



MISSILE DEFENSE AGENCY RECORD OF ENVIRONMENTAL CONSIDERATION

Project Title: AN/TPY-2 Radar Deployment at the Ted Stevens Marine Research Institute (TSMRI) on the National Oceanic and Atmospheric Administration (NOAA) Site in Juneau, Alaska in Support of Flight Test Ground-Based Interceptor (FTG)-04.

Description of Proposed Action: The proposed action is to site, transport, set up, calibrate, and operate the AN/TPY-2 radar (previously designated as the Forward Based X-Band Transportable [FBX-T] Radar) at the TSMRI to allow MDA to locate and track target missiles launched from the Kodiak Launch Complex as part of the FTG-04 test event.

The proposed site is located approximately 29 kilometers (18 miles) northwest of Juneau, Alaska. The site is a former rock quarry situated on a bluff overlooking Favorite Channel and currently consists of a research facility (i.e., laboratory and administrative space), graveled grounds, and paved parking areas. The proposed radar equipment layout is shown in Exhibit 1.

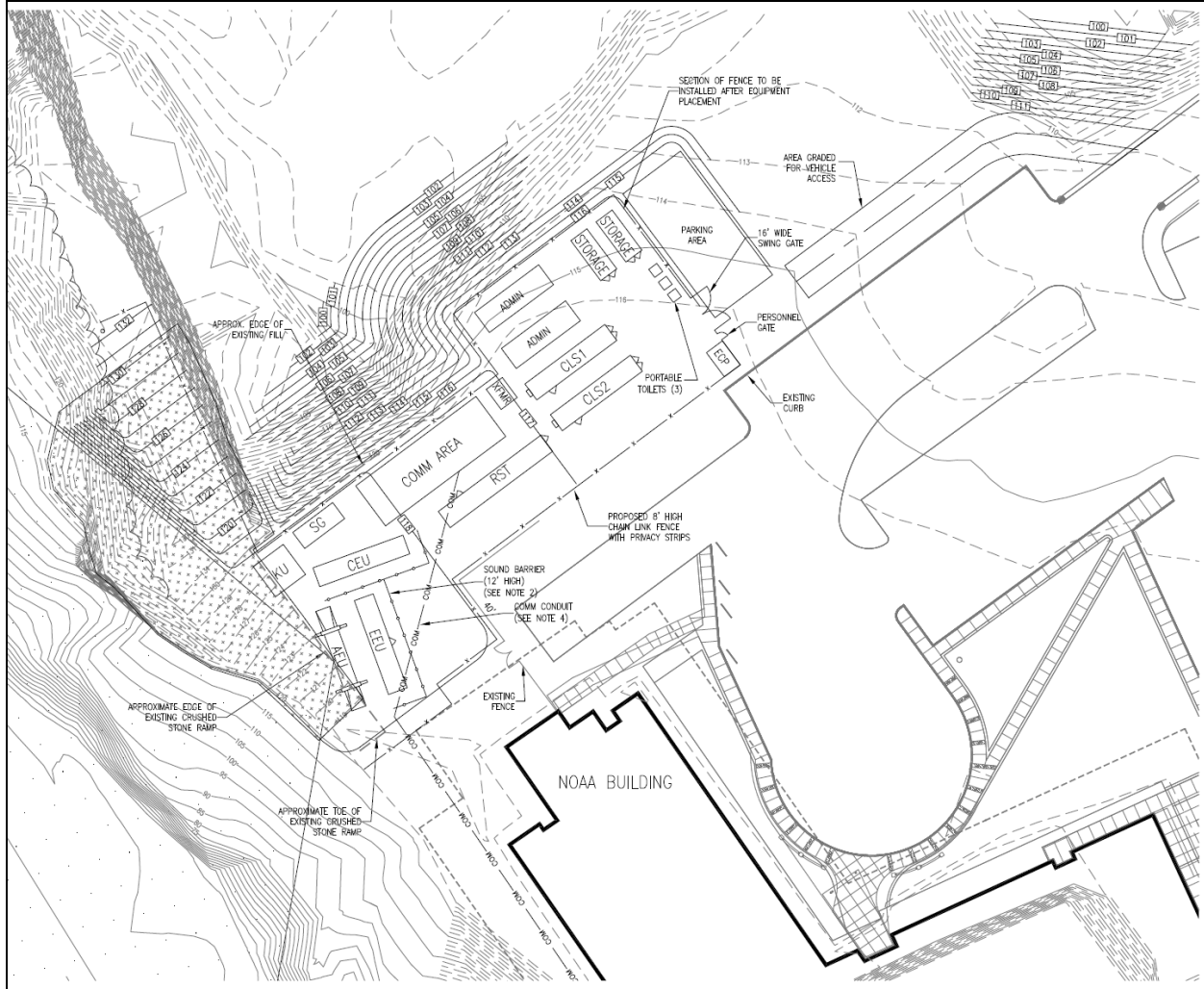
Improvements to the proposed NOAA site would consist of:

