MOBILE SENSORS
ENVIRONMENTAL ASSESSMENT

AGENCY: Missile Defense Agency

ACTION: Finding of No Significant Impact

BACKGROUND: The Missile Defense Agency (MDA) prepared this Environmental Assessment (EA) to evaluate the potential environmental impacts of the use of mobile land-based sensors (i.e., radar, telemetry, command and control, and optical systems) and the use of airborne sensor systems (i.e., High Altitude Observatory [HALO]-I and -II, and Widebody Airborne Sensor Platform [WASP]). This EA considers impacts associated with the proposed use of land-based mobile sensors and airborne sensor systems. In addition, this EA address the development of a specific land-based mobile sensor site at the Merle K. Smith Airport near Cordova, Alaska. Finally, the EA addresses cumulative impacts associated with test events using mobile sensors from land-based platforms and airborne sensor systems.

This EA was prepared in accordance with the National Environmental Policy Act (NEPA); the Council on Environmental Quality regulations that implement NEPA (Code of Federal Regulations [CFR], Title 40, Parts 1500-1508); Department of Defense Instruction 4715.9, *Environmental Planning and Analysis*; the applicable service regulations that implement these laws and regulations; and Executive Order (EO) 12114, *Environmental Effects Abroad of Major Federal Actions*.

After reviewing and analyzing currently available data and information on existing conditions, project impacts, and measures to mitigate those impacts, the MDA has determined that the proposed action is not a Federal action that would significantly affect the quality of the human environment within the meaning of NEPA, as amended. Therefore, the preparation of an Environmental Impact Statement (EIS) is not required and the MDA is issuing a Finding of No Significant Impact. The MDA made this determination in accordance with all applicable environmental laws.

PURPOSE AND NEED

The purpose of the proposed action is to provide comprehensive and realistic test surveillance and tracking data capabilities in support of the MDA's mission to implement an integrated and effective Ballistic Missile Defense System (BMDS). As BMDS capabilities are developed sensor locations change to meet test requirements. Mobile land- and air-based sensors provide a more versatile and cost effective method for meeting this requirement than construction of fixed assets at required locations. The proposed action requires the transport, set-up, and operation of mobile land-based sensors from land-based platforms and set-up and operation of airborne sensor systems.

The MDA needs to collect test surveillance and tracking data by using a variety of mobile land-based and airborne sensors at various test support positions. This is needed to provide test events

data to ensure useful information is gained from the BMDS developmental flight and ground tests.

DESCRIPTION OF THE PROPOSED ACTION

The MDA proposes to use land-based mobile sensors and airborne sensor systems (i.e., optical and infrared systems). A test event may use any combination of mobile land-based and one of the airborne mobile sensors in any combination. Either of the systems may be used alone or as part of an integrated sensor system.

Land-based sensors include radar (i.e., Transportable System X-Band Radar [TPS-X], Forward-Based X-Band Radar [FBX-T], MK-74 Target Tracking Illuminating System Radar, MPS-36 Radar), Telemetry (i.e., Transportable Telemetry System [TTS], Mobile Range Safety System [MRSS], Range Safety Telemetry System [RSTS]), Command and Control (i.e., Transportable Range Augmentation Control System [TRACS]), and Optical Systems (i.e., Stabilized High-Accuracy Optical Tracking System [SHOTS], Innovative Science and Technology Experimentation Facility [ISTEF]). The proposed airborne sensor systems include the HALO-I, HALO-II, and the WASP. The HALO-I and -II are both housed in modified Gulfstream IIB aircraft, and the WASP in a modified DC-10 aircraft.

Specific land-based mobile sensor and airborne sensor system activities and scenarios have been proposed and are described in the EA. Proposed future tests that involve the specific land-based mobile sensors and airborne sensors presented in this EA may rely on the analysis in this document, as appropriate. A range of scenarios for use of mobile sensors from land-based platforms and airborne sensor systems are considered and analyzed in this EA to ensure that reasonably foreseeable activities were analyzed; however, specific future activities not analyzed in this EA would need to be evaluated in subsequent NEPA analyses, as appropriate.

