

Commercial Space Transportation License

License Number: LLO 18-113 (Rev 1)

UNITED LAUNCH ALLIANCE

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. United Launch Alliance is authorized to conduct:

(a) Flights of Atlas V 401, 411, 421, 431, 521, 531, 541, and 551 launch vehicles, from Cape Canaveral Air Force Station (CCAFS), as identified in license orders issued by the Federal Aviation Administration; and

(b) Pre-flight ground operations at CCAFS associated with the flights of Atlas V 400 and 500 series 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: June 1, 2018
Rev 1 Issued: January 24, 2020
Rev 1 Effective: January 24, 2020



Manager, Licensing and Evaluation Division

Revision History:

Original License - Issued June 1, 2018

Revision 1 - Issued January 24, 2020

- 1) In paragraph (a), inserted "541, and 551"

License Order No. LLO 18-113A (Rev 1)

OFFICE OF
COMMERCIAL SPACE TRANSPORTATION
LICENSE ORDER REGARDING

LAUNCH

AUTHORIZED BY LICENSE NO. LLO 18-113
ISSUED TO

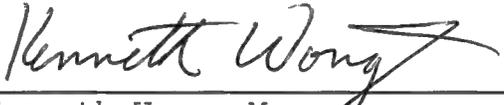
UNITED LAUNCH ALLIANCE

1. Authority: This Order is issued to United Launch Alliance, referred to as ULA, under 51 U.S.C. subtitle V, chapter 509, and 14 C.F.R. Ch. III.
2. Purpose: This Order modifies License No. LLO 18-113 originally issued on June 1, 2018, by the Federal Aviation Administration's Office of Commercial Space Transportation, authorizing ULA to conduct launches of Atlas V launch vehicles; and prescribes as conditions to License No. LLO 18-113 certain requirements applicable to those launches.
3. Definitions: For purposes of License No. LLO 18-113 and any orders issued by the FAA pertaining to activities covered by License No. LLO 18-113:
 - (a) "Flight" shall mean the flight of an Atlas V 401, 411, 421, 431, 521, 531, 541, or 551 launch vehicle commencing with ignition of the first stage from Cape Canaveral Air Force Station (CCAFS) on launch azimuths and transporting classes of payloads to orbital destinations, as specified in License Order No. LLO 18-113B. A nominal flight is concluded upon ULA's last exercise of control over the Atlas V 401, 411, 421, 431, 521, 531, 541, or 551 launch vehicle, including the safing of Atlas V 401, 411, 421, 431, 521, 531, 541, or 551 launch vehicle stages or components that reach Earth orbit, following separation of the payload.
 - (b) "Pre-flight ground operations" shall mean ULA's pre-flight preparations of an Atlas V 400 or 500 series launch vehicle at CCAFS, beginning with the arrival of the Atlas V 400 or 500 series launch vehicle at CCAFS.

License Order No. LLO 18-113A (Rev 1)

4. License Term: The term of License No. LLO 18-113 authorizing ULA to conduct launches is five (5) years from June 1, 2018.

OFFICE OF COMMERCIAL SPACE TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

By: 
Kenneth Wong, Manager
Licensing and Evaluation Division

Originally Issued: June 1, 2018
Rev 1 Issued: January 24, 2020
Rev 1 Effective: January 24, 2020

Revision History:

Original License Order A - Issued June 1, 2018

Revision 1 - Issued January 24, 2020

- 1) In paragraph (2), replaced "issued concurrently" with "originally issued on June 1, 2018"
- 2) In paragraph (3) (a), inserted "541, or 551".
- 3) In paragraph (4), replaced "the effective date of this license" with "June 1, 2018"

License Order No. LLO 18-113B (Rev 1)

