

## *UH Managed lands – Project Proposal*

For projects anticipated to be classified as having “Minimal Impact”

**Name:** National Radio Astronomy Observatory (NRAO), Very Long Baseline Array (VLBA) Site - Security Sign Installation Project

**Project Name:** Attach safety/security sign to VLBA site fence

- Brief Description of the Project  
Attach sign to front of perimeter fence stating, “Notice No Firearms Allowed on Premises”
- Identified Land Use (see HAR § 13-5-22 through 13-5-25)  
HAR §13-5-22, P-7 Signs, (B-1) Signs, including safety signs danger signs, no trespassing signs, and other informational signs...
- Identify the existing CDUP this proposal alters or affects, if any  
VLBA CDUP HA-2174 (1989)
- Identify [University of Hawai’i exemption](#) per HAR § 11-200-8(a), if any  
Exemption Class #6: Construction or placement of minor structures accessory to existing facilities, 1.) Construction or placement of: c.) Scoreboard, signs and flag poles.
- Tax Map Key(s): 4-4-015:009 – Mauna Kea Science Reserve (por.)
- Proposed Commencement Date: Immediately upon OCCL approval
- Proposed Completion Date: Completion expected same-day as action begun
- Estimated Project Cost: \$ 0
- Total size / area of proposed use: 6”x9” sign

### **Project Purpose and Need**

The VLBA observatory on Maunakea is one of ten radio telescopes operating as a national system. Its managing entity, the National Radio Astronomy Observatory (NRAO), requests this security signage to be displayed at all ten sites to aid in compliance with the federal requirements prohibiting possession of firearms in a federal facility.

With recent events regarding gun violence, some states require posting notices of possession and carrying of firearms where prohibited in the workplace. The State of Hawai’i does not currently require posting. The existing federal requirements prohibit possession and carrying of firearms at any building owned, leased, or rented by the federal government is detailed in the 18 U.S. Code § 930 - Possession of firearms and dangerous weapons in Federal facilities.

In section (g)(1) of the referenced code, the term “Federal facility” means a building or part owned or leased by the Federal Government, where Federal employees are regularly present for the purpose of performing their official duties.

While the legislation does not mandate the posting of notices, the intention of the sign is to ensure that the federal requirements of the section are communicated.

- In the U.S. Code: Title 18 - CRIMES AND CRIMINAL PROCEDURE, the 18 U.S. Code § 930 - Possession of firearms and dangerous weapons in Federal facilities, describes the prohibition of firearms at federal facilities. The section further defines federal facilities.
- The VLBA site is leased from the University of Hawai'i, Institute for Astronomy and is operated by the NRAO under a cooperative agreement between the federal agency, the National Science Foundation (NSF) and NRAO's management organization.
- NRAO Safety Officer has visited and confirmed the need for this signage for the Maunakea VLBA.

### Existing Conditions at Project Site(s)

- **Geology, Climate, & Hazards**

The geology is considered an active, post-shield building volcano (USGS). Climate conditions at this altitude (12,000' and above) can be extreme and can change rapidly with little or no warning. Public safety is of paramount concern with emphasis on accident avoidance due to site remoteness, terrain and lengthy response time from outside help including emergency responders.

- **Flora, Fauna, Ecology, Water Resources**

No vegetation, flora, fauna or water resources are impacted.

- **Cultural Resources**

SIHP site 25767 is approximately 200' from the proposed action. The site is within the Maunakea Summit Historic District (SIHP site 26869)

- **Recreation**

No recreational activities are impacted by the proposed action.

- **Built Infrastructure**

VLBA seeks to attach a single safety/security sign measuring approximately 6" by 9" to its existing perimeter fence, a managed access point to the facility. The new sign is intended to be clearly visible to anyone approaching the front gate of the VLBA.

- **Landscaping & Visual Conditions**

The sign will not affect view sheds or viewing of the summit landscape.

