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DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Parts 415, 417, 431, and 435

Statement of Policy on Waiving Ground Safety Regulations at Cape Canaveral Air Force Station, Vandenberg Air Force Base, Wallops Flight Facility, and Kennedy Space Center

AGENCY: Federal Aviation Administration (FAA), Department of Transportation (DOT).

ACTION: Policy statement.

SUMMARY: This action establishes the FAA's policy applicable to waivers of FAA ground safety requirements for licensed commercial launch and reentry activities at certain Federal ranges. The Federal ranges that currently meet the criteria for application of this policy are: Cape Canaveral Air Force Station, Vandenberg Air Force Base, Wallops Flight Facility, and Kennedy Space Center.

DATES: The policy described herein was effective November 3, 2020.

FOR FURTHER INFORMATION CONTACT: For additional information concerning this action, contact Randy Repcheck, Acting Executive Director, Office of Operational Safety, via letter: 800 Independence Ave SW, Washington, DC 20591; via email: 9-AST-Inquiries@faa.gov; via phone: 202-267-7793.

SUPPLEMENTARY INFORMATION: The Commercial Space Launch Act of 1984, as amended and codified at 51 U.S.C. 50901-50923, authorizes the Department of Transportation, and the FAA through delegation, to oversee, license, and regulate commercial launch and reentry activities, and the operation of launch and reentry sites as carried out by U.S. citizens or within the United States. Section 50905(b)(3) allows the Secretary to waive a requirement, including the requirement to obtain a license, for an individual applicant if the Secretary decides that the waiver is in the public interest and will not jeopardize the public health and safety, safety of property, and national security and foreign policy interests of the United States.¹ This policy statement provides public notice of the FAA's approach to evaluating waiver applications under 51 U.S.C. 50905(b)(3) with respect to ground safety requirements at Federal launch ranges. It does not have the force and effect of law and is not meant to bind the public in any way. It is intended only to provide clarity to the public regarding existing requirements under the law and agency policies.

¹The Secretary may not grant a waiver under this section that would permit the launch or reentry of a launch vehicle or a reentry vehicle without a license or permit if a human being will be on board.

I. Background

The FAA has worked in partnership for launch safety with the U.S. Air Force (AF) since 2001 and the National Aeronautics and Space Administration (NASA) since 2007. An objective of these interagency partnerships has been to maintain common safety standards and practices for launch across the Federal Government. These agencies formed the Common Standards Working Group (CSWG), which is tri-chaired by FAA, AF, and NASA. The CSWG is a forum to maintain common safety standards and practices between the agencies for both commercial and Government launch activities. The CSWG is comprised of range safety personnel from Cape Canaveral Air Force Station (CCAFS), Vandenberg Air Force Base (VAFB), Wallops Flight Facility (WFF), and Kennedy Space Center (KSC).

In 2006, the FAA issued a final rule that established the launch site safety assessment (LSSA) process.² The LSSA is an FAA assessment of a Federal launch range to determine if the range requirements and practices satisfy FAA safety regulations. Subpart C of 14 CFR part 415 describes how the FAA reviews the safety of licensed launches from Federal launch ranges. Subpart C recognizes that a launch operator may use an LSSA to demonstrate compliance with FAA safety requirements.³

The FAA has completed LSSAs for CCAFS, VAFB, WFF, and it is in the process of finalizing an LSSA for KSC. In the initial assessments for CCAFS, VAFB, and WFF, the FAA did not find any substantial differences between the requirements and practices of these Federal ranges and FAA regulations because 14 CFR part 417 was derived largely from existing Federal launch range safety requirements. Similarly, in developing the LSSA for KSC, the FAA likewise concluded that KSC's requirements and practices were not substantially different from FAA ground safety regulations. The FAA has maintained and updated the initial assessments for CCAFS, VAFB, and WFF to account for changes in processes at these Federal ranges and in

FAA regulations. Where the range's requirement or practice did not meet FAA regulations, the FAA either made a determination that the range's requirement provides for an equivalent level of safety to the FAA's requirement, waived the FAA requirement, or required the operator to comply with the FAA requirement. In addition to the LSSA process, the FAA, through its participation in the CSWG, has gained significant insight into the ground safety requirements and practices for CCAFS, VAFB, WFF, and KSC.

The 2015 Commercial Space Launch Competitiveness Act directed the Secretary of Transportation to consult with the Secretary of Defense, Administrator of NASA, and other agencies, as appropriate, to identify and evaluate requirements imposed on commercial space launch and reentry operators to protect the public health and safety, safety of property, national security interests, and foreign policy interests of the United States.⁴ It also directed the Secretary of Transportation to resolve any inconsistencies and remove any outmoded or duplicative Federal requirements or approvals applicable to any commercial launch of a launch vehicle or commercial reentry of a reentry vehicle. The FAA has been working with AF and NASA to fulfill this mandate.

