FINDING OF NO SIGNIFICANT IMPACT (FONSI)

PROGRAMMATIC ENVIRONMENTAL ASSESSMENT/ OVERSEAS ENVIRONMENTAL ASSESSMENT (PEA/OEA) FOR JOINT FLIGHT CAMPAIGN (JFC) SPACE LAUNCH DELTA 45 (SLD 45) CAPE CANAVERAL SPACE FORCE STATION (CCSFS)

INTRODUCTION

Pursuant to the Council on Environmental Quality (CEQ) regulations, the provisions of the National Environmental Policy Act (NEPA) of 1969, 40 Code of Federal Regulations (CFR) Parts 1500-1508, and *Environmental Impact Analysis Process* (32 CFR Part 989); the Department of the Air Force, United States Space Force (USSF), cooperated in the preparation of the Programmatic Environmental Assessment/ Overseas Environmental Assessment (PEA/OEA) prepared by the Department of the Army (U.S. Army) and the Department of the Navy (U.S. Navy) to evaluate potential impacts associated with flight test launches of the U.S. Navy Conventional Prompt Strike (CPS) weapon system and U.S. Army Long Range Hypersonic Weapon (LRHW) system. That PEA/OEA, *Joint Flight Campaign Programmatic Environmental Assessment / Overseas Environmental Assessment, February 2022,* is attached and incorporated by reference.

The U.S. Army and the U.S. Navy's proposal to test launch payloads from four candidate launch sites over broad ocean areas (BOA) is considered a major federal action subject to environmental review under NEPA. Two of the initial candidate launch sites are USSF property, Vandenberg Space Force Base, Space Launch Delta (SLD) 30 and Cape Canaveral Space Force Station (CCSFS), SLD 45. SLD 30 was removed from the preferred alternative; SLD 45 is the launch site addressed in this FONSI. The U.S. Army and the U.S. Navy were the lead agencies for the subject NEPA effort, and the USSF participated in the preparation of the PEA/OEA as a cooperating agency.

The lead agencies released the Draft PEA/OEA by direct announcement to agencies on 11 June 2021. The Draft PEA/OEA was noticed in locally viewed newspapers for each candidate site on 11 June 2021, and made available on the https://jfceaoea.govsupport.us. Public review concluded on 10 Jul 2021. The lead agencies consulted with Federal and State resource agencies. Coordination with, and responses from, Federal agencies, State agencies and the public is documented in the final PEA/OEA. The lead agencies issued a joint FONSI on 14 April 2022.

In accordance with 32 CFR 989.9, the SLD 45 re-released the Draft PEA/OEA with a Draft FONSI for specific actions affecting CCSFS property (see section below). The public review was initiated on 19 May 2022 and will conclude on 17 June 2022. The affected public was notified by advertisement placed in the *Florida Today*. The documents were made available by placing them in four local public libraries, in the SLD 45 Public Affairs Office, and on www.patrick.spaceforce.mil website.

PROPOSED ACTIONS OCCURRING ON USAF/USSF LEASED AND OWNED PROPERTY APPLICABLE TO THIS FONSI

This FONSI applies solely to launches from CCSFS at Launch Complex 46 (LC-46) with impact in the Atlantic BOA, as described in the following sections in the PEA/OEA:

- Rocket Motor Transportation (Sec 2.5.2.4),
- Launch Site Preparations and Operations (Sec 2.5.3.4),
- Terminal Location Preparations and Operations (Sec 2.5.4.4),
- Flight Test (Sec 2.5.5.4),
- Post Flight Test (Sec 2.5.6.4).

ENVIRONMENTAL CONSEQUENCES

The PEA/OEA analyzes potential impacts from the Proposed Action occurring at the four candidate sites. The activities at the CCSFS candidate site include the LC-46 launch area, the over-ocean flight corridor originating from LC-46 and extending over the Atlantic, and the booster drop/payload impact zone in the Atlantic. The program proposes and intends to launch a maximum of six times annually for the next 10 years at any of the four candidate launch locations. Existing facilities, transportation routes, and infrastructure would be used at CCSFS; therefore, no new construction is associated with the proposal. The launch vehicle consists of a two-stage booster system (solid propellant fuel) and hypersonic payload. The typical flight test includes the launch, first-stage burn, separation, and descent into the first-stage booster drop zone; second-stage burn, separation, and descent into the second-stage booster/payload impact; and payload flight and impact into the second stage/payload impact zone BOA (refer to Figure 1-4 in the PEA/OEA).