ALTERNATIVES TO THE PROPOSED ACTION

Three alternatives to the proposed action, including the no action alternative, were identified and considered in this EA.

Alternative 1 – use of land-based mobile sensors but not airborne sensor systems

Alternative 2 – use of airborne sensor systems but not land-based mobile sensors

No Action Alternative - In the no action alternative, MDA would not transport or use mobile land-based sensors or airborne sensors to support MDA test events or to track targets of opportunity to test and calibrate the mobile land-based and airborne sensors. The sensors used for the test events would be the existing fixed land-based sensors as well as any sea-based sensor assets. For the purpose of this EA, MDA assumed that no mobile land-based or airborne sensors would be used during MDA testing events.

ENVIRONMENTAL EFFECTS

Methodology

Thirteen resource areas were considered to provide a context for understanding the potential effects of the proposed action and the severity of potential impacts. The resource areas considered include: air quality, airspace, biological resources, cultural resources, geology and soils, hazardous materials and hazardous waste, health and safety, land use, noise, socioeconomics and environmental justice, transportation and infrastructure, visual resources, and water resources. These areas represent the resources that the proposed mobile sensors may impact. When appropriate to adequately characterize the potential impacts (i.e., when a resource may be impacted), MDA included site-specific information on the specific locations where proposed activities are reasonably foreseeable.

Environmental Effects

Under the proposed action MDA would use both mobile land-based and airborne sensors. Exhibit 1 shows the locations considered in the EA under all of the alternatives. There are only six areas that would use both land-based and airborne mobile sensors. The impacts from the combined use of both types of sensor systems are presented in the summary of the proposed action. The impacts from using only land-based mobile sensors are presented under Alternative 1 and the impacts from using only airborne sensors are presented under Alternative 2. The No Action Alternative assumes that no mobile land-based or airborne sensor systems would be used during MDA testing events and therefore, no locations would be impacted.

A summary of potential environmental effects of the Proposed Action, Alternative 1, Alternative 2, and the No Action Alternative is included in Exhibit 2. A summary of potential environmental effects of the proposed specific test events near Cordova, Alaska is included in Exhibit 3.

Exhibit 1. Locations Using Mobile Sensors Under Various Alternatives

Location	Proposed Action (Land-based and/or Airborne Sensors)	Alternative 1 (Land-based Sensors Only)	Alternative 2 (Airborne Sensors Only)
Airspace over Broad Ocean Area	X		X
Airspace over land portion of ranges	X		X
Airspace over ocean portion of ranges	X		X
Adak, Alaska	X		X
Anderson Air Force Base, Guam	X		X
Andrews Air Force Base, Maryland	X		X
Anchorage International Airport, Alaska	X		X
Eareckson Air Force Station, Alaska	X	X	
Edwards Air Force Base, California	X		X
Eglin Air Force Base, Florida	X		X
Elmendorf Air Force Base, Alaska	X		X

Location	Proposed Action (Land-based and/or Airborne Sensors)	Alternative 1 (Land-based Sensors Only)	Alternative 2 (Airborne Sensors Only)
Harlingen Airport, Texas	X		X
Hickam Air Force Base, Hawaii	X		X
Holloman Air Force Base, New Mexico	X		X
Huntsville International Airport, Alabama	X		X
Johnston Atoll	X		X
Jones Riverside Airport, Oklahoma	X		X
Kaneohe Bay Marine Corp Air Station, Hawaii	X		X
Keesler Air Force Base, Mississippi	X		X
Key West Naval Air Station	X		X
King Salmon Air Station, Alaska	X	X	
Kirtland Air Force Base, New Mexico	X		X
Kodiak Airport and Kodiak Launch Complex, Alaska	X	X	X
Lihue International Airport, Hawaii	X		X
MacDill Air Force Base, Florida	X		X
McChord Air Force Base, Washington	X		X
Majors Airport, Greenville, Texas	X		X
Majuro Island, Republic of the Marshall Islands	X		X
McCarran International Airport, Nevada	X		X
Melbourne International Airport, Florida	X		X
Nellis Air Force Base, Nevada	X		X
Midway Island	X	X	X
Monterey Airport, California	X		X
Merle K. (Mudhole) Smith Airport, Cordova, Alaska	X	X	
National Aeronautics and Space Administration Wallops Island, Virginia	X	X	X
Naval Air Station Whidbey Island, Washington	X	X	
Naval Base Ventura County Port Hueneme/San Nicolas Island/Point Mugu, California	X	X	X
Niihau, Hawaii	X	X	
Patrick Air Force Base, Florida	X		X
Palm Beach International Airport, Florida	X		X

