Commercial Space **Transportation** License Number: LLS 18-107 License is authorized, subject to the provisions of 51 USC SPACE Subtitle V, ch. 509, and the orders, rules, and **EXPLORATION** regulations issued under it, to conduct a launch. TECHNOLOGIES General. Space Exploration Technologies is authorized to conduct: (i) A flight of the Falcon Heavy launch vehicle from Launch Complex 39A at Kennedy Space Center (KSC) transporting the modified Tesla Roadster (mass simulator) to a hyperbolic orbit; and (ii) pre-flight ground operations at KSC associated with the flight, as identified in paragraph (i) of this license, of the Falcon Heavy 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.

www.nasawatch.com

US Department of Transportation Federal Aviation Administration

Issued: February 2, 2018 Effective: February 2, 2018

Kenneth Won

Manager, Licensing and Evaluation Division

800 Independence Ave., S.W. Washington, D.C. 20591 www.nasawatch.com

#### License Order No. LLS 18-107A

# OFFICE OF COMMERCIAL SPACE TRANSPORTATION LICENSE ORDER REGARDING

#### LAUNCH

## AUTHORIZED BY LICENSE NO. LLS 18-107 ISSUED TO

### SPACE EXPLORATION TECHNOLOGIES

- 1. <u>Authority</u>: 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. <u>Purpose</u>: This Order modifies License No. LLS 18-107 issued concurrently by the Federal Aviation Administration's Office of Commercial Space Transportation, authorizing SpaceX to conduct the launch of a Falcon Heavy launch vehicle; and prescribes as conditions to License No. LLS 18-107 certain requirements applicable to the launch.
- 3. <u>Definitions</u>: For purposes of License No. LLS 18-107 and any orders issued by the FAA pertaining to activities covered by License No. LLS 18-107:

(i) "Flight" shall mean the flight of a Falcon Heavy launch vehicle, commencing with ignition of the first stage from Kennedy Space Center (KSC) and transporting the modified Tesla Roadster to a hyperbolic orbit. Flight includes landing of the Falcon Heavy first stage core and side boosters as indicated in the license application. A flight is concluded upon SpaceX's last exercise of control over the Falcon Heavy vehicle, including the safing of Falcon Heavy vehicle stages or components that reach a hyperbolic orbit.

(ii) "Pre-flight ground operations" shall mean SpaceX's pre-flight preparations of a Falcon Heavy launch vehicle at KSC, beginning with the arrival of the Falcon Heavy vehicle at KSC.

# License Order No. LLS 18-107A

4. <u>License Term</u>: The license terminates upon completion of the launch authorized by the license, or one (1) year from the effective date of this license order, whichever comes first.

OFFICE OF COMMERCIAL SPACE TRANSPORTATION FEDERAL AVIATION ADMINISTRATION

Wong By:

Kenneth Wong, Manager Licensing and Evaluation Division

Issued: February 2, 2018 Effective: February 2, 2018

### License Order No. LLS 18-107B

## OFFICE OF COMMERCIAL SPACE TRANSPORTATION LICENSE ORDER REGARDING

#### FLIGHT

## AUTHORIZED BY LICENSE NO. LLS 18-107 ISSUED TO

#### SPACE EXPLORATION TECHNOLOGIES

- 1. <u>Authority</u>: 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. <u>Purpose</u>: This Order modifies License No. LLS 18-107 issued concurrently by the Federal Aviation Administration's Office of Commercial Space Transportation, authorizing SpaceX to conduct the launch of a Falcon Heavy launch vehicle; and prescribes as conditions to License No. LLS 18-107 certain requirements applicable to the authorization to conduct the flight of this launch vehicle.
- 3. <u>Authorization</u>: SpaceX is authorized to conduct the flight of a launch vehicle:
  - (a) Using a Falcon Heavy launch vehicle;
  - (b) From Launch Complex 39A at Kennedy Space Center, Florida;
  - (c) On a nominal launch azimuth of 90 degrees;
  - (d) Transporting the modified Tesla Roadster (mass simulator) to a hyperbolic orbit; and
  - (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.

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License Order No. LLS 18-107B

OFFICE OF COMMERCIAL SPACE TRANSPORTATION FEDERAL AVIATION ADMINISTRATION

Kenneth Wong, Manager Licensing and Evaluation Division By:

Issued:	February	2,	2018	
Effective:	February	2,	2018	

### License Order No. LLS 18-107C

# OFFICE OF COMMERCIAL SPACE TRANSPORTATION LICENSE ORDER REGARDING

#### PRE-FLIGHT GROUND OPERATIONS

AUTHORIZED BY LICENSE NO. LLS 18-107 ISSUED TO

#### SPACE EXPLORATION TECHNOLOGIES

- 1. <u>Authority</u>: 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. <u>Purpose</u>: This Order modifies License No. LLS 18-107 issued concurrently by the Federal Aviation Administration's Office of Commercial Space Transportation, authorizing SpaceX to conduct the launch of a Falcon Heavy launch vehicle; and prescribes as conditions to License No. LLS 18-107 certain requirements applicable to the authorization to conduct pre-flight ground operations.
- 3. <u>Authorization</u>: SpaceX is authorized to conduct pre-flight ground operations at Kennedy Space Center (KSC) associated with the launch of the modified Tesla Roadster (mass simulator) on a Falcon Heavy launch vehicle.

OFFICE OF COMMERCIAL SPACE TRANSPORTATION FEDERAL AVIATION ADMINISTRATION

By:

Kenneth Wong, Manager

Kenneth Wong, Manager Licensing and Evaluation Division

Issued:	February	2,	2018
Effective:	February	2,	2018

#### License Order No. LLS 18-107D

## OFFICE OF COMMERCIAL SPACE TRANSPORTATION LICENSE ORDER REGARDING

#### FINANCIAL RESPONSIBILITY REQUIREMENTS

Under License No. LLS 18-107 Issued to

### SPACE EXPLORATION TECHNOLOGIES

- 1. <u>Authority</u>: 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. <u>Purpose</u>: This Order modifies License No. LLS 18-107 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. <u>Definitions</u>: 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. <u>Liability Insurance</u>: 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) One Hundred Ten Million Dollars (\$110,000,000) for covered claims resulting from flight of the Falcon Heavy launch vehicle from Kennedy Space Center (KSC) and
  - (b) Twelve Million Dollars (\$12,000,000) for covered claims resulting from pre-flight operations performed at KSC.

## License Order No. LLS 18-107D

- 5. <u>Government Property Insurance</u>: 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) One Hundred Million Dollars (\$100,000,000) for covered claims resulting from flight of the Falcon Heavy launch vehicle from KSC and
  - (b) Seventy-Two Million Dollars (\$72,000,000) for covered claims resulting from pre-flight operations performed at KSC.
- 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 KSC.

OFFICE OF COMMERCIAL SPACE TRANSPORTATION FEDERAL AVIATION ADMINISTRATION

By: Kenneth Wong, Manager

Licensing and Evaluation Division

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