

**UNITED STATES SPACE FORCE
DRAFT FINDING OF NO SIGNIFICANT IMPACT**

**FALCON 9 CADENCE INCREASE AT VANDENBERG SPACE FORCE BASE, CALIFORNIA AND
OFFSHORE LANDING LOCATIONS**

This DRAFT Finding of No Significant Impact (FONSI) hereby incorporates by reference and attaches hereto the *Draft Supplemental Environmental Assessment (SEA), Falcon 9 Cadence Increase at Vandenberg Space Force Base (VSFB), California and Offshore Landing Locations*. The SEA considered all potential environmental impacts of the Proposed Action (Alternative 1) and the No Action Alternative, and identified management protective measures to avoid, prevent, or minimize environmental impacts.

PROPOSED ACTION (ALTERNATIVE 1)

The Proposed Action (Alternative 1) is to increase the Falcon 9 annual launch cadence at VSFB and include additional downrange offshore landing locations on the Pacific Ocean. Under the Proposed Action, SpaceX would launch the Falcon 9 from SLC-4E up to 36 times per year. Following each launch, SpaceX would perform a boost-back and landing of the first stage up to 36 times, either downrange on a droneship or on SLC-4W at VSFB. No more than 12 first stage landings would occur at SLC-4W per year. There would be no change to the Falcon 9 specifications or launch/landing facilities, which are currently conducted at VSFB. First stage processing protocols associated with the Proposed Action would also remain unchanged; however, they would increase in frequency to support 36 launches per year.

The purpose of the Proposed Action is to provide greater mission capability to the Department of Defense (DOD), NASA, and commercial customers by increasing Falcon 9 launch capacity. The Federal Aviation Administration (FAA) forecasts that commercial launch operations will increase in the United States (U.S.) from an all-time high in 2022 of 87 launches, to up to 186 launches by just 2026. The space consulting company, Euroconsult, estimates that worldwide, 2,500 satellites will be launched per year between 2022 and 2031. The Proposed Action is needed so SpaceX can continue implementing missions for the U.S. government while simultaneously meeting its ever-increasing commercial launch demands. Adding new northerly trajectories from VSFB is also needed to allow SpaceX to reach inclinations not currently available through existing trajectories.

The Proposed Action also fulfills Congress's grant of authority to the Secretary of Defense (SECDEF), pursuant to 10 U.S.C. § 2276(a), Commercial Space Launch Cooperation, that SECDEF is permitted to act to:

- (1) maximize the use of the capacity of the space transportation infrastructure of the [DOD] by the private sector in the [U.S.];
- (2) maximize the effectiveness and efficiency of the space transportation infrastructure of the [DOD];

- (3) reduce the cost of services provided by the [DOD] related to space transportation infrastructure at launch support facilities and space recovery support facilities;
- (4) encourage commercial space activities by enabling investment by covered entities in the space transportation infrastructure of the [DOD]; and
- (5) foster cooperation between the [DOD] and covered entities.

By increasing launch capacity at VAFB, the Proposed Action allows continued fulfillment of the National Space Policy guideline of promoting a “robust commercial space industry and strengthen U.S. leadership as the country of choice for conducting commercial space activities.”

ALTERNATIVES CONSIDERED

The Council on Environmental Quality’s regulation requires assessing reasonable alternatives. 40 Code of Federal Regulations [C.F.R.] § 1502.14. SpaceX evaluated its existing facilities at Cape Canaveral Space Force Station (CCSFS) and Kennedy Space Center (KSC) for reasonableness. SpaceX determined CCSFS cannot accommodate any additional activity because of the turn-around time required to check-out and refurbish infrastructure between launches and the required time for pre-launch operations. Therefore, the USSF eliminated CCSFS from further consideration. SpaceX leases Launch Complex (LC) 39A at KSC. SpaceX determined KSC cannot accommodate additional activity at LC-39A because of the overriding need and priority to support Falcon 9 launches, Falcon Heavy launches, and astronaut launches. Also, the required turn-around time to check-out and refurbish infrastructure between launches and the required time for pre-launch operations precludes additional launches. Therefore, the USSF eliminated KSC from further consideration.

No Action:

The Council on Environmental Quality’s regulation requires assessing reasonable alternatives. For this Proposed Action, the USSF considered the No Action Alternative (40 Code of Federal Regulations [C.F.R.] § 1502.14(c)). Under the No Action Alternative, the USSF would not authorize SpaceX to increase Falcon 9 operations at VAFB and the Federal Aviation Administration would not issue a license modification for the additional Falcon 9 launches and landings at SLC 4 and on the Pacific Ocean. SpaceX would continue to conduct Falcon 9 operations as authorized by its current license with an annual cadence of 12 launches. The No Action Alternative would not meet the Purpose and Need.

SUMMARY OF FINDINGS

The attached SEA analyzed the potential environmental consequences of activities associated with the Proposed Action and the No Action Alternative. Based on the analysis, neither the Proposed Action nor the No Action Alternative would result in individual or cumulatively significant impacts to any resources. Specific environmental resources with the potential for environmental consequences include: air quality, climate, noise, biological resources, water

resources, cultural resources, coastal zone management, Department of Transportation Section 4(f) properties, utilities, socioeconomics, and transportation. The No Action Alternative would result in impacts less than the Proposed Action; however, it would not meet the Proposed Action’s purpose and need. Environmental protection measures that are incorporated into the Proposed Action (identified as required in the SEA) would be implemented to avoid and/or minimize the potential adverse impacts. Discretionary environmental protection measures may further reduce potential impacts of the Proposed Action.

PUBLIC REVIEW AND COMMENT

The Draft SEA and FONSI were made available for public review and comment for 30 days following the publication of the Notice of Availability (NOA) in the *Lompoc Record* and *Santa Maria Times*. The Draft SEA and FONSI were also distributed per the current Space Launch Delta 30 (SLD 30) NEPA Distribution List, including the State Clearinghouse. The Final SEA will include an Appendix J (Notice of Availability for Public Review, Proof of Delivery/Publication, Comments Received on Final Draft, and Responses) that will include a copy of the NOA, proofs of publication, proof of library deliveries, NEPA distribution list, public comments, and SLD 30 responses.

FINDING OF NO SIGNIFICANT IMPACT

Based on my review of the facts and analyses contained in the attached SEA, conducted per the NEPA, 42 U.S. Code 4321 et seq., implementing Council on Environmental Quality Regulations, 40 C.F.R. Parts 1500–1508, and 32 C.F.R. Part 989, *Environmental Impact Analysis Process*, I conclude that implementing the Proposed Action (Preferred Alternative) will not have a significant effect on the human or natural environment. Therefore, further analysis with an Environmental Impact Statement is not required and a FONSI is appropriate. I made this decision after considering all submitted information, including reviewing public and agency comments submitted during the 30-day public comment period, and considering a full range of reasonable alternatives to meet project requirements and are within the legal authority of the U.S. Air Force (USAF).

PAUL G. FILCEK, Col, USAF
Chief, Space Force Mission Sustainment
(Engineering, Logistics, & Force Protection)

Date

Attachment: Draft Supplemental Environmental Assessment Falcon 9 Cadence Increase at Vandenberg Space Force Base, California and Offshore Landing Locations