Location	Proposed Action (Land-based and/or Airborne Sensors)	Alternative 1 (Land-based Sensors Only)	Alternative 2 (Airborne Sensors Only)
Palm Springs International Airport, California	X		X
Pacific Missile Range Facility, Hawaii	X	X	X
San Jose International Airport, California	X		X
Sea-Tac International Airport, Washington	X		X
Travis Air Force Base, California	X		X
Tyndall Air Force Base, Florida	X		X
Tulsa International Airport, Oklahoma	X		X
U.S. Army Kwajalein Atoll/Ronald Reagan Ballistic Missile Defense Test Site, Republic of the Marshall Islands	X	X	X
Vandenberg Air Force Base, California	X	X	
Wake Island	X	X	X
White Sands Missile Range, New Mexico	X	X	X

Note: Bold indicates locations where both land-based and airborne sensors would be used.

Exhibit ES-2. Summary of Environmental Impacts from the Proposed Action and Alternatives

Resource Area	Proposed Action	Alternative 1	Alternative 2	No Action Alternative
Air Quality	**Land-based:** Land-based mobile sensors would produce impacts to air quality primarily from the transportation of the systems and the use of generators to power the sensors. In addition, the MDA or test proponent would be required to obtain necessary permits and complete toxicological risk screening before using generators to support tests. **Airborne:** Airborne sensors would produce impacts on air quality primarily from the emissions from the DC-10 and Gulfstream IIB aircraft. **Combined:** Using land-based and airborne mobile sensors would result in the release of volatile organic compounds (VOCs), carbon monoxide (CO), nitrogen oxides (NO_X), sulfur dioxide (SO_2), and particulate matter (PM_{10}). However, even the total emissions of VOCs and NO_X in existing maintenance areas where the sensors may be used do not exceed the *de minimis* thresholds of the regulated emissions.	Using land-based mobile sensors would not result in significant impacts on air quality because none of the ambient air quality *de minimis* regulatory thresholds would be exceeded. In addition, the MDA or test proponent would be required to obtain necessary permits and complete toxicological risk screening before using generators to support tests.	None of the ambient air quality *de minimis* regulatory thresholds would be exceeded from the operation of the DC-10 or Gulfstream IIB aircraft; therefore, ambient air quality would not be significantly impacted.	No mobile sensors would be used; therefore, the ambient air quality would not be impacted.
Airspace	**Land-based:** Appropriate notices would be published on applicable aeronautical charts identifying boundaries of the operating area that may impact aircraft operating in the airspace. Laser light would use a filter that would result in laser light that is eye-safe and would therefore, not impact pilots operating in the airspace. **Airborne:** When in transit the aircraft would operate as any other airplane in the National Airspace System. During testing they would operate at altitudes between 20,000 and 45,000 feet and would not interfere with commercial airspace. **Combined:** All testing would be coordinated with the appropriate airspace management agency. Notices to Airmen (NOTAMs) and Mariners (NOTMARs) would	Impacts would be as described for land-based sensors under the Proposed Action. No significant impacts would be expected because appropriate notices would be published.	Impacts would be as described for airborne sensors under the Proposed Action. No significant impacts would be expected because in transit the aircraft would operate as any other airplanes and during testing they would operate at altitudes between 20,000 and 45,000 feet and would not interfere	No mobile sensors would be used; therefore, the airspace would not be impacted.