The PEA/OEA evaluates in detail the potential environmental impacts from the Proposed Action and the No Action Alternative in the following impact categories: airspace, water resources, geological resources, land use, noise, socioeconomics, environmental justice, aesthetics/ visual resources, marine sediments, air quality, cultural resources, biological resources, public health and safety, hazardous materials and wastes, infrastructure, and transportation resources. Potential cumulative effects are also addressed in the PEA/OEA. The Proposed Action will have no significant direct, indirect, or cumulative impacts that would require the preparation of an Environmental Impact Statement. Airspace, water resources, geological resources, land use, noise, socioeconomics, environmental justice, aesthetics/ visual resources, marine sediments were all considered to be negligible impacts. Discussion of minor impacts resulting from implementation of the Proposed Action that were identified and addressed in the PEA/OEA are summarized below. There will be no disproportionate and adverse impacts to minority and low-income populations as a result of the Proposed Action.

Air Quality

Air emissions were estimated by comparison to Minuteman III emissions for missile launch. Because the JFC missile is still in development there are no estimated emissions; therefore, this analysis uses the emissions from a Minuteman III launch as a surrogate. The analysis used the Prevention of Significant Deterioration (PSD permitting threshold of 250 tons per year for all criteria pollutants. For criteria pollutants for which the area has always been in attainment, the initial indicator of significance is the PSD threshold. These values are being used as first tier air quality significant indicators for NEPA purposes. Generally, minor emissions of criteria pollutants (i.e., PM10, PM2.5,

NOx, SOx, VOC, and CO) and GHGs (i.e., mostly CO2e) during the Proposed Action activities would be expected.

No significant impacts to air quality are expected at CCSFS. Estimated annual emissions do not exceed the PSD significance indicator levels for pollutants of concern, and where applicable, launch activities are conducted in compliance with all applicable Brevard County rules and regulations equating to insignificance. Therefore, no significant impacts to air quality are anticipated from the JFC flight test.

Cultural Resources
The Proposed Action would not require new construction at Launch Complex-46, only the potential modification of an existing structure. In addition, the facilities to be used as part of the Proposed Action are not listed or eligible for listing on the National Register of Historic Places. The launch site does not contain a historic or tribal site of significance. Therefore, no impacts on cultural resources are anticipated as a result of the Proposed Action.

The SLD 45 Cultural Resources Manager evaluated the areas affected by the Proposed Action, and no historical or cultural resource issues were found at or near LC-46. During the Florida State Clearinghouse review of the PEA/OEA, the Florida Department of State Division of Historic Resources (FDHR), State Historic Preservation Office (SHPO), performed a Section 106 of the National Historic Preservation Act of 1966 review of the Proposed Action. The U.S. Army and the U.S. Navy determined the Proposed Action would have no effects on historic resources, and the FDHR SHPO concurred on 13 Jul 2021. Their concurrence is included in the PEA/OEA.

Biological Resources
Terrestrial vegetation near the launch complex may be temporarily affected by heat and launch emissions. However, impacts will be minimal and short-term. Terrestrial wildlife may be impacted by elevated sound pressure levels from launch as well as hazardous chemicals, and artificial lighting. The launch site is in an area that has routine human activity, equipment operation, and launch activity. Noise from launches and launch related activity may startle nearby wildlife but disturbance to wildlife from launches will be brief and is not expected to have any long-term impacts. Wildlife are not likely to be physically harmed by heat or emissions during launch. Overall, terrestrial wildlife will not be significantly impacted. Impact to ESA-listed species will be minimal and short-term and are not expected to be different than those of ongoing operations at CCSFS. Any potential effects on ESA-listed species as a result of the Proposed Action are covered under numerous Section 7 consultations and existing Biological Opinions for ongoing launch operations at CCSFS. Marine wildlife are not expected to be significantly impacted by the Proposed Action. Any impacts, if realized, will likely be limited to short-term startle reactions due to elevated noise levels and marine wildlife will be expected to return to normal behaviors within minutes. No impacts on marine wildlife due to direct contact or exposure to hazardous chemicals from debris are expected during normal flight operations.

To comply with the requirements of the Endangered Species Act and the Marine Mammal Protection Act, the U.S. Army and the U.S. Navy initiated consultation with the National Marine Fisheries Service (NMFS) on 24 May 2021. According to the consultation documentation, the Proposed Action would have minimal to no impacts on marine wildlife in the BOA. The potential would exist for exposure to elevated sound levels, direct contact from expended test components, hazardous materials, and vessel traffic. Based on the expected sound pressure levels and estimated density of

special-status wildlife, no injury from elevated sound levels is expected. Any effects due to sound would likely be limited to short-duration behavioral response with no long-term impacts. Based on the available animal densities in the Atlantic BOA and on the size and number of expended test components, no physical injury to special-status species is expected as a result of direct contact. Any hazardous chemicals introduced to the water column would be quickly diluted and dispersed and are not likely to impact marine wildlife or their habitats. Any test components or debris would sink to the ocean floor where most marine wildlife would not come into contact with it. The Proposed Action would not meaningfully increase vessel traffic in the BOA, and vessel traffic would have minimal to no impacts.

