# MEMORANDUM OF AGREEMENT BETWEEN THE DEPARTMENT OF THE AIR FORCE AND THE FEDERAL AVIATION ADMINISTRATION FOR LAUNCH AND REENTRY ACTIVITY

DEPARTMENT OF THE AIR FORCE RANGES AND INSTALLATIONS AGREEMENT NUMBER: FAA-DAF-SLR-2021.01

# 1. PURPOSE:

This Memorandum of Agreement (MOA) explains the roles and responsibilities of the Department of the Air Force (DAF) and the Federal Aviation Administration (FAA) for licensed launch<sup>1</sup> and reentry<sup>2</sup> activity on (DAF) ranges and installations, specifically the Eastern and Western Ranges - Cape Canaveral Space Force Station (CCSFS) and Vandenberg Space Force Base (VSFB), respectively. When referred to collectively, the DAF and the FAA are referred to as the "Parties."

# 2. AUTHORITY:

- 2.1. The Department of Transportation (DOT) is authorized to enter this MOA in the exercise of its responsibility to license and regulate commercial space transportation activities established by Title 51 of United States Code (51 U.S.C.), Chapter 509. The Office of Commercial Space Transportation (AST) within the FAA acts on behalf of the Secretary of Transportation in carrying out DOT's statutory responsibilities regarding commercial launch and reentry.
- 2.2. The DAF enters this Agreement in the exercise of its responsibility to conduct the affairs of the DAF in support of commercial launch and reentry activity as authorized by 51 U.S.C. § 50913(b)(2) Acquiring United States Government property and services, 10 U.S.C. § 2276 Commercial Space Launch Cooperation, and Department of Defense Instruction (DoDI) 3100.12-Space Support. In addition, as the manager and operator of the space launch ranges at CCSFS, Florida, and VSFB, California (both United States Space Force (USSF)-managed installations), the DAF has authority over operations that occur on those launch ranges and military installations.
- 2.3. The FAA is entering into this Agreement under the authority of 49 U.S.C. § 106(1)(6) and 106(m). Title 49 U.S.C. § 106(m) authorizes the FAA Administrator to use and accept services, equipment, personnel, and facilities of another Federal agency, with or without reimbursement. Pursuant to the same authority, the DAF, when authorized by the Secretary of the Air Force, may transfer to or receive the same from FAA with or without reimbursement. Currently, the Parties do not expect any reimbursement of funds. If funds are to be exchanged, the Parties will execute

<sup>&</sup>lt;sup>1</sup> Title 14 of the Code of Federal Regulations (14 CFR) § 401.7 provides: Launch means to place or try to place a launch vehicle or reentry vehicle and any payload or human being from Earth in a suborbital trajectory, in Earth orbit in outer space, or otherwise in outer space, including activities involved in the preparation of a launch vehicle or payload for launch, when those activities take place at a launch site in the United States.

<sup>&</sup>lt;sup>2</sup> 14 CFR § 401.7 provides: Reenter; reentry means to return or attempt to return, purposefully, a reentry vehicle and its payload or human being, if any, from Earth orbit or from outer space to Earth.

a separate agreement pursuant to 31 U.S.C. § 1535, the Economy Act. Neither party may augment Congressional appropriations of the other without statutory authority.

2.4. Consistent with the consultation requirements of 51 U.S.C. § 50918, Section 1606 of the FY19 National Defense Authorization Act, Improvements to Commercial Space Launch Operations, prohibits the Secretary of Defense from imposing "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 [51 U.S.C. Chapter 509]." The Secretary of the Air Force may waive this limitation if "necessary to avoid negative consequences for the national security space program" and "the Secretary notifies the Secretary of Transportation of such determination before making such a waiver."

### 3. SCOPE:

- 3.1. This agreement applies to launch and reentry activity licensed and regulated by the FAA Office of Commercial Space Transportation in accordance with authorities provided by 51 U.S.C. Subtitle V Programs Targeting Commercial Opportunities.
- 3.2. This MOA applies to activity that occurs on, originates from, or returns to the DAF CCSFS and VSFB. Upon modification of this MOA, either party may add other DAF ranges and installations on which space launch and reentry operations occur, pursuant to Section 13 of this MOA.
- 3.3. This MOA replaces the MOA between the DAF and the FAA on Safety for Space Transportation and Range Activities, 5 September 2014, and any predecessor agreements on the same subject. This MOA embodies the entire agreement between the Parties regarding the MOA's subject matter.