Resource Area	Proposed Action	Alternative 1	Alternative 2	No Action Alternative
	be issued as appropriate to support tests. No significant impacts to airspace would be expected.		with commercial airspace.	
Biological Resources	**Land-based:** Removal of vegetation on previously disturbed land would not cause significant impacts. Noise from generators may startle wildlife but sites would not be adjacent to environmentally sensitive areas and therefore, would not present significant impacts. A site-specific analysis would be required for the placement of a sensor in an undisturbed area that would require grading, clearing, or other ground disturbing activities. Impacts to wildlife from artificial lighting would not be significant. 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. **Airborne:** Infrared and optical sensors are passive systems that would not impact biological resources. A plausible airborne sensor, the Light Detection and Ranging (LIDAR) system, emits an eye-safe laser and would not impact biological resources. **Combined:** Because airborne sensors would not impact biological resources, the impacts from the combined use of both types of mobile sensors would be insignificant as described for land-based sensors.	Impacts would be as described for land-based sensors under the Proposed Action. No significant impacts would be expected to plants or animals as a result of the pre-operational, operational, or post-operational activities associated with land-based sensors.	Infrared and optical sensors are passive systems that would not impact biological resources. A plausible airborne sensor, the LIDAR system, emits an eye-safe laser and would not impact biological resources.	No mobile sensors would be used; therefore, biological resources would not be impacted.
Cultural Resources	**Land-based:** The site preparation activities and associated area of potential effect would occur on previously disturbed sites and would not impact cultural resources. The land-based sensor systems would not impact non-living resources such as cultural resources. A site-specific analysis would be required for the placement of a sensor in an undisturbed area that would require grading, clearing, or other ground disturbing	The site preparation activities and associated area of potential effect would occur on previously disturbed sites and would not impact cultural resources. The land-based sensor systems would not	Current airborne sensors are passive systems and would not remove, alter, or physically impinge on cultural resources and adverse impacts are not anticipated. A plausible	No mobile sensors would be used; therefore, cultural resources would not be impacted.

Resource Area	Proposed Action	Alternative 1	Alternative 2	No Action Alternative
	activities. **Airborne:** Current airborne sensors are passive systems and would not remove, alter, or physically impinge on cultural resources and adverse impacts are not anticipated. A plausible airborne sensor, the LIDAR system, emits an eye-safe laser and would not impact cultural resources. **Combined:** The use of mobile sensors would not impact cultural resources on previously disturbed sites.	impact non-living resources such as cultural resources. A site-specific analysis would be required for the placement of a sensor in an undisturbed area that would require grading, clearing, or other ground disturbing activities.	airborne sensor, the LIDAR system, emits an eye-safe laser and would not impact cultural resources.	
Geology and Soils	**Land-based:** Site preparation activities would occur on previously disturbed sites and would not result in a significant impact on geology or soils. A site-specific analysis would be required for the placement of a sensor in an undisturbed area that would require grading, clearing, or other ground disturbing activities. **Airborne:** These sensors would not impact soils or geology. **Combined:** The use of mobile sensors would not impact geology or soils on previously disturbed sites.	Site preparation activities would occur on previously disturbed sites and would not result in a significant impact on geology or soils. A site-specific analysis would be required for the placement of a sensor in an undisturbed area that would require grading, clearing, or other ground disturbing activities.	Airborne mobile sensors would not impact geology or soils.	No mobile sensors would be used; therefore, geology and soils would not be impacted.
Hazardous Materials and Hazardous Waste	**Land-based:** Use and disposal of hazardous materials and use of fuel storage tanks would be in accordance with applicable regulations; therefore, there would not be any significant impacts. **Airborne:** Use and disposal of hazardous materials would be in accordance with applicable regulations; therefore, there would not be any hazardous waste impacts. **Combined:** Because use and disposal of hazardous materials would be in accordance with applicable regulations, there would not be any hazardous waste impacts from the use of mobile sensors.	Use and disposal of hazardous materials and use of fuel storage tanks would be in accordance with applicable regulations; therefore, there would not be any significant hazardous waste impacts.	Use and disposal of hazardous materials associated with airborne mobile sensors would be in accordance with applicable regulations; therefore, there would not be any hazardous waste impacts.	No mobile sensors would be used; therefore, hazardous materials and hazardous waste would impacts would not occur.