Therefore, the Proposed Action may affect but is not likely to adversely affect ESA-listed species in the BOA. No incidental take or harassment of marine mammals protected under the MMPA is expected. No impacts to environmentally sensitive habitats are expected, including designated critical habitat, essential fisheries habitat, habitat areas of particular concern, marine national monuments, national marine sanctuaries, and biologically important areas. NMFS concurred with these findings on 14 Oct 2021.

The State of Florida conducted a review of the Proposed Action pursuant to the Coastal Zone Management Act and provided their acceptance of the Coastal Zone Consistency Determination on 13 Jul 2021. The Proposed Action has no impact on wetlands or floodplains.

Infrastructure
CCSFS launch pad suitability, data collection and storage, booster and explosive materials storage capabilities, and security systems were reviewed to be suitable for the JFC Flight Tests. CCSFS power, potable water management, wastewater, and stormwater management resources are numerous and will be capable of absorbing any potential stressors from the JFC Flight Launch. The modification of the existing mobile service structure (MSS) at the launch pad will have no significant impact on infrastructure resources at CCSFS. Any ground disturbing activities are not expected to remove vegetation or earth as the MSS will be designed on existing man-made structures. All federal, state, local, and CCSFS-specific SOPs will be followed during MSS modification to ensure worker and environmental safety. The Proposed Action will not impact infrastructure resources in the CCSFS ROI.

Transportation
The transportation network at CCSFS will be capable of absorbing any potential stressors from the JFC Flight Launch. Fewer than 100 support personnel will be at each JFC Flight Test, and are required to follow all applicable federal, state, DOD and local traffic laws, rules, and regulations. The modification of the existing MSS at the launch pad will have no significant impact on infrastructure resources at CCSFS. Any ground-disturbing activities are not expected to remove vegetation or earth as the MSS will be designed on existing man-made structures and will not impact the CCSFS transportation network. All federal, state, local, and CCSFS-specific SOPs will be followed during MSS modification to ensure worker and environmental safety. The Proposed Action will not impact transportation resources in the CCSFS ROI.

Public Health and Safety
JFC launch activities will follow established protocols at CCSFS and will involve risks to safety that are similar to those previously analyzed in NEPA documents. CCSFS will implement protective measures to ensure risks to personnel and the general public from these operations are minimized.

The JFC mission personnel will follow the same health and safety procedures developed under existing plans at CCSFS. Federal, state, and local regulations as well as CCSFS SOPs will be followed for launch site preparation, booster handling, and all hazardous operations. CCSFS Missile Flight Analysis, Ground Safety, Range Safety, Ocean Clearance, Transportation Safety, and Fire and Crash Safety procedures will be followed to ensure the safety of workers and members of the public. CCSFS will issue NOTAMs and NTMs ahead of any JFC flight test, in accordance with range safety and FAA requirements. In accordance with EO 13045, Protection of Children from Environmental Health and Safety Risks, the proponents have determined that since the JFC flight tests will be conducted on DOD property and out in the open ocean, the JFC flight test has no environmental health and safety risks that may disproportionately affect children. The Proposed Action will not impact health and safety in the CCSFS ROI.

Hazardous Materials and Waste

All applicable local, state, and federal regulations, range operating procedures, and JFC-specific safety plans will be followed to prevent accidents that could release hazardous materials or waste into the local environment. The modification of the existing MSS at the launch pad will have no impact on management of hazardous materials and wastes at CCSFS. All federal, state, local, and CCSFS-specific SOPs will be followed during MSS modification to ensure worker and environmental safety. Although unlikely, should a release of hazardous materials or waste occur, CCSFS is capable of mitigating personnel and environmental health risks by following SOPs and utilizing on-site emergency response teams. The Proposed Action will not exceed CCSFS's ability to manage, store, and dispose of hazardous materials and waste. Major Mitigating Actions are not required for any of the noted resources at CCSFS. Minor mitigation activities are incorporated into the Proposed Action such that there are no significant impacts to any resource from the planned activities.

FINDING OF NO SIGNIFICANT IMPACT

Based on the facts and analyses contained in the attached PEA/OEA, conducted under the provision of NEPA, CEQ Regulations, and 32 CFR Part 989, the action affecting USSF property as stated in this FONSI, launches from CCSFS at Launch Complex 46 (LC-46), would not have a significant environmental impact, either by itself or cumulatively with other known projects. Accordingly, an Environmental Impact Statement is not required. This decision has been made after taking into account all submitted information and considering alternatives that will meet project requirements and that are within the legal authority of the USSF.

Approved by:

_____ _____

MICHAEL J. ZUHLSDORF, Colonel, USAF DATE
U.S. Space Force S4O - Deputy Chief, Mission Sustainment

(Engineering, Logistics, & Force Protection)