# 4. ROLES AND RESPONSIBILITIES:

- 4.1. The DAF will support commercial launch and reentry activity on USSF ranges and installations. This will include executing ground safety supervisory activity to ensure risks from one operation do not unnecessarily impact the operations of others. Additionally, the DAF will actively participate in license consultation to ensure the preservation of DAF national security interests.
- 4.2. The Parties will implement a non-duplicative, single approval process for each licensed activity on a range and/or from/to an installation as identified in paragraph 3.2 of this MOA.
  - 4.2.1 The FAA will accept DAF safety processes, analysis, and products performed at the request of the launch and reentry provider, as long as the FAA determines that the launch or reentry services or property provided satisfy FAA regulations.
  - 4.2.2. Consistent with the FAA Ground Safety Policy, 3 November 2020, the FAA generally will, upon receiving an application from a prospective licensee, waive its ground safety regulations at DAF facilities that meet FAA criteria unless issuing such a waiver would jeopardize public health and safety, the safety of property, or the national security or foreign policy interests of the U.S., or when issuing the waiver would not be in the public interest.

- 4.2.3. The DAF will accept FAA decisions/approvals for licensed missions.
- 4.2.4. The DAF will provide ground safety services and oversight for activity on a USSF installation consistent with the FAA Ground Safety Policy, 3 November 2020, and 14 CFR § 450.179(b). The DAF will ensure its ground safety requirements and process protect the public health and safety, safety of property, and national security and foreign policy interests of the U.S. The DAF will not impose requirements on operators for the flight portion of launches/reentries that are duplicative with those required for FAA licensing unless they are deemed necessary to avoid negative consequences for the national security space program and unless the Secretary of the Air Force through the relevant installation commander notifies the Secretary of Transportation through the FAA Office of Commercial Space Transportation in accordance with Section 1606 Improvements to Commercial Space Launch Operations, FY19 National Defense Authorization Act, Pub. L. No. 115-232.
- 4.3. Installation Responsibilities: The DAF will synchronize activity on USSF ranges and installations to de-conflict overlapping activities, make decisions for the allocation of DAF resources, and ensure protection of people and resources on the installation. The DAF, through the relevant USSF installation, will ensure the safe siting of explosives, coordinate frequency management, control public access to the installation to include area protection for the installation's land area, coordinate launch and reentry operations to prevent unsafe interference, and coordinate installation activities as necessary with other Federal, State, and local government agencies. The DAF and the FAA will collaborate on environmental reviews for USSF installation activity to ensure the government's response to requests is prompt and consistent. The DAF will limit actions to establish hazard areas on USSF ranges and installations in support of any FAA regulated activity to the minimum area essential to protect the installation. The DAF will develop hazard areas on USSF ranges and installations in coordination with the FAA.

### 5. OBJECTIVES:

- 5.1. Minimize the burden on the U.S. commercial space sector by eliminating duplicative processes and approvals for commercial space activity.
- 5.2. Maintain common safety standards, to the extent practicable, and recommended practices to ensure a coherent and consistent government approach exists for launch and reentry activity.
- 5.3. Consult with each other before responding to requests from a launch or reentry operator for relief from any launch or reentry safety requirements.

# 6. COMMON REQUIREMENTS FOR LAUNCH AND REENTRY

6.1. The Parties will ensure commonality of launch and reentry requirements and processes for licensed and non-licensed operations, to the extent practicable through a Common Standards Working Group, Range Commander's Council, or other appropriate engagement for launch and reentry activity.

- 6.2. The Parties will create a process to facilitate mutual access to relevant safety-related data for licensed and non-licensed operations, including information required to protect people and assets on the USSF installation potentially impacted by FAA licensed activities.
- 6.3. The Parties will coordinate prior to publication of FAA advisory circulars on ground safety, launch, or reentry or DAF launch safety publications. The Parties will coordinate on implementation of new or modified acceptable means of compliance for a proposed licensed activity of a common launch vehicle on a USSF installation.
- 6.4. Services performed by DAF at the request of a commercial launch and reentry provider will be performed to DAF standards. DAF, through the mutual collaboration efforts discussed above, will ensure FAA has the necessary amount of access to the processes and methods used to perform the requested services.
- 6.5. For licensed launches, DAF accepts the FAA definition of "public" in 14 CFR § 401.7 and will perform analysis and prepare products in accordance with the FAA's definition for FAA-approved activity.<sup>3</sup>