Resource Area	Proposed Action	Alternative 1	Alternative 2	No Action Alternative
Health and Safety	**Land-based:** EMR/electromagnetic interference surveys would be conducted before activating radar sensors. Implementing range safety procedures would preclude any potential safety hazard to the public or workforce. Optical sensors are passive systems that would not impact health and safety. LIDAR laser light emissions would use a filter which results in eye-safe light that would not impact health and safety. **Airborne:** Current airborne sensors are passive systems and would not impact human health and safety. A plausible airborne sensor, the LIDAR system, emits an eye-safe laser and would not impact health and safety. **Combined:** The impacts from the combined use of both types of mobile sensors would be insignificant as described for both above.	Impacts would be as described for land-based sensors under the Proposed Action. No significant impacts to health and safety would result because all applicable safety procedures regarding radars would be followed.	Current airborne sensors are passive systems and would not impact human health and safety. A plausible airborne sensor, the LIDAR system, emits an eye-safe laser and would not impact health and safety.	No mobile sensors would be used; therefore, health and safety would not be impacted.
Land Use	**Land-based:** Site preparation activities would occur on previously disturbed sites and would not result in a significant impact on land use. The operation of the land based sensors would not preclude any existing land uses; therefore, the operation would not result in a significant impact on land use. A site-specific analysis would be required to place a sensor in an undisturbed area that would require grading, clearing, or other ground disturbing activities. **Airborne:** These sensors would operate from existing airports or military bases and their use would be consistent with the existing land use; therefore, land use would not be impacted. **Combined:** Because land-based sensors would not impact land use and airborne sensors would operate from facilities where their use would be consistent with the existing land use, there would be no impacts to land use from the combined use of mobile sensors.	Site preparation activities would occur on previously disturbed sites and would not result in a significant impact on land use. The operation of the land based sensors would not preclude any existing land uses; therefore, the operation would not result in a significant impact on land use.	Airborne sensors would operate from facilities where their use would be consistent with the existing land use and therefore land use would not be impacted.	No mobile sensors would be used; therefore, land use would not be impacted.

Resource Area	Proposed Action	Alternative 1	Alternative 2	No Action Alternative
Noise	**Land-based:** Because the location of land-based mobile sensors would be in previously disturbed areas that are not located on or adjacent to an environmentally sensitive resource, no noise sensitive receptors would be located near equipment and personnel would be required to wear appropriate hearing protection. **Airborne:** The noise produced during takeoff and landing would be consistent with noise produced at the airports where these activities occur. Under the proposed action, planes carrying the airborne sensors would climb to altitudes between 20,000 and 45,000 feet and would not be audible from the ground. Operation of the planes and use of the airborne sensors would not impact noise sensitive areas or populations. **Combined:** The use of appropriate hearing protection measures would prevent impacts to personnel from exposure to noise associated with land-based sensors. Noise associated with takeoff and landing of airplanes would take place in areas that are accustomed to this type of activity. Noise from the operations of airborne sensors would not be audible on the ground.	Impacts would be as described for land-based sensors under the Proposed Action. The use of hearing protection would prevent impacts to personnel.	Airborne sensors takeoff and land from facilities where these types of activities would be consistent with existing operations. The operations of planes and the use of airborne sensors would not be audible from the ground. Therefore, there would not be any noise impacts	No mobile sensors would be used; therefore, noise impacts would not occur.
Socioeconomics and Environmental Justice	**Land-based:** Test locations are designed to accommodate additional temporary personnel; test staff would not exceed existing infrastructure capacity. No environmental justice impacts would occur because populations that fall under the protection of environmental justice are not located on the test sites. If impacts occur outside the boundary of a test site, such areas should be reviewed for environmental justice concerns. **Airborne:** Locations used for airborne sensors have been designed to accommodate additional temporary personnel. Because these activities would occur at existing airfields or at altitudes between 20,000 and	Impacts would be as described for land-based sensors under the Proposed Action. All test locations would be designed to accommodate temporary personnel associated with land-based sensors. No environmental justice impacts would occur because populations that fall under the protection of environmental justice are	Impacts would be as described for airborne sensors under the Proposed Action. Because test locations were designed to accommodate additional temporary personnel no socioeconomics impacts would be expected. Because activities would take place at existing locations there	No mobile sensors would be used; therefore, socioeconomics and environmental justice would not be impacted.