OFFICE OF
COMMERCIAL SPACE TRANSPORTATION
LICENSE ORDER REGARDING

FLIGHT

AUTHORIZED BY LICENSE NO. LLO 18-113
ISSUED TO

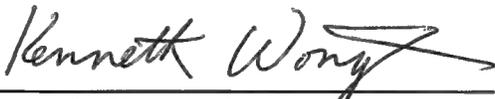
UNITED LAUNCH ALLIANCE

1. Authority: This Order is issued to United Launch Alliance, referred to as ULA, under 51 U.S.C. subtitle V, chapter 509, and 14 C.F.R. Ch. III.
2. Purpose: This Order modifies License No. LLO 18-113 issued originally on June 1, 2018, by the Federal Aviation Administration's Office of Commercial Space Transportation, authorizing ULA to conduct launches; and prescribes as conditions to License No. LLO 18-113 certain requirements applicable to the authorization to conduct the flights.
3. Authorization: ULA is authorized to conduct flights of launch vehicles:
 - (a) Using Atlas V 401, 411, 421, 431, 521, 531, 541, and 551 launch vehicles;
 - (b) From Cape Canaveral Air Force Station, Florida;
 - (c) On launch azimuths, respectively inclusive between:
 - (i) 93.5 to 95.9 degrees for the Atlas V 401,
 - (ii) 84.8 to 94.4 degrees for the Atlas V 411,
 - (iii) 92.5 to 104.0 degrees for the Atlas V 421,
 - (iv) 93.5 to 97.0 degrees for the Atlas V 431,
 - (v) 81.0 to 86.5 degrees for the Atlas V 521,
 - (vi) 90.1 to 97.0 degrees for the Atlas V 531, and

License Order No. LLO 18-113B (Rev 1)

- (vii) 90.7 to 100.7 degrees for the Atlas V 541 and the Atlas V 551;
- (d) Transporting (i) U.S. government payloads and (ii) non-government communication, navigation, and scientific satellites, to geosynchronous transfer orbit as described in the ULA license application;
- (e) According to the launch vehicle, launch vehicle systems, and safety management program represented in the ULA 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, Manager
Licensing and Evaluation Division

Originally Issued: June 1, 2018
Rev 1 Issued: January 24, 2020
Rev 1 Effective: January 24, 2020

Revision History:

Original License Order B - Issued June 1, 2018

Revision 1 - Issued January 24, 2020

- 1) In paragraph (2), replaced "issued concurrently" with "originally issued".
- 2) In paragraph (3)(a), insert "541 and 551"
- 3) In paragraph (3)(b), after "521;" removed "and", after "531" replaced ";" with ", and"
- 4) In paragraph (3)(b), added new line (vii): "90.7 to 100.7 degrees for the Atlas V 541 and the Atlas V 551;"

License Order No. LLO 18-113C

OFFICE OF
COMMERCIAL SPACE TRANSPORTATION
LICENSE ORDER REGARDING

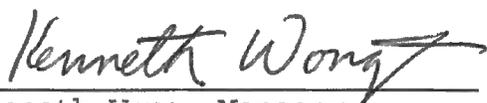
PRE-FLIGHT GROUND OPERATIONS

AUTHORIZED BY LICENSE NO. LLO 18-113
ISSUED TO

UNITED LAUNCH ALLIANCE

1. Authority: This Order is issued to United Launch Alliance, referred to as ULA, under 51 U.S.C. subtitle V, chapter 509, and 14 C.F.R. Ch. III.
2. Purpose: This Order modifies License No. LLO 18-113 issued concurrently by the Federal Aviation Administration's Office of Commercial Space Transportation, authorizing ULA to conduct launches of Atlas V launch vehicles; and prescribes as conditions to License No. LLO 18-113 certain requirements applicable to the authorization to conduct pre-flight ground operations.
3. Authorization: ULA is authorized to conduct pre-flight ground operations at Cape Canaveral Air Force Station (CCAFS) associated with launch of an Atlas V 400 or 500 series launch vehicle.