# 7. LICENSED LAUNCH AND REENTRY DECISION

- 7.1. The FAA process is the single process used by the government to regulate licensed launch and reentry operations. Except as identified in use agreements, there is no requirement for commercial launch and reentry providers to use DAF flight safety requirements or services for FAA-licensed launch and reentries on USSF ranges and/or from/to USSF installations. The commercial launch and reentry provider may request services in appropriate support agreements or in accordance with procedures prescribed by the relevant installation Commander.
- 7.2. Department of Defense consultation during the FAA's licensing process in accordance with 51 U.S.C. § 50918 will be used to assert national security interests, to include interests resulting from unique situations resulting from operations on military installations. Consultation is a continuous process. Should the DAF become aware of an issue concerning the licensed operations at any time, the DAF will bring it to the attention of the commercial launch and reentry provider and the FAA Office of Commercial Space Transportation.
  - 7.2.1. The DAF will consult with the commercial launch entry provider and the FAA Office of Space Transportation in a timely manner and will provide sufficient information for the Department of Defense to provide a vetted input. Recognizing the licensing process occurs well in advance of a launch or reentry activity, the Department of Defense will provide input at the time of request. If conditions change during the duration of the licensed activity that could affect the respective roles of either Party, the relevant party will notify the impacted Party.
- 7.3. FAA safety inspectors will assess launch provider compliance during critical public safety related procedures and activities as appropriate to ensure proper protection of the public health

<sup>3</sup> 14 CFR § 401.7 provides: "Public means, for a particular licensed or permitted launch or reentry, people that are not involved in supporting the launch or reentry and includes those people who may be located within the launch or reentry site, such as visitors, individuals providing goods or services not related to launch or reentry processing or flight, and any other operator and its personnel."

and safety, safety of property, national security and foreign policy interests of the U.S. and satisfaction of licensing conditions.

7.4. For special activities the FAA regulates that occur from, or impacting, USSF launch ranges, such as Experimental Permits and Human Space Flight, the Parties will cooperate closely with each other.

### 8. CRITICAL ASSET PROTECTION

To protect critical assets on USSF ranges and installations, the DAF will perform probability of impact calculations for property at risk from commercial space activity. The DAF will conduct this activity in coordination with commercial launch and reentry providers.

### 9. PERSONNEL

Each Party is responsible for all costs of its own personnel, including pay and benefits, support, and travel. Each Party is responsible for supervision and management of its personnel.

### 10. REIMBURSEMENT

Nothing in this Agreement obligates funds of either party.

# 11. MISHAP INVESTIGATION

The Parties agree to cooperate and exchange information on mishaps of mutual interest in accordance with the "Memorandum of Understanding between the National Transportation Safety Board, and Department of the Air Force and Federal Aviation Administration Regarding Space Launch Accidents," 7 September 2004, or its successor.

### 12. IMPLEMENTATION

12.1. The Parties may use this MOA as a basis for establishing implementing procedures to carry out their respective responsibilities for commercial space transportation and range activities. The primary point of contact (POC) for the DAF shall be the Space Operations Command Director of Space and Cyber Operations (phone number: 719-554-3216) and the alternate POC for the DAF shall be the Chief, Space Enterprise Operations Division (phone number: 719-554-3500). The Parties anticipate that this responsibility will transition following the stand-up of Space Systems Command. If the transition in responsibility occurs, the DAF will identify the appropriate DAF POC and inform the FAA. The primary POC for the FAA shall be the Associate Administrator for Commercial Space Transportation (phone number: 202-267-7793) and the alternate POC for the FAA shall be the Director of the Safety Authorization Division (phone number: 202-267-7793). Together, the POCs shall be mutually responsible for administering this MOA so as to ensure its successful execution. All correspondence to be sent and notices to be given pursuant to this MOA will be addressed, if to the DAF, to Brigadier General Douglas Schiess, Director of Space and Cyber Operations, and, if to the FAA to Mr. Wayne Monteith, Associate Administrator for Commercial Space Transportation, or as may from time to time otherwise be directed by the Parties.

12.2. Nothing herein is intended to conflict with current directives, instructions or policies of either Party. If any terms of this Agreement are found to be inconsistent with existing

regulations of either of the Parties, and the regulation has not been waived by the proper authority, then the inconsistent term will be invalid, but all remaining terms and conditions will be unaffected by such inconsistency.

12.3 Any disputes relating to this MOA will, subject to any applicable law, Executive Order, Directive, or Instruction, be resolved by consultation between the Parties.

### 13. MODIFICATION AND TERMINATION

- 13.1. This MOA takes effect beginning on the day after the last Party signs and expires ten years from the date of the last signature. The assigned points of contact will review this MOA every three years in its entirety.
- 13.2. This MOA may only be modified by the written agreement of the Parties, duly signed by their authorized representatives. Either Party may request modifications at any time.
- 13.3. This MOA may be terminated by either Party by giving at least 60 days written notice to the other Party. The MOA may also be terminated at any time upon the mutual written consent of the Parties.
- 13.4. This Agreement is not transferable except with the written consent of the Parties.

For the DAF

John P Rosh

Secretary of the Air Force (Acting)

DATE: 6/15/202 le

For the FAA

Steve Dickson

Administrator of the

Federal Aviation Administration

DATE: 5/14/2021