNAVCO, Inc., Plate Boundary Observatory Environmental Assessment* (AK-010-08-EA-033). These mitigation measures will be used to minimize adverse impacts associated with the proposed action.

1. Reduce the air particulate matter by removing all loose drilled materials from the site and storing in a sealed containers and removing from the site.

2. Installation gear, including operator's boots and clothing should be free of all vegetation material from prior installations before descending on the proposed site.
3. All personal and work waste materials shall be properly stored and removed from the site to remove any unnecessary form of contaminant from the area.
4. Batteries shall be inspected prior to installation at the site for deficiencies and subsequently checked in annual or bi-annual inspection of the site for any leaks which could introduce contaminants to the area. Any batteries found deficient shall be removed immediately in a secure manner so as not to introduce contamination during the removal, and then replaced with a battery in good working order if necessary for the continued operation of the station.
5. Care in traversing the mountain during installation shall be taken to reduce the impacts to the vegetation near the crown of the mountain.
6. Thought of the placement of the cabinet and peripheral equipment for the site should be taken to reduce the visual impacts to the surrounding area. Painting the equipment casings and other areas of the station should be performed to reduce contrasting lines of the station from the surrounding area.