- Installation of temporary privacy fencing up to 2.4 meters (8 feet tall)
- Installation of temporary 3.6 meters tall (12 feet) noise attenuation barriers
- Grading, filling, and compaction of 0.4 hectare (1 acre) to 0.8 hectare (2 acres) hardstand area
- Installation of two 1.8-meter (6-foot) satellite dishes for communications
- Installation of temporary lighting
- Installation of grounding and lightning protection poles approximately 8 meters (25 feet) tall
- Trimming and/or topping of trees in approximately 0.4 hectare (1 acre) of coastal fringe forest
- Development of a gravel parking lot for up to 15 vehicles, and
- Development of a gravel access road from the NOAA driveway, approximately 30.5 meters (100 feet) long.

The radar system and equipment would be located and operated to minimize disruption to the on-going activities at the TSMRI facility.

DISTRIBUTION STATEMENT A. Approved for public release; distribution is unlimited.
Case #: 07-MDA-2794 (10 AUG 07)

Exhibit 1: Proposed TSMRI Site Layout



The AN/TPY-2 radar system would be transported from Vandenberg Air Force Base by up to five C-17 aircraft to the Juneau Airport, and would then be transported by an M1088 tractor or comparable truck to the proposed site. Non-critical support equipment would be transported by truck from Vandenberg Air Force Base to Seattle, Washington, and then transported by barge from Seattle to Juneau. The transportation route from Juneau to the TSMRI would follow the existing highway system. Special material handling equipment (e.g., cranes and forklifts) would be used to position major equipment items within the proposed AN/TPY-2 radar site.

Under the proposed action, site preparation would occur in June, 2007; the AN/TPY-2 radar and system components would be set up at the site in July, 2007; and system calibration would start soon after. Depending on the actual FTG-04 test date, MDA could operate the radar for up to six months at the site for calibration purposes and for the actual test event. Leading up to the test event, the AN/TPY-2 radar and system components would operate daily (up to 1 hour/day) at full power for calibration purposes.

During the test event, the AN/TPY-2 radar and system components would operate at full power for up to 4 hours.

Approximately 40 individuals would be required to set up and breakdown the AN/TPY-2 radar and system components, operate the radar and system components, and provide security for the system. During test out, calibration and operation a maximum of approximately 30 individuals would be required to operate the radar and system components and provide security for the system. All of these individuals would temporarily reside in Juneau, Alaska and commute to and from the site daily. Upon completion of testing, MDA would return the equipment to VAFB and remove all visible infrastructure and fencing from the site.

