
Commercial Space Transportation License

License Number: LLO 01-060 (Rev 3)

BOEING LAUNCH SERVICES

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. Boeing Launch Services is authorized to conduct:

(i) flights of Delta II 7925 and Delta II 7420-10 launch vehicle systems, from the Eastern Range at Cape Canaveral Air Force Station (CCAFS), FL, as specified in license orders issued by the Office; and

(ii) pre-flight ground operations at CCAFS associated with the conduct of flights that require a Federal Aviation Administration license.

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

Original Issued On: April 17, 2001
Revision 3 Issued On: April 8, 2011
Revision 3 Effective On: May 1, 2011

A handwritten signature in black ink, reading "Kenneth Wong".

Manager, Licensing and Evaluation Division

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

Revision History:

Original License - Issued April 17, 2001

Revision 1 - Issued April 28, 2006

- 1) Removed references to Delta III.
- 2) Redesignated License No. LLO 01-060 with "(Rev 1)" following.

Revