
Commercial Space Transportation License

License Number: LLS 14-087 (Rev 2)

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 launches.

General. Space Exploration Technologies is authorized to conduct:

(a) Flights of Falcon 9 launch vehicles from Complex 40 at Cape Canaveral Air Force Station (CCAFS) in support of the NASA Commercial Resupply Services missions, each transporting a Dragon capsule and specified secondary payloads to low Earth orbit; and

(b) pre-flight ground operations at CCAFS associated with the flights, as identified in paragraph (a) of this license, of the Falcon 9 launch vehicles.

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

Original Issued: February 28, 2014
Rev 2 Issued: December 4, 2017
Rev 2 Effective: December 4, 2017

Manager, Licensing and Evaluation Division

Revision History:

Original License - Issued February 28, 2014

Revision 1 - Issued February 26, 2016

- 1) Changed Falcon 9 launch vehicle version from 1.1 to 1.2.

Revision 2 - Issued December 4, 2017

- 1) Changed "Falcon 9 Version 1.2" to "Falcon 9"

License Order No. LLS 14-087A (Rev 2)

OFFICE OF
COMMERCIAL SPACE TRANSPORTATION
LICENSE ORDER REGARDING

LAUNCH

AUTHORIZED BY LICENSE NO. LLS 14-087
ISSUED TO


SPACE EXPLORATION TECHNOLOGIES

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 14-087 originally issued February 28, 2014, by the Federal Aviation Administration's Office of Commercial Space Transportation, authorizing SpaceX to conduct launches of Falcon 9 launch vehicles; and prescribes as conditions to License No. LLS 14-087 certain requirements applicable to the launches.
3. Definitions: For purposes of License No. LLS 14-087 and any orders issued by the FAA pertaining to activities covered by License No. LLS 14-087:
 - (a) "Flight" shall mean the flight of a Falcon 9 launch vehicle, commencing with ignition of the first stage from Cape Canaveral Air Force Station (CCAFS) and transporting the Dragon capsule and any secondary payloads to low Earth orbit. Flight includes landing of the Falcon 9 first stage as indicated in the license application. A flight is concluded upon SpaceX's last exercise of control over the Falcon 9 launch vehicle, including the safing of Falcon 9 launch vehicle stages or components that reach Earth orbit following separation of the payloads.
 - (b) "Pre-flight ground operations" shall mean SpaceX's pre-flight preparations of a Falcon 9 launch vehicle at CCAFS, beginning with the arrival of the Falcon 9 launch vehicle at CCAFS.

License Order No. LLS 14-087A (Rev 2)

4. Special Reporting Requirements: In addition to all applicable reporting requirements under 14 C.F.R. Ch. III, SpaceX must:
- (a) Comply with 14 C.F.R. § 415.59 for any secondary payloads not later than 60 days before any flight conducted under this license; and
 - (b) Identify any anomaly occurring on a prior Falcon 9 launch that could be material to public safety, no less than 15 days before any flight conducted under this license, unless the requirement of 14 C.F.R. § 417.25(a) had already been satisfied.
5. License Term: The term of License No. LLS 14-087 authorizing SpaceX to conduct launches is two (2) years from December 4, 2017.

OFFICE OF COMMERCIAL SPACE TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

By: 
Kenneth Wong, Manager
Licensing and Evaluation Division

Original Issued: February 28, 2014
Rev 2 Issued: December 4, 2017
Rev 2 Effective: December 4, 2017

Revision History:

Original License - Issued February 28, 2014

Revision 1 - Issued February 26, 2016

- 1) Changed Falcon 9 launch vehicle version from 1.1 to 1.2.
- 2) Paragraph (2) replaced "issued concurrently" with "originally issued on February 28, 2014"
- 3) Paragraph (4)(b) changed to more closely match current license order wording.

Revision 2 - Issued December 4, 2017

- 1) Changed "Falcon 9 Version 1.2" to "Falcon 9"

License Order No. LLS 14-087B (Rev 2)

OFFICE OF
COMMERCIAL SPACE TRANSPORTATION
LICENSE ORDER REGARDING

FLIGHT

AUTHORIZED BY LICENSE NO. LLS 14-087
ISSUED TO

SPACE EXPLORATION TECHNOLOGIES

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 14-087 originally issued on February 28, 2014, by the Federal Aviation Administration's Office of Commercial Space Transportation, and authorizes SpaceX to conduct launches of Falcon 9 launch vehicles; and prescribes as conditions to License No. LLS 14-087 certain requirements applicable to the authorization to conduct the flight of the launch vehicles.
3. Authorization: SpaceX is authorized to conduct flights of launch vehicles:
 - (a) Using a Falcon 9 launch vehicle;
 - (b) From Cape Canaveral Air Force Station (CCAFS), Florida;
 - (c) On a nominal launch azimuth of 43 degrees;
 - (d) Transporting to low Earth orbit a Dragon capsule and specified secondary payloads; 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.