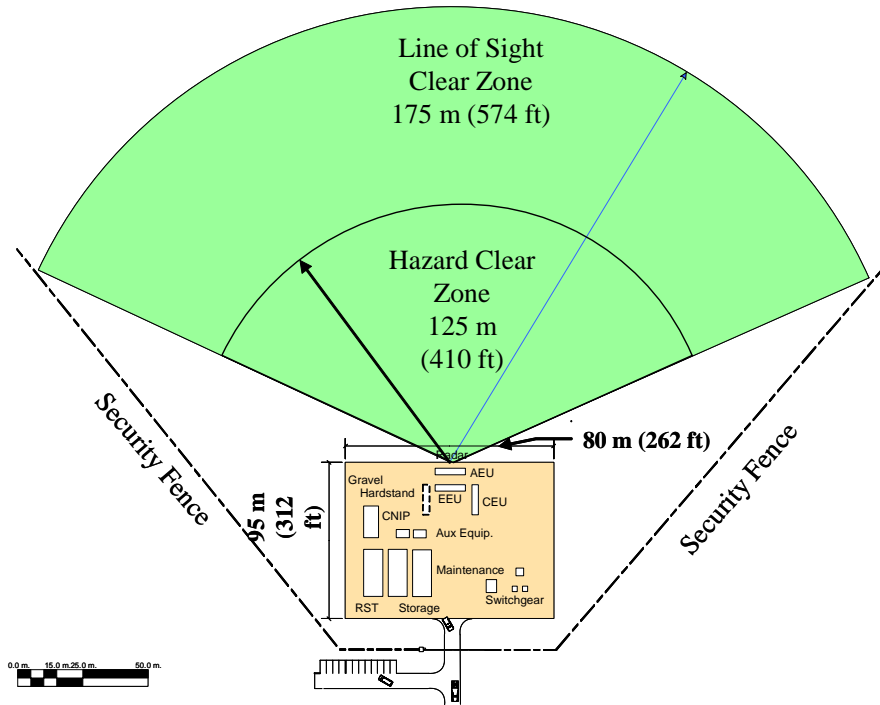
Impacts to wildlife from artificial lighting would not be significant. All lighting will be focused downward, not away from the site.

Electromagnetic radiation (EMR) and radio frequency from radars may cause impacts. However, birds are not likely to remain continuously within the radar beam and the power density is not expected to exceed levels that could impact birds; therefore, the likelihood of harmful exposure is remote.

As described in the Mobile Sensors Environmental Assessment (2005), the AN/TPY-2 radar and system components require a total of 2.1 megawatts of power to operate. Electric power would be provided to the site by Alaska Electric Light and Power (AELP) in accordance with State approved AELP procedures and Federal/State requirements (may require additional line and poles to be installed within existing right of ways and previously disturbed areas, per existing AELP permits). Small backup generators may be at the site for emergency use and would be periodically exercised according to maintenance schedules.

The AN/TPY-2 radar and system components typically require approximately 0.8 hectare (2 acres) of graded compacted hardstand surface (shown as tan area in Exhibit 2) and approximately 5 hectares (12 acres) of “clear zone” (green shaded area) to allow unobstructed, low-elevation radiation. Contained within the clear zone is a “hazard clear zone” of approximately 2.5 hectares (6 acres). At TSMRI, the majority of the clear zone is located in airspace above Favorite Channel and the AN/TPY-2 radar hardstand would be located in an area with controlled access using temporary fencing to prevent unauthorized entry to the hazard clear zone.

Exhibit 2. AN/TPY-2 Radar Hazard Area (Notional)



Anticipated Start/End Date of the Proposed Action: 1 Jun 07 – 31 Dec 07. Weather and other delays could extend the end date.

Determination: MDA/DFW has determined that the proposed action:

1. Is adequately analyzed in an existing EA/EIS
 Title: MDA Mobile Sensors Environmental Assessment
 Date: September, 2005
2. Qualifies for a Categorical Exclusion
3. Is exempt from NEPA requirements under the provisions of (cite the superceding law)

Rationale: MDA determined that the proposed actions for relocating and operating the radar were programatically analyzed in the Mobile Sensors Environmental Assessment (MSEA), completed in 2005. This radar (formerly known as the TPS-X) was also analyzed in the Ground-Based Midcourse Defense (GMD) Extended Test Range (ETR) Environmental Impact Statement (EIS). However, site-specific analysis for the NOAA location in Juneau, Alaska was not included in either the MSEA or GMD ETR EIS.

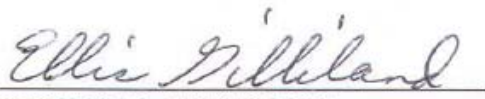
MDA determined that this action qualifies for Army CATEXs (see Appendix A), as outlined below:

- The proposed actions, consisting of (1) grading, filling, and compacting areas for a hardstand, (2) installing grounding and lightning protection poles, and (3) pruning/clearing trees in previously undisturbed areas are categorically excluded under the provision of: **32 CFR Part 651, Appendix B (C1)** - "Construction of an addition to an existing structure or new construction of a previously undisturbed site if the area to be disturbed has no more than 5 cumulative acres of new surface disturbance. This does not include construction of facilities for the transportation, distribution, use, storage, treatment and disposal of solid waste, medical waste, and hazardous waste (REC required)."
- The proposed actions, consisting of developing a gravel access road and vehicle parking lot, are categorically excluded under the provision of: **32 CFR Part 651, Appendix B (C3)** - "Road or trail construction and repair on existing rights-of-ways or on previously disturbed areas."
- The proposed action that includes installing utilities (power) to the site is categorically excluded under the provision of: **32 CFR Part 651, Appendix B (E2)** - "Acquisition, installation, and operation of utility and communication systems, mobile antennas, data processing cable, and similar electronic equipment that use existing right-of-way, easement, distribution systems, and/or facilities."

