Commercial Space Transportation License

License Number: LLS 13-084

SPACE EXPLORATION TECHNOLOGIES

is authorized, subject to the provisions of 51 USC Subtitle V, ch. 509, and the orders, rules, and regulations issued under it, to conduct a launch.

General. Space Exploration Technologies is authorized to conduct:

(i) A flight of a Falcon 9 Version 1.1 launch vehicle from SLC-4E at Vandenberg Air Force Base (VAFB), transporting the following payloads to a near-polar orbit:

a. Cassiope Satellite as the primary payload
b. CUSat satellite, DANDE satellite, and three POPACS CubeSats, as secondary payloads; and

(ii) pre-flight ground operations at VAFB associated with the flight, as identified in paragraph (i) of this license, of the Falcon 9 Version 1.1 launch vehicle.

This license is granted subject to the terms, conditions, and limitations set forth in licensing orders A, B, C, and D and any subsequent orders issued by the Office of Commercial Space Transportation.

The licensee shall at all times conduct its operations in accordance with the regulations prescribed by the Office of Commercial Space Transportation for the activities authorized by this license.

US Department
of Transportation
Federal Aviation Administration

800 Independence Ave., S.W.
Washington, D.C. 20591

Issued On: **August 2, 2013**

Effective On: **August 2, 2013**

Kenneth Wong

Manager, Licensing and Evaluation Division

OFFICE OF
COMMERCIAL SPACE TRANSPORTATION
LICENSE ORDER REGARDING

LAUNCH

AUTHORIZED BY LICENSE NO. LLS 13-084
ISSUED TO

SPACE EXPLORATION TECHNOLOGIES

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1. Authority: This Order is issued to Space Exploration Technologies, referred to as SpaceX, under 51 U.S.C. subtitle V, chapter 509, and 14 C.F.R. Ch. III.

2. Purpose: This Order modifies License No. LLS 13-084 issued concurrently by the Federal Aviation Administration's Office of Commercial Space Transportation, authorizing SpaceX to conduct the launch of a Falcon 9 Version 1.1 launch vehicle; and prescribes as conditions to License No. LLS 13-084 certain requirements applicable to the launch.

3. Definitions: For purposes of License No. LLS 13-084 and any orders issued by the FAA pertaining to activities covered by License No. LLS 13-084:

   (i) "Flight" shall mean the flight of a Falcon 9 Version 1.1 launch vehicle commencing with ignition of the first stage from Vandenberg Air Force Base (VAFB) on a launch azimuth of 175.6 degrees and transporting primary and secondary payload satellites to a near-polar orbit. After stage separation, an experimental burn with three Falcon 9 first stage engines may be made to reduce the Stage 1 entry velocity just prior to entry, followed by a second experimental burn with one engine to impact the water with minimal velocity. A flight is concluded upon SpaceX's last exercise of control over the Falcon 9 vehicle, including the safing of Falcon 9 Version 1.1 vehicle stages or components that reach Earth orbit following separation of the payloads.

   (ii) "Pre-flight ground operations" shall mean SpaceX's pre-flight preparations of the Falcon 9 Version 1.1 vehicle at VAFB, beginning with the arrival of the Falcon 9 Version 1.1 vehicle at VAFB.

4. License Term: License No. LLS 13-084 terminates upon completion of the launch authorized by the license, or on December 31, 2014, whichever occurs first.

OFFICE OF COMMERCIAL SPACE TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

By: Kenneth Wong

Kenneth Wong, Manager
Licensing and Evaluation Division

Issued On: August 2, 2013
Effective On: August 2, 2013

OFFICE OF
COMMERCIAL SPACE TRANSPORTATION
LICENSE ORDER REGARDING

FLIGHT

AUTHORIZED BY LICENSE NO. LLS 13-084
ISSUED TO

SPACE EXPLORATION TECHNOLOGIES

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1. Authority: This Order is issued to Space Exploration Technologies, referred to as SpaceX, under 51 U.S.C. subtitle V, chapter 509, and 14 C.F.R. Ch. III.

2. Purpose: This Order modifies License No. LLS 13-084 issued concurrently by the Federal Aviation Administration's Office of Commercial Space Transportation, authorizing SpaceX to conduct the launch of a Falcon 9 Version 1.1 launch vehicle; and prescribes as conditions to License No. LLS 13-084 certain requirements applicable to the authorization to conduct the flight of a launch vehicle.