License Order No. LLS 14-087B (Rev 2)

OFFICE OF COMMERCIAL SPACE TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

By: Kenneth Wong
Kenneth Wong, Manager
Licensing and Evaluation Division

Original Issued: February 28, 2014
Rev 2 Issued: December 4, 2017
Rev 2 Effective: December 4, 2017

Revision History:

Original License - Issued February 28, 2014

Revision 1 - Issued February 26, 2016

- 1) Changed Falcon 9 launch vehicle version from 1.1 to 1.2.
- 2) Paragraph (2) replaced "issued concurrently" with "originally issued on February 28, 2014"
- 3) Paragraph (3)(c) changed launch azimuth from 47 to 43 degrees to reflect latest Final Flight Data Package

Revision 2 - Issued December 4, 2017

- 1) Changed "Falcon 9 Version 1.2" to "Falcon 9"

License Order No. LLS 14-087C (Rev 2)

OFFICE OF
COMMERCIAL SPACE TRANSPORTATION
LICENSE ORDER REGARDING


PRE-FLIGHT GROUND OPERATIONS

AUTHORIZED BY LICENSE NO. LLS 14-087
ISSUED TO

SPACE EXPLORATION TECHNOLOGIES

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 14-087 originally issued on February 28, 2014, by the Federal Aviation Administration's Office of Commercial Space Transportation, authorizing SpaceX to conduct launches of Falcon 9 launch vehicles; and prescribes as conditions to License No. LLS 14-087 certain requirements applicable to the authorization to conduct pre-flight ground operations.
3. Authorization: SpaceX is authorized to conduct pre-flight ground operations at CCAFS associated with launches of Dragon capsules and specified secondary payloads on Falcon 9 launch vehicles.

OFFICE OF COMMERCIAL SPACE TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

By: 
Kenneth Wong, Manager
Licensing and Evaluation Division

Original Issued: February 28, 2014
Rev 2 Issued: December 4, 2017
Rev 2 Effective: December 4, 2017

License Order No. LLS 14-087C (Rev 2)

Revision History:

Original License - Issued February 28, 2014

Revision 1 - Issued February 26, 2016

- 1) Changed Falcon 9 launch vehicle version from 1.1 to 1.2.
- 2) Paragraph (2) replaced "issued concurrently" with "originally issued on February 28, 2014"

Revision 2 - Issued December 4, 2017

- 1) Changed "Falcon 9 Version 1.2" to "Falcon 9"

License Order No. LLS 14-087D (Rev 4)

OFFICE OF
COMMERCIAL SPACE TRANSPORTATION
LICENSE ORDER REGARDING

FINANCIAL RESPONSIBILITY REQUIREMENTS

UNDER LICENSE NO. LLS 14-087
ISSUED TO

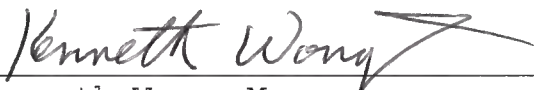
SPACE EXPLORATION TECHNOLOGIES

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 14-087 originally issued on February 28, 2014, 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) Sixty-Eight Million Dollars (\$68,000,000) for covered claims resulting from flight of the Falcon 9 launch vehicle from Cape Canaveral Air Force Station (CCAFS) or One Hundred Sixty Million Dollars (\$160,000,000) if the flight includes first stage return to launch site (LC-13); and.
 - (b) Twelve Million Dollars (\$12,000,000) for covered claims resulting from pre-flight operations performed at CCAFS.

License Order No. LLS 14-087D (Rev 4)

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) Ninety-Two Million Dollars (\$92,000,000) for covered claims resulting from flight of the Falcon 9 launch vehicle from CCAFS; and
 - (b) Forty-Three Million Dollars (\$43,000,000) for covered claims resulting from pre-flight operations performed at CCAFS.
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 CCAFS.

OFFICE OF COMMERCIAL SPACE TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

By: 
Kenneth Wong, Manager
Licensing and Evaluation Division

Original Issued: February 28, 2014
Rev 4 Issued: March 28, 2018
Rev 4 Effective: March 28, 2018

Revision History:

Original License - Issued February 28, 2014

Revision 1 - Issued February 26, 2016

- 1) Changed Falcon 9 launch vehicle version from 1.1 to 1.2.
- 2) Paragraph (2) replaced "issued concurrently" with "originally issued on February 28, 2014"

Revision 2 - Issued July 15, 2016

- 1) Revised paragraph (4)(a) to add liability insurance requirement of one hundred eighty-five million dollars for Falcon 9 flights that include first stage return to launch site.

Revision 3 - Issued December 4, 2017

- 1) Changed "Falcon 9 Version 1.2" to "Falcon 9"
- 2) Paragraph (4)(a) removed "Forty-Five Million Dollars (\$45,000,000) for covered claims resulting from flight of the Falcon 9 launch vehicle from Cape Canaveral Air Force Station (CCAFS) or"
- 3) Paragraph (4)(a) replaced "One Hundred Eighty-Five Million Dollars (\$185,000,000)" with "One Hundred Sixty Million Dollars (\$160,000,000)"
- 4) Paragraph (5)(b) replaced "Thirteen Million Dollars (\$13,000,000)" with "Forty-Three Million Dollars (\$43,000,000)"

Revision 4 - Issued March 28, 2018

- 1) Paragraph (4)(a) changed to require Sixty-Eight Million Dollars (\$68,000,000) for covered claims resulting from flight of the Falcon 9 launch vehicle from Cape Canaveral Air Force Station (CCAFS) or One Hundred Sixty Million Dollars (\$160,000,000) if the flight includes first stage return to launch site (LC-13)
- 2) Paragraph (5)(a) reduced from One Hundred Million Dollars (\$100,000,000) to Ninety-Two Million Dollars (\$92,000,000)