² 71 FR 50508 (Aug. 25, 2006).

³ 14 CFR 415.31(a).

⁴ U.S. Commercial Space Launch Competitiveness Act, Pub. L. 114-90, sec. 113(c)(1), 129 Stat. 704, 714 (2015).

In the John S. McCain National Defense Authorization Act for Fiscal Year 2019 (Pub. L. 115-232, Sec. 1606, 132 Stat. 2107), Congress directed that the Secretary of Defense may not impose any requirement on a licensee or transferee that is duplicative of, or overlaps in intent with, any requirement imposed by the Secretary of Transportation under Title 51.⁵

II. Discussion of the Policy

A. Ground safety under part 417 for expendable launch vehicles

Section 415.31(a) states, in relevant part, that the FAA will issue a safety approval to a license applicant proposing to launch from a Federal launch range if the applicant has contracted with the Federal launch range for the provision of safety-related launch services and property, provided the LSSA shows that the range's launch services and launch property satisfy part 417.

Subpart E of part 417 contains the FAA's public safety requirements that apply to ground safety at launch sites in the United States, including Federal launch ranges. Under § 417.402(b), the FAA will accept a launch operator's proposed ground safety process for an expendable launch vehicle from a Federal launch range without further demonstration of compliance to the FAA if:

- (1) a launch operator has contracted with a Federal launch range for the provision of ground safety process; and
- (2) the FAA has assessed the Federal launch range through its launch site safety assessment and found that the Federal launch range's ground safety process satisfies the requirements of subpart E.

In such cases, the FAA treats the Federal launch range's process as that of a launch operator.

Generally, under subpart E, the FAA requires an operator to conduct a ground safety analysis for launch vehicle hardware, ground hardware including launch site and ground support equipment, launch processing, and post-launch operations. This analysis must identify each potential hazard, associated cause, and hazard control that a launch operator must establish and maintain to keep each identified hazard from affecting the public. An operator must identify and control hazards that extend beyond the launch location under the control of a launch operator, including hazards arising from associated payloads. These hazards include, but are not limited to, blast overpressure and fragmentation resulting from an explosion, fire and deflagration, sudden release of a hazardous material, and inadvertent ignition of a propulsive launch vehicle payload, stage, or motor. The FAA requires an operator to institute hazard controls, which may include safety clear zones, designated hazard areas, or other means of protecting the public from hazardous operations. In addition, an operator also has to identify and control launch location hazards, which are hazards that stay within the confines of the location under the control of a launch operator.

⁵The Secretary of the Air Force may waive this limitation when necessary to avoid negative consequences for the national security space program after notifying the Secretary of Transportation.

It is against these subpart E requirements that the FAA assesses a Federal range's process to determine if the range's process satisfies FAA requirements. If it does not, the FAA addresses the difference by issuing equivalent level of safety determinations or waivers, or -- if necessary -- requiring compliance with the FAA's requirements.

B. Ground safety under part 431 for reusable launch vehicles

Section 431.35(c) requires, in part, that an applicant demonstrate that the launch of a reusable launch vehicle complies with acceptable risk criteria by employing a system safety process to identify the hazards and assess the risks to public health and safety and the safety of property associated with the mission. The FAA requires this system safety process to identify and assess hazards associated with both licensed ground and flight activities. This system safety process must identify the same types of ground safety hazards and related ground safety hazard controls as detailed above with regard to part 417, subpart E; however, there is no formally prescribed LSSA process under part 431. Therefore, operators must meet all of the safety requirements in part 431, regardless of whether the FAA has completed an LSSA for the relevant Federal launch range or not.

C. Waiver

As noted, Congress has directed Federal agencies involved in commercial launches to eliminate duplicative requirements. Accordingly, it is the FAA's policy to use its authority in 51 U.S.C. 50905(b)(3), as delegated by the Secretary, to waive ground safety requirements for launches conducted from certain Federal ranges, when appropriate, if an operator has contracted with the Federal range for the provision of the ground safety process. Specifically, the FAA generally will, upon the applicant's showing, waive the requirements in §§ 415.31(a) and 417.402(b) to the extent that those provisions require an LSSA to verify that a Federal range's

ground safety process satisfies the requirements of subpart E of part 417. Additionally, the FAA generally will, upon the applicant's showing, grant a partial waiver of § 431.35(c) to the extent that section requires a system safety process for the ground portion of launch at these Federal ranges.⁶ Although the FAA sets forth this general policy for evaluating and issuing waivers, the FAA reserves its discretion to deny or withdraw a waiver if, under the particular circumstances, the FAA finds that it is not in the public interest or will jeopardize the public health and safety, safety of property, or national security and foreign policy interests of the United States.