3. Authorization: SpaceX is authorized to conduct one flight of a launch vehicle:

   (a) Using a Falcon 9 Version 1.1 launch vehicle;

   (b) From Vandenberg Air Force Base, California;

   (c) On an azimuth of 175.6 degrees;

   (d) Transporting to a near-polar orbit primary and secondary payload satellites;

   (e) According to the launch vehicle, launch vehicle systems, and safety management program represented in the SpaceX application as of the date of this order, and any amendments to the license application approved by the FAA, in writing.

OFFICE OF COMMERCIAL SPACE TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

By: Kenneth Wong

Kenneth Wong, Manager
Licensing and Evaluation Division

Issued On: August 2, 2013
Effective On: August 2, 2013

License Order No. LLS 13-084C

OFFICE OF
COMMERCIAL SPACE TRANSPORTATION
LICENSE ORDER REGARDING

PRE-FLIGHT GROUND OPERATIONS

AUTHORIZED BY LICENSE NO. LLS 13-084
ISSUED TO

SPACE EXPLORATION TECHNOLOGIES

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1. Authority: This Order is issued to Space Exploration Technologies, referred to as SpaceX, under 51 U.S.C. subtitle V, chapter 509, and 14 C.F.R. Ch. III.

2. Purpose: This Order modifies License No. LLS 13-084 issued concurrently by the Federal Aviation Administration's Office of Commercial Space Transportation, authorizing SpaceX to conduct the launch of a Falcon 9 Version 1.1 launch vehicle; and prescribes as conditions to License No. LLS 13-084 certain requirements applicable to the authorization to conduct pre-flight ground operations.

3. Authorization: SpaceX is authorized to conduct pre-flight ground operations at VAFB associated with the launch of primary and secondary payload satellites on a Falcon 9 Version 1.1 launch vehicle.

OFFICE OF COMMERCIAL SPACE TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

By: Kenneth Wong

Kenneth Wong, Manager
Licensing and Evaluation Division

Issued On: August 2, 2013
Effective On: August 2, 2013

OFFICE OF
COMMERCIAL SPACE TRANSPORTATION
LICENSE ORDER REGARDING

FINANCIAL RESPONSIBILITY REQUIREMENTS

Under License No. LLS 13-084
Issued to

SPACE EXPLORATION TECHNOLOGIES

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1. Authority: This Order is issued to Space Exploration Technologies, referred to as SpaceX, under 51 U.S.C. Subtitle V, chapter 509, and 14 C.F.R. part 440.

2. Purpose: This Order modifies License No. LLS 13-084 issued concurrently by the Federal Aviation Administration's Office of Commercial Space Transportation, by prescribing financial responsibility requirements for licensed launch activities in accordance with 14 C.F.R. part 440.

3. Definitions: For purposes of this Order, "licensed launch activities" shall mean activities authorized by the License. Other terms used in this Order are defined in accordance with 14 C.F.R. § 440.3.

4. Liability Insurance: SpaceX shall maintain a policy or policies of liability insurance (or otherwise demonstrate financial responsibility) in accordance with 14 C.F.R. § 440.9(b) in the amount of:

   (a) Ninety Million Dollars ($90,000,000) for covered claims resulting from flight of the Falcon 9 Version 1.1 launch vehicle from Vandenberg Air Force Base (VAFB).

   (b) Nine Million Dollars ($9,000,000) for covered claims resulting from pre-flight operations performed at VAFB.

5. Government Property Insurance: SpaceX shall maintain a policy or policies of insurance (or otherwise demonstrate financial responsibility) in accordance with 14 C.F.R § 440.9(d) in the amount of:

   (a) Seventeen Million Dollars ($17,000,000) for covered claims resulting from flight of the Falcon 9 Version 1.1 launch vehicle from VAFB.

   (b) One Million Dollars ($1,000,000) for covered claims resulting from pre-flight operations performed at VAFB.

6. Covered property includes all property owned, leased, or occupied by, or within the care, custody, or control of, the United States and its agencies, and its contractors and subcontractors involved in licensed launch activities, at VAFB.

OFFICE OF COMMERCIAL SPACE TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

By: Kenneth Wong

Kenneth Wong, Manager
Licensing and Evaluation Division

Issued On: August 2, 2013
Effective On: August 2, 2013