### Description of the Project

- **Describe the process of completing the project.**

The single sign will be secured to fencing with fencing clips. The clips are specified as vandal proof and are resistant to deterioration from ultraviolet exposure.

- **Location**

On the front entry gate to site at a height of approximately 5 feet from ground level, the average adult line of sight.



- Who will do the work?  
NRAO employees; existing site technicians
- Equipment & Transportation  
No additional, specialized equipment or transportation required for this action beyond items utilized in day-to-day operations.

#### Measures to protect the environment and/or mitigate impacts

- Protective Measures:
- All project participants have previously attended a Maunakea orientation prior to participating in fieldwork.
- Use of 4-wheel drive vehicles, with 4-wheel drive engaged, when traveling above Halepōhaku is required. Exceptions require notification to the road-conditions email group on an explicit case-by-case basis.
- Allow OMKM Rangers to visit and monitor activities.
- Comply with all actions and measures described in the proposal, including (community) benefits, CMP compliance list, and mitigation measures.
- Ensure that loose tools or equipment are not left unattended and are properly stored at the end of each day.
- In preparation for high wind conditions protocols must include measures to ensure debris and equipment are not blown from the job site. Projects occurring in the summit region must verify that temporary and permanent infrastructure can sustain 120mph winds.

- All improvements shall be designed and installed to withstand the severe weather conditions on the mountain.
- Remove and properly dispose of all waste material. All perishable items including food, food wrappers and containers, etc. shall be removed from the site at the end of each day and properly disposed.
- Employ invasive species prevention best practices, including inspections of materials by a DLNR-approved biologist, as identified in the Maunakea Invasive Species Management Plan prior to entering UH managed lands. Every inspection request submitted to OMKM shall include correspondence with the observatory representative(s) identified in the initial notification. Inspections shall not occur on UH managed lands on Maunakea, at State or County parks, along public roadsides, or on Department of Hawaiian Home Lands.
- Nēnē (*Branta sandvicensis*) may be present. If a nēnē appears within 100 feet (30.5) meters of ongoing work, all activity shall be suspended until the animal leaves the area of its own accord. Feeding of nēnē is prohibited.
- The project approval/permit may not be transferred or assigned. A copy of the approval/permit must be present on-site and available for review at all times while are working on University-managed lands.
- Identify and comply with other permit requirements, such as County of Hawaii building permits or Department of Land & Natural Resources (see both any applicable DLNR permit and HAR §13-5-42 Standard conditions).
- Use of cell phones, other than in airplane mode, is prohibited except in case of emergency.
- Notify OMKM in writing when field activity associated with the project is completed. This notification must list all steps identified in the "notice to proceed" and explicitly communicate the status of completion.
- The project must be completed within the time frame specified in the proposal and (when applicable) DLNR approval. Projects not completed within this timeframe are not allowed to continue (or commence) without explicit, prior, written approval from OMKM.
- Compliance with Lease, Sublease, or Comprehensive Management Plan (CMP)  
 The proposed action is consistent with the Maunakea Sign Plan, approved by the Maunakea Management Board in February 2017,  
[http://www.malamamaunakea.org/uploads/management/plans/Maunakea\\_SignPlan\\_2017-02-14.pdf](http://www.malamamaunakea.org/uploads/management/plans/Maunakea_SignPlan_2017-02-14.pdf).  
 Relevant management actions from the 2009 Mauna Kea Comprehensive Management Plan:

**MAUNA KEA COMPREHENSIVE MANAGEMENT PLAN**

<b>COMPONENT PLAN: UNDERSTANDING AND PROTECTING MAUNA KEA'S RESOURCES</b>			
<b>EDUCATION AND OUTREACH</b>		<b>Subplans</b>	<b>Comments</b>
<b>Education</b>			
EO-4	Develop and implement a signage plan to improve signage throughout the UH Management Areas (interpretive, safety, rules and regulations).	NRMP 4.4.2 PAP 4.2, 5.2, 6.2	The requested signage will comply with NRAO's security directive for its VLBA sites and is consistent with the Maunakea Sign Plan
<b>ASTRONOMICAL RESOURCES</b>		<b>Subplans</b>	<b>Comments</b>
<b>Protection of Astronomical Resources</b>			
AR-1	Operate the UH Management Areas to prohibit activities resulting	PAP 5.1	The requested signage will comply with NRAO's security directive for our VLBA sites