Resource Area	Proposed Action	Alternative 1	Alternative 2	No Action Alternative
	45,000 feet, no environmental justice populations would be affected. **Combined:** The proposed action would not impact socioeconomics or environmental justice. Testing locations are designed to accommodate additional temporary personnel; test staff would not exceed existing infrastructure capacity. No environmental justice impacts would occur because populations that fall under the protection of environmental justice are not located on the test sites. If impacts occur outside the boundary of a test site, such areas should be reviewed for environmental justice concerns.	not located on the test sites. If impacts occur outside the boundary of a test site, such areas should be reviewed for environmental justice concerns.	would be no impacts to environmental justice.	
Transportation and Infrastructure	**Land-based:** The predicted injury rate from transporting land-based mobile sensors by truck would not be significant. C-130 transport aircraft would operate as any other airplane in the National Airspace System and would not impact air transportation. **Airborne:** The relatively infrequent flights (30 total test events per year) of the Gulfstream IIB and DC-10 planes would result in a negligible increase in air traffic; therefore, transportation would not be impacted. **Combined:** The combined impacts from land-based and airborne sensors resulting from implementing the proposed action would be insignificant for the reasons described under land-based and airborne sensors above.	Impacts would be as described for land-based sensors under the Proposed Action. Insignificant impacts would result from transport of land-based mobile sensors by both road and air.	Impacts would be as described for airborne sensors under the Proposed Action. Infrequent flights related to the use of airborne sensors would not result in significant impacts to air transportation.	No mobile sensors would be used; therefore, transportation would not be impacted.
Visual Resources	**Land-based:** Temporary set up of antennas, radars, and signal collection dishes may impact the aesthetic setting. Because of the temporary nature of tests and because set up would be in previously disturbed areas, no significant impact on visual resources would be associated with the use of land-based sensors. **Airborne:** The planes carrying the airborne sensors would takeoff and land from existing facilities, which would be consistent with current visual setting at the	Impacts would be as described for land-based sensors under the Proposed Action. The temporary nature of the tests would cause the visual impacts to be insignificant.	Impacts would be as described for airborne sensors under the Proposed Action. The airplanes carrying airborne sensors would takeoff and land from existing facilities and would be consistent	No mobile sensors would be used; therefore, visual resources would not be impacted.

Resource Area	Proposed Action	Alternative 1	Alternative 2	No Action Alternative
	airports where these activities occur. **Combined:** The combined impacts from land-based and airborne sensors resulting from implementing the proposed action would be insignificant for the reasons described above.		with the visual setting at the airports.	
Water Resources	**Land-based:** The location of land-based mobile sensors would be located in previously disturbed areas that are not located on or adjacent to an environmentally sensitive resource, which include sensitive water related resources (wetlands, floodplain). Telemetry, command and control, and optical sensors are passive systems that would not impact water resources. Radar operations would not impact non-living resources such as water resources. LIDAR emits a low power laser beam that would not impact water resources. **Airborne:** Current airborne sensors are passive systems and would not impact on water resources. A plausible airborne sensor, the LIDAR system, emits an eye-safe laser and would not impact water resources. **Combined:** The combined impacts from land-based and airborne sensors resulting from implementing the proposed action would be insignificant for the reasons described under land-based and airborne sensors above.	Land-based mobile sensors would not impact water resources.	Current airborne sensors are passive systems and would not impact on water resources. A plausible airborne sensor, the LIDAR system, emits an eye-safe laser and would not impact water resources.	No mobile sensors would be used; therefore, water resources would not be impacted.

