

# Commercial Space Transportation License

License Number: LLS 17-098

## 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 launch vehicles from Launch Complex 41 at Cape Canaveral Air Force Station (CCAFS), each transporting a Cygnus spacecraft 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 Atlas V 401 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.**

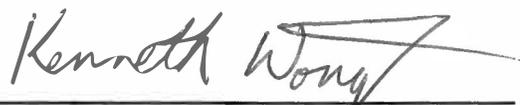


US Department  
of Transportation  
Federal Aviation  
Administration

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

**Issued On: February 2, 2017**

**Effective On: February 2, 2017**

  
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Manager, Licensing and Evaluation Division

**License Order No. LLS 17-098A (Rev 1)**

OFFICE OF  
COMMERCIAL SPACE TRANSPORTATION  
LICENSE ORDER REGARDING

**LAUNCH**

AUTHORIZED BY LICENSE NO. LLS 17-098  
ISSUED TO

UNITED LAUNCH ALLIANCE

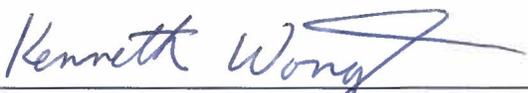
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1. Authority: This Order is issued to United Launch Alliance, referred to as ULA, under 51 U.S.C. subtitle V, chapter 509, and 14 C.F.R. Ch. III.
2. Purpose: This Order modifies License No. LLS 17-098 originally issued on February 2, 2017, by the Federal Aviation Administration's Office of Commercial Space Transportation, authorizing ULA to conduct launches of Atlas V 401 launch vehicles; and prescribes as conditions to License No. LLS 17-098 certain requirements applicable to the launches.
3. Definitions: For purposes of License No. LLS 17-098 and any orders issued by the FAA pertaining to activities covered by License No. LLS 17-098:
  - (a) "Flight" shall mean the flight of an Atlas V 401 launch vehicle commencing with ignition of the first stage from Cape Canaveral Air Force Station (CCAFS) on the same ground track and trajectory as presented in the license application for the purposes of transporting a Cygnus spacecraft and any secondary payloads to low Earth orbit. A flight is concluded upon ULA's last exercise of control over the Atlas V 401 vehicle, following the separation of the Cygnus spacecraft, including the deorbit burn of the upper stage and its safing.
  - (b) "Pre-flight ground operations" shall mean ULA's pre-flight preparations of an Atlas V 401 vehicle at CCAFS, beginning with the arrival of the Atlas V 401 vehicle at CCAFS.

**License Order No. LLS 17-098A (Rev 1)**

4. Special Reporting Requirements: In addition to all applicable reporting requirements under 14 C.F.R. Ch. III, ULA must comply with 14 C.F.R. § 415.59 for any secondary payloads not later than 60 days before any flight conducted under this license.
5. License Term: The term of License No. LLS 17-098 authorizing ULA to conduct launches is two (2) years from February 2, 2019.

OFFICE OF COMMERCIAL SPACE TRANSPORTATION  
FEDERAL AVIATION ADMINISTRATION

By:   
Kenneth Wong, Manager  
Licensing and Evaluation Division

Original Issued: February 2, 2017  
Rev 1 Issued: January 31, 2019  
Rev 1 Effective: February 2, 2019

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**Revision History:**

Original License Order - Issued February, 2, 2017

Revision 1 - Issued January 31, 2019

- 1) In paragraph 2, replaced "issued concurrently" with "originally issued on February 2, 2017".
- 2) In paragraph 5, replaced "the effective date of this license order" with "February, 2, 2019".

OFFICE OF  
COMMERCIAL SPACE TRANSPORTATION  
LICENSE ORDER REGARDING

**FLIGHT**

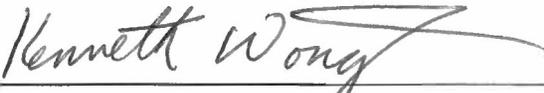
AUTHORIZED BY LICENSE NO. LLS 17-098  
ISSUED TO

UNITED LAUNCH ALLIANCE

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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. LLS 17-098 issued concurrently by the Federal Aviation Administration's Office of Commercial Space Transportation, authorizing ULA to conduct launches of Atlas V 401 launch vehicles; and prescribes as conditions to License No. LLS 17-098 certain requirements applicable to the authorization to conduct the flight of a launch vehicle.
3. Authorization: ULA is authorized to conduct flights of launch vehicles:
  - (a) Using an Atlas V 401 launch vehicle;
  - (b) From Cape Canaveral Air Force Station, Florida;
  - (c) On the ground track and trajectory presented in the license application;
  - (d) Transporting to low Earth orbit a Cygnus spacecraft and specified secondary payloads;
  - (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

Issued On: February 2, 2017

Effective On: February 2, 2017

OFFICE OF  
COMMERCIAL SPACE TRANSPORTATION  
LICENSE ORDER REGARDING

**PRE-FLIGHT GROUND OPERATIONS**

AUTHORIZED BY LICENSE NO. LLS 17-098  
ISSUED TO

UNITED LAUNCH ALLIANCE

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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. LLS 17-098 issued concurrently by the Federal Aviation Administration's Office of Commercial Space Transportation, authorizing ULA to conduct launches of Atlas V 401 launch vehicles; and prescribes as conditions to License No. LLS 17-098 certain requirements applicable to the authorization to conduct pre-flight ground operations.
3. Authorization: ULA is authorized to conduct pre-flight ground operations at CCAFS associated with the launch of Cygnus spacecraft and specified secondary payloads on Atlas V 401 launch vehicles.

OFFICE OF COMMERCIAL SPACE TRANSPORTATION  
FEDERAL AVIATION ADMINISTRATION

By: \_\_\_\_\_

  
Kenneth Wong, Manager  
Licensing and Evaluation Division

Issued On: February 2, 2017

Effective On: February 2, 2017

**License Order No. LLS 17-098D (Rev 1)**

OFFICE OF  
COMMERCIAL SPACE TRANSPORTATION  
LICENSE ORDER REGARDING

**FINANCIAL RESPONSIBILITY REQUIREMENTS**

UNDER LICENSE NO. LLS 17-098  
ISSUED TO

UNITED LAUNCH ALLIANCE

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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. LLS 17-098 originally issued on February 2, 2017, 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: 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) Twenty-Two Million Five Hundred Thousand Dollars (\$22,500,000) for covered claims resulting from flight of an Atlas V 401 launch vehicle from Cape Canaveral Air Force Station (CCAFS).
  - (b) Six Million Dollars (\$6,000,000) for covered claims resulting from pre-flight operations performed at CCAFS.
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:

**License Order No. LLS 17-098D (Rev 1)**

- (a) Eleven Million Dollars (\$11,000,000) for covered claims resulting from flight of an Atlas V 401 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

Original Issued: February 2, 2017  
Rev 1 Issued: January 31, 2019  
Rev 1 Effective: February 2, 2019

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**Revision History:**

Original License Order - Issued February 2, 2017

Revision 1 - Issued January 31, 2019

- 1) In paragraph 2, replaced "issued concurrently" with "originally issued on February 2, 2017".
- 2) In paragraph 4(a), changed Liability Insurance value for flight from \$45,000,000 to \$22,500,000.
- 3) In paragraph 5(a), changed Government Property Insurance value for flight from \$24,500,000 to \$11,000,000.
- 4) In paragraph 5(b), changed Government Property Insurance value for pre-flight from \$7,000,000 to \$11,000,000.