	in negative impacts to astronomical resources.		and is consistent with the Maunakea Sign Plan.
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- Identify other required or associated permits

| Not applicable. |

- Five Year Outlook

| Project was not included in the most recent Five-Year Outlook for this VLBA site. |

#### Community Benefits

- Benefits to other Maunakea entities and/or global astronomy community

| The proposed activity addresses health, safety and welfare concerns of site workers including other employees on Maunakea as well as maintains compliance with federal regulations governing firearms in federally managed facilities. |

- Benefits to the Hawaii Island community

| The proposed activity addresses health, safety and welfare concerns of the general public. |

- Will data, publications, or other products be free and available to the public?

| N/A |

#### DLNR Evaluation Criteria

After approval by the Maunakea Management Board, the Department of Land & Natural Resources or Board of Land & Natural Resources will evaluate the merits and approve the project based on the following eight criteria (§13-5-30). See <http://dlnr.hawaii.gov/occl/files/2013/08/13-5-2013.pdf>

1. The purpose of the Conservation District is to conserve, protect, and preserve the important natural and cultural resources of the State through appropriate management and use to promote their long-term sustainability and the public health, safety, and welfare. (ref §13-5-1) How is the proposed land use consistent with the purpose of the conservation district?

| The proposed land use addresses public health, safety and welfare concerns. |

2. How is the proposed use consistent with the objectives of the Resource subzone of the land on which the land use will occur? (§13-5-13 The objective of this subzone is to ensure, with proper management, the sustainable use of the natural resources of those areas. This subzone shall encompass: lands necessary for providing future parkland and lands presently used for national, state, county, or private parks. Land suitable for outdoor recreational uses such as hunting, fishing, hiking, camping, and picnicking. [And other lands not applicable to Maunakea.]

| The objective of the Resource subzone "...is to develop, with proper management, areas to ensure sustained use of the natural resources of those areas." This use will reduce risk to natural resources from public accidents and in compliance with federal law. No change in footprint, extent, or intensity of use will occur. |

- [ ]
3. Describe how the proposed land use complies with the provisions and guidelines contained in chapter 205A, HRS, entitled "Coastal Zone Management".

[ The site of the proposed use is over 20 miles from the coast and is not hydrologically connected to shoreline resources. ]

4. Describe how the proposed land use will not cause substantial adverse impact to existing natural resources within the surrounding area, community or region.

[ The proposed land use only entails attaching a sign to existing infrastructure. No change in use patterns, footprint or visibility/aesthetic visual impact will occur. ]

5. Describe how the proposed land use, including buildings, structures and facilities, is compatible with the locality and surrounding areas, appropriate to the physical conditions and capabilities of the specific parcel or parcels.

[ The proposed land use will occur ONLY on existing infrastructure. No change to the physical conditions and capabilities of the parcel will occur. ]

6. Describe how the existing physical and environmental aspects of the land, such as natural beauty and open space characteristics, will be preserved or improved upon.

[ The proposed use is constrained to within-areas previously developed. While visibility is critical to successful public information signs, the size and height of the proposed signage is the minimum necessary to avoid inadvertent impacts to natural and open space conditions. The visual and environmental character of the site will not change in any substantial way, but the existing permitted users and public will be safer. ]

7. If applicable, describe how subdivision of land will not be utilized to increase the intensity of land uses in the Conservation District.

[ The proposed use does not involve or depend upon subdivision. ]

8. Describe how the proposed land use will not be materially detrimental to the public health, safety and welfare.

[ The proposed land use will IMPROVE public health, safety and welfare by informing the public of items restricted from the premises. ]