Exhibit ES-3. Summary of Environmental Impacts from the Use of Land-Based Mobile Sensors at Merle K. Smith Airport, Cordova, Alaska

Resource Area	Proposed Action	No Action Alternative
Air Quality	The development and operation of the proposed sensors site at the Merle K. Smith Airport would result in the emissions of VOCs, CO, NO_X, PM, including diesel particulates, and SO_2 would impact the ambient air quality. However, the amount of emissions would be below regulated *de minimis* values and would not result in a significant impact on air quality.	Implementation of the no action alternative would not result in any impact on air quality.
Airspace	The development and operation of the proposed site at the Merle K. Smith Airport would not impact airspace; the sensors to be used would not affect aircraft operations or communications.	Implementation of the no action alternative would not result in any impact on airspace.
Biological Resources	The development of the proposed sensors site would result in the loss of up to 0.5 acres of pioneering and buffer vegetative habitat adjacent to the active Merle K. Smith Airport. Because the area is an active airport, the operation of the sensor would not result in a new impact on biological resources. The impacts on biological resources would not be significant.	Implementation of the no action alternative would not result in any impact on biological resources.
Cultural Resources	The location of the proposed sensors site at the Merle K. Smith Airport is in an area that has been previously disturbed does not contain any cultural resources that would be eligible for listing in the National Register.	Implementation of the no action alternative would not result in any impact on cultural resources.
Geology and Soils	The development of the proposed sensors site (i.e., clearing and grading activities) at the Merle K. Smith Airport would not result in significant adverse impacts on the soil or geology, as the area has been previously disturbed by past activities.	Implementation of the no action alternative would not result in any impact on geology or soils.
Hazardous Materials and Waste	All activities would adhere to appropriate and relevant regulations and would not represent a significant impact associated with hazardous materials and waste handling and disposal.	Implementation of the no action alternative would not result in any impact on hazardous materials and waste.
Health and Safety	Prior to operating any radar at the proposed sensors site at the Merle K. Smith Airport, MDA or the Alaska Aerospace Development Corporation would complete an EMR/electromagnetic interference survey that considers Hazards of Electromagnetic Radiation to Personnel, Hazards of Electromagnetic Radiation to Fuels, and Hazards of Electromagnetic Radiation to Ordnance, as appropriate. The analysis would provide recommendations for sector blanking and safety systems to minimize exposures, and would not result in a significant impact on health and safety. The use of an RSTS from the Lodge, adjacent to the Kodiak Launch Complex, would not result in an adverse impact on health or safety.	Implementation of the no action alternative would not result in any impact on health and safety.

