

**FINDING OF NO SIGNIFICANT IMPACT
(FONSI)
SPACED-BASED LASER INTEGRATED FLIGHT EXPERIMENT GROUND
TESTING
BALLISTIC MISSILE DEFENSE ORGANIZATION**

Lead Agency: Ballistic Missile Defense Organization (BMDO), Office of Secretary of Defense (OSD), Pentagon

Executive Agency: Space and Missile Systems Center (SMC), Air Force Material Command, Department of the Air Force

Background: Pursuant to the National Environmental Policy Act (NEPA), as amended (42 U.S.C. 4321 et seq.), the President's Council on Environmental Quality (CEQ) regulations implementing the Act (40 CFR 1500-1508), Department of Defense Instruction 4715.9, BMDO Directive No. 6050, Air Force Instruction (AFI) 32-7061, and Title 32, CFR Part 989, which implements these regulations in the Environmental Impact Analysis Process (EIAP), and other applicable federal and local regulations, SMC, as the executing agency for BMDO, has conducted an Environmental Assessment (EA) of the potential environmental consequences resulting from the construction of the facilities and the ground testing phase of the Space-Based Laser (SBL) Integrated Flight Experiment (IFX) ground-test program. The National Aeronautics and Space Administration (NASA); the U.S. Army Aviation & Missile Command, Redstone Arsenal; and the U.S. Air Force Space Command are cooperating agencies in the NEPA process. The purpose of the proposed action is to conduct research and technology demonstration to advance and assess the feasibility of the SBL concept and its technologies, culminating in execution of an on-orbit demonstration. The IFX effort includes two decisional phases: 1) design, development, and ground testing (including test facilities design and construction); and 2) launch, on-orbit testing, lethal demonstration, vehicle disposition, and delivery of data. The current decision relates only to the first phase of development and ground testing. This FONSI summarizes the results of the evaluation.

Proposed Action and Alternatives: The Environmental Assessment (EA), which is hereby incorporated by reference, assesses the environmental impacts of construction of the SBL Test Facility (STF) complex in the continental United States and performing ground demonstrations and validation testing for the IFX project at one or more of the following sites: Stennis Space Center, Mississippi; Cape Canaveral Air Force Station, Florida; and Redstone Arsenal/Marshall Space Flight Center, Alabama. The decision could be made to locate the various components of the STF complex at one or more sites, i.e., to split the complex between the above sites. The No-Action Alternative was also considered.

The potential environmental effects associated with the proposed action and alternatives were assessed for the following environmental resources: air quality, airspace, biological resources, cultural resources, geology and soils, hazardous materials and hazardous waste management, health and safety, land use and aesthetics, noise, socioeconomics, transportation, utilities, water resources, and environmental justice.

Cumulative effects resulting from the overlap of the proposed action with other planned activities and other reasonably foreseeable actions at each of the alternative sites were also assessed.

Construction and operational activities associated with the proposed action would affect the existing environment. The primary effects from construction relate to changes in air quality, biological resources, cultural resources, and noise. The primary effects from operation relate to air quality, biological resources, hazardous materials and waste management, and noise.

Air emissions estimated for construction activities as well as increased vehicle emissions resulting from the proposed action would not have significant adverse effects on the regional air quality. All facility construction would occur in previously developed areas, or immediately adjacent to developed areas, minimizing effects to biological resources. Consultation under Section 7 of the Endangered Species Act has been completed, and no adverse effects on threatened or endangered species are anticipated. At SSC, up to eight acres of disturbed wetlands would be mitigated in accordance with the mitigation banking provisions of the SSC wetlands permit. Construction at Redstone Arsenal would affect facilities that are considered eligible for the National Register of Historic Places. Prior to construction, consultation with the Alabama State Historic Preservation Officer will be completed, including any necessary recordation and/or documentation. These steps will mitigate the potential impacts to non-significance. Construction activities would increase noise levels adjacent to the work sites. However, noise would be short-term and limited to daytime hours. Cumulative effects will not be significant.

Air emissions estimated for operational activities would not adversely affect regional air quality. Estimated episodic emissions during testing are not estimated to constitute a hazard to human health. A Risk Management Plan, as required by the Clean Air Act, will be prepared to assure that hazardous materials used during testing will not adversely affect human health, and meteorological and/or procedural operational constraints will be used to mitigate any potential harm to personnel or the environment. Air emissions and noise during testing are not anticipated to constitute hazards to wildlife in the vicinity. Hazardous materials and wastes will be managed in accordance with applicable regulations and installation guidelines. Noise from testing would be episodic and consistent with the current noise environments on the installations. Cumulative effects will not be significant.

Finding of No Significant Impact: Based on my review of the data and analysis contained in this EA, which is incorporated herein by reference, I have concluded that the ground testing phase of the SBL IFX program will not have a significant impact either by itself or considering cumulative impacts. Accordingly, the requirements of NEPA and regulations promulgated by the CEQ have been fulfilled, and an Environmental Impact Statement is not required and will not be prepared for the proposed action.

Approved:



RONALD T. KADISH
Lieutenant General, USAF
Director, BMDO

19 DEC 00

Date

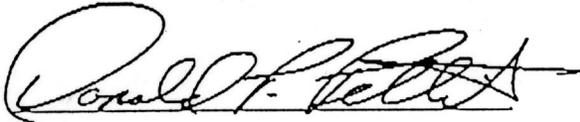
CONCUR:



WILLIAM M. WILSON
Brigadier General, USAF
Vice Commander, SMC
EPC Chairperson

13 Nov 00

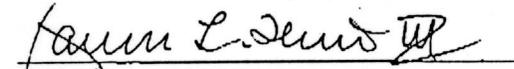
Date



DONALD P. PETTIT
Brigadier General, USAF
Commander, 45th Space Wing

16 Nov 00

Date



JULIAN A. SULLIVAN, JR.
Major General, USA
Commander, U.S. Army Aviation & Missile Command
Redstone Arsenal

17 NOV 00

Date

Concurrence on the findings and determination concerning the environmental impacts, individually and cumulatively, on Marshall Space Flight Center:



ART STEPHENSON
Center Director
Marshall Space Flight Center

11/21/00

Date

Concurrence on the findings and determination concerning the environmental impacts, individually and cumulatively, on Stennis Space Center:



ROYS S. ESTESS
Center Director
Stennis Space Center

11/13/00

Date