OFFICE OF COMMERCIAL SPACE TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

By: 
Kenneth Wong, Manager
Licensing and Evaluation Division

Issued: June 1, 2018
Effective: June 1, 2018

License Order No. LLO 18-113D (Rev 3)

OFFICE OF
COMMERCIAL SPACE TRANSPORTATION
LICENSE ORDER REGARDING

FINANCIAL RESPONSIBILITY REQUIREMENTS

UNDER LICENSE NO. LLO 18-113
ISSUED TO

UNITED LAUNCH ALLIANCE

1. Authority: This Order is issued to United Launch Alliance, referred to as ULA, under 51 U.S.C. Subtitle V, chapter 509, and 14 C.F.R. part 440.
2. Purpose: This Order modifies License No. LLO 18-113 originally issued on June 1, 2018, by the Federal Aviation Administration's Office of Commercial Space Transportation, authorizing ULA to conduct launches; and prescribes 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: ULA 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) Six Million Dollars (\$6,000,000) for covered claims resulting from pre-flight operations performed at Cape Canaveral Air Force Station (CCAFS).
 - (b) For covered claims resulting from flight of an Atlas V launch vehicle from CCAFS:
 - (1) Twenty-Two Million Five-Hundred Thousand Dollars (\$22,500,000) for Atlas V 401,
 - (2) Eighty Million Dollars (\$80,000,000) for Atlas V 411,
 - (3) One Hundred Seven Million Dollars (\$107,000,000) for Atlas V 421, and 521.

License Order No. LLO 18-113D (Rev 3)

- (4) One Hundred Forty Million Dollars (\$140,000,000) for Atlas V 431 and 531.
 - (5) One Hundred Sixty-Four Million Dollars (\$164,000,000) for Atlas V 541, and
 - (6) One Hundred Eighty-Two Million Dollars (\$182,000,000) for Atlas V 551.
5. Government Property Insurance: ULA 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) Eleven Million Dollars (\$11,000,000) for covered claims resulting from flight of an Atlas V launch vehicle from CCAFS.
 - (b) Eleven Million Dollars (\$11,000,000) 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

Originally Issued: June 1, 2018
Rev 3 Issued: January 24, 2020
Rev 3 Effective: January 24, 2020

License Order No. LLO 18-113D (Rev 3)

Revision History:

Original License Order - Issued June 1, 2018

Revision 1 Order D - Issued November 1, 2018

- 1) Changed the first sentence of paragraph 2 from "This Order amends License No. LLO 18-113 issued concurrently by the ..." to "This Order modifies License No. LLO 18-113 originally issued on June 1, 2018, by the ...".
- 2) In paragraph 2, after "Space Transportation," inserted "authorizing ULA to conduct launches;" and following, replaced "by prescribing" with "and prescribes".
- 3) Moved paragraph 4(b) up to become 4(a); after "performed at " inserted "Cape Canaveral Air Force Station ("; after "CCAFS" inserted ")".
- 4) Inserted new paragraph 4(b): "For covered claims resulting from flight of an Atlas V launch vehicle from CCAFS:
- 5) Inserted new paragraph 4(b)(1) and added following: "One Hundred Sixty-Five Million Dollars (\$165,000,000) for Atlas V 401, 411, 421, and 521."
- 6) Indented and changed former paragraph 4(a) to become 4(b)(2); and replaced "covered claims resulting from ... (CCAFS)" with "Atlas V 431 and 531".
- 7) Redesignated License Order No. LLO 18-113D with "(Rev 1)" following.

Revision 2 Order D - Issued February 2, 2019

- 1) In paragraph 4(b)(1): delete "401, "
- 2) Inserted new paragraph 4(b)(3): "Twenty-Two Million Five-Hundred Thousand Dollars (\$22,500,000) for Atlas V 401."

Revision 3 Order D - Issued January 24, 2020

- 1) Moved paragraph 4(b)(3) up to become new paragraph 4(b)(1)
- 2) In paragraph 4(b), replaced newly renumbered lines (2)-(3) with the following:
 - "(2) Eighty Million Dollars (\$80,000,000) for Atlas V 411.
 - "(3) One Hundred Seven Million Dollars (\$107,000,000) for Atlas V 421, and 521.
 - "(4) One Hundred Forty Million Dollars (\$140,000,000) for Atlas V 431 and 531.
 - "(5) One Hundred Sixty-Four Million Dollars (\$164,000,000) for Atlas V 541.
 - "(6) One Hundred Eighty-Two Million Dollars (\$182,000,000) for Atlas V 551."