The FAA finds that this policy is in the public interest because it reduces duplicative requirements imposed by Federal authorities on commercial space operators. This policy responds to repeated Congressional direction to remove overlapping requirements. Removing duplicative Federal government requirements increases efficiency in launch application processing and approval for both Government and commercial stakeholders. Removing duplicative requirements will also result in a clear delineation of responsibility between Federal actors with regard to oversight over different portions of launch, which is expected to reduce confusion and improve safety of the public.

⁶This partial waiver of § 431.35(c) also applies to applications for a reentry vehicle other than a reusable launch vehicle under part 435, consistent with § 435.33. The section covers both ground safety and flight safety requirements. This waiver policy will extend only to the requirements for ground safety.

The FAA further finds that this policy would not jeopardize public health and safety, safety of property, or the national security and foreign policy interests of the United States. This policy will apply only to Federal ranges: (1) with which the FAA has a long-term working relationship through the CSWG, and (2) that have a cadence of both commercial and government launches that facilitates highly-developed and well-understood processes and requirements. To date, those ranges include: CCAFS, VAFB, WFF, and KSC. As mentioned previously, the FAA has been working with AF and NASA launch personnel through the CSWG since 2001 and 2007, respectively. The longevity of this working relationship has allowed for insight into the requirements and practices at these ranges sufficient to provide FAA confidence that these ranges will ensure public safety during ground operations. The FAA has found that these Federal ranges have processes, procedures, and requirements that account for hazards to public safety associated with launch vehicle hardware, ground hardware including launch site and ground support equipment, launch processing, and post-launch operations. Constant dialogue through the CSWG will keep the FAA updated on requirements and practices at these ranges and will allow the FAA to intervene if necessary. Furthermore, the cadence of launches has provided these Federal ranges with unparalleled experience with both commercial and government launches. This experience informs the requirements at these ranges and provides the FAA further confidence that the requirements and processes at these ranges satisfy the FAA's statutory mandate to protect the public. In summary, the FAA has found that satisfaction of the criteria above has established a level of confidence with regard to the ranges' ground safety processes, procedures, and requirements that it is an appropriate basis on which to waive these FAA requirements.

Under this policy, the FAA will not continue to update LSSAs for ground safety for these launch sites; rather, the FAA will continue to work with AF and NASA through the CSWG to ensure consistency of requirements for ground safety at Federal and non-Federal launch ranges.

The FAA retains its authority, however, to deny or withdraw any waiver, or to withdraw this policy, if it determines that public health and safety, safety of property, or national security and foreign policy interests of the United States would be jeopardized.

III. Determination of Maximum Probable Loss

The FAA determines the maximum probable loss (MPL) from covered claims by a third party for bodily injury or property damage, and the United States, its agencies, and its contractors and subcontractors for covered property damage or loss, resulting from licensed activity. The MPL determination forms the basis for financial responsibility requirements issued in a license order. The FAA calculates the MPL taking into account the hazards associated with the licensed activity. The MPL amount for both the ground and flight portions of a licensed activity is detailed in the license orders.

The FAA's process for determining MPL will not change as a result of this policy statement. The FAA will continue to calculate MPL for both ground and flight portions of launch at CCAFS, VAFB, WFF, and KSC. Furthermore, the FAA does not expect this policy to impact the MPL amounts for licensed activities at these Federal ranges.

IV. Implementation

The FAA currently requires an applicant seeking to conduct a launch from a Federal range to show evidence of an agreement with the Federal range in its license application. 14 CFR 417.13(a). This agreement must provide for access to and use of property and services required to support a licensed launch from that facility.

An applicant seeking a waiver consistent with this policy statement should include in its application the following:

“[INSERT COMPANY NAME] is seeking a waiver, consistent with the policy statement published at [INSERT FEDERAL REGISTER CITATION], to operate from [INSERT FEDERAL LAUNCH RANGE]. [INSERT COMPANY NAME] will utilize the ground safety processes and services at this location, and comply with any ground safety requirements imposed by the agreement dated [INSERT DATE OF AGREEMENT WITH FEDERAL RANGE].”

The applicant should also provide the FAA its agreement with the Federal range in accordance with regulations.

The contents of this document do not have the force and effect of law and are not meant to bind the public in any way. This document is intended only to provide clarity to the public regarding existing requirements under the law or clarify agency policies.