Resource Area	Proposed Action	No Action Alternative
Land Use	Because the location of the proposed action would be in an area that was previously disturbed and the proposed development and operation of the site would not preclude or adversely affect any of the existing land uses, the proposed sensors site at the Merle K. Smith Airport would not impact land use. The development of the Lodge site would change 1 acre of existing grazing land to developed land, resulting in a minor impact.	Implementation of the no action alternative would not result in any impact on land use.
Noise	The location of the proposed sensors site at the Merle K. Smith Airport is adjacent to an active runway and day-time construction would not result in a substantial new source of noise. During operation of the proposed off-axis site, the generators would be housed in a shelter and would have sound attenuating equipment (muffler) to reduce the potential noise impacts associated with night-time use. Therefore, the development and operation of the proposed off-axis site would not result in a significant impact on noise. The generators associated with the operation of the RSTS at the Lodge site would have noise attenuation equipment and would not result in a substantial change over ambient noise levels.	Implementation of the no action alternative would not result in any impact on noise.
Socioeconomics and Environmental Justice	The development and operation of the proposed sensors site at the Merle K. Smith Airport would not result in a significant impact on socioeconomics. The temporary influx of 35 personnel to the region would not represent a substantial change in the population or require additional infrastructure.	Implementation of the no action alternative would not result in any impact on socioeconomics or environmental justice.
Transportation and Infrastructure	The equipment associated with the proposed sensors site at the Merle K. Smith Airport would be transported from King Salmon, Alaska via barge or aircraft and would not result in a significant impact on transportation.	Implementation of the no action alternative would not result in any impact on transportation or infrastucture.
Visual Resources	The development of the proposed sensors site at the Merle K. Smith Airport and its operation would alter the visual setting of the area. However, because the facility is an active airport and contains various towers and antennas, the placement of additional antennas and support equipment in the same location would not result in a significant impact on visual resources.	Implementation of the no action alternative would not result in any impact on visual resources.
Water Resources	The development and operation of the proposed sensors site at the Merle K. Smith Airport would not impact water resources. The site preparation and construction activities would result in increased storm water runoff that would enter the onsite streams, resulting in short-term impacts. The proposed site is in an area that has been previously disturbed and the project would not impact the hydrological properties of the wetland system or alter its current function or value.	Implementation of the no action alternative would not result in any impact on water resources.

Cumulative Impacts

Under the cumulative impact analysis, MDA reviewed the impacts of using the various mobile land-based and airborne sensors at different locations at the same time, as well as the impacts associated with using a mobile sensor with the existing fixed based sensors in conjunction with a specific MDA test event. Because the specifics of the unique test events are unknown, and such tests would be a "major federal action" as defined under NEPA requiring an environmental review in accordance with NEPA, the cumulative impacts of using mobile sensors during a specific test event would be addressed in subsequent test specific documentation.

The cumulative impacts of using various land-based and airborne mobile sensors at different locations supporting different test events, and potentially at different times would not result in cumulative impacts. The potential locations would be far enough apart that the local emissions, EMR hazard areas, or cleared air space would not overlap and result in cumulative impacts. MDA acknowledges that the use of the land-based and airborne mobile sensors along with the local activities and impacts of a specific test may result in cumulative impacts. However, at this time, the details of specific test events are unknown; therefore, the potential cumulative impacts cannot be determined. MDA or the test proponent would use this document to aid in defining the cumulative impacts in the environmental reviews prepared in accordance with NEPA for the specific test events.

Cumulative Impacts at Cordova, Alaska

To review the potential cumulative impacts, MDA reviewed the potential impacts associated with the proposed sensors site with other Federal and non-federal actions, specifically the impacts associated with the airport improvements. Because the proposed location for the sensors site at the Merle K. Smith Airport would be a temporary site that will be renovated under the airport improvement plan, MDA concluded that there would be no cumulative site preparation and construction impacts.

MDA reviewed the operations of the proposed sensors at the Merle K. Smith Airport, and found that the operation of the sensors, the ongoing airport operations, and the improvement projects would not result in significant cumulative impact

CONCLUSION: An analysis of the proposed action has concluded that there are no significant short-term of long-term effects to the environment or surrounding populations. After careful and thorough consideration of the facts herein, the undersigned finds that the proposed Federal action is consistent with existing national environmental policies and objectives set forth in Section 101(a) of NEPA and that it will not significantly affect the quality of the human environment or otherwise include any condition requiring consultation pursuant to Section 102(2)(c) of NEPA. Therefore, and EIS for the proposed action is not required.

DEADLINE FOR RECEIPT OF WRITTEN COMMENTS: September 23, 2005

POINT OF CONTACT: Submit written comments of requests for a copy of the Mobile Sensors EA to: Mobile Sensors EA, c/o ICF Consulting, 9300 Lee Highway, Fairfax, VA 22031; or via e-mail mobilesensorsea@icfconsulting.com.

MOBILE SENSORS ENVIRONMENTAL ASSESSMENT

AGENCY: Missile Defense Agency

ACTION: Finding of No Significant Impact

APPROVED:

DATE: 3 OCT 05

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