Therefore, the proposed action to deploy the AN/TPY-2 radar in support of FTG-04 at TSMRI does not require the preparation of an EA or EIS. The proposed action may proceed.

Signature: 
FOR COL KEITH KOSAN
MDA CTF

Date: 24 May 07

Signature: 
for JERRY M. HUBBARD
MDA DFW

Date: 24 May 2007

APPENDIX A: ARMY SCREENING CRITERIA

Categorical Exclusions, as defined in 32 CFR 651.28 and listed in Appendix B to Part 651, are categories of actions with no individual or cumulative effect on the human or natural environment, and for which neither an EA nor an EIS is required. To use categorical exclusions, the proponent must satisfy the following screening conditions:

TRUE	NOT TRUE	DESCRIPTION OF ACTION'S EFFECT
<input checked="" type="checkbox"/>	<input type="checkbox"/>	1. The action has not been segmented. The scope of an action must include the consideration of connected, cumulative, and similar actions.
		2. The proposed action includes none of the following exceptional circumstances:
<input checked="" type="checkbox"/>	<input type="checkbox"/>	a. There is no likelihood of significant effects on public health, safety, or the environment.
<input checked="" type="checkbox"/>	<input type="checkbox"/>	b. There are minimal or no significant environmental effects (direct or indirect cumulative).
<input checked="" type="checkbox"/>	<input type="checkbox"/>	c. There is no imposition of uncertain or unique environmental risks.
<input checked="" type="checkbox"/>	<input type="checkbox"/>	d. This project involves no greater scope or size than is normal for this category of action.
<input checked="" type="checkbox"/>	<input type="checkbox"/>	e. There are no planned reportable releases of hazardous or toxic substances as specified in 40 CFR Part 302.
<input checked="" type="checkbox"/>	<input type="checkbox"/>	f. There are no planned releases of petroleum, oils, and lubricants (POL) except from a properly functioning engine or vehicle, and there will be no application of pesticides and herbicides as part of the proposed action that would result in the development or amendment of a Spill Prevention, Control, or Countermeasures Plan.
<input checked="" type="checkbox"/>	<input type="checkbox"/>	g. Air emissions will not exceed <i>de minimis</i> levels or otherwise require a formal Clean Air Act conformity determination be made.
<input checked="" type="checkbox"/>	<input type="checkbox"/>	h. There is no reasonable likelihood of violating any Federal, state, or local law or requirements imposed for the protection of the environment.
<input checked="" type="checkbox"/>	<input type="checkbox"/>	i. The proposed action will not have an unresolved effect on environmentally sensitive resources.
<input checked="" type="checkbox"/>	<input type="checkbox"/>	j. This project does not involve effects on the quality of the environment that are likely to be highly controversial.
<input checked="" type="checkbox"/>	<input type="checkbox"/>	k. This project does not involve effects on the environment that are highly uncertain, involve unique or unknown risks, or are scientifically controversial.
<input checked="" type="checkbox"/>	<input type="checkbox"/>	l. This project does not establish a precedent for future or subsequent actions that are reasonably likely to have a future significant effect.
<input checked="" type="checkbox"/>	<input type="checkbox"/>	m. There is no potential for an already poor environment being further degraded, and the action does not degrade an environment that remains close to its natural condition.
<input checked="" type="checkbox"/>	<input type="checkbox"/>	n. This project does not involve the use of unproven technology.
<input checked="" type="checkbox"/>	<input type="checkbox"/>	3. One (or more) CX encompasses the proposed action. If no CX is appropriate, and the project is not exempted by statute or emergency provisions, an EA or an EIS must be prepared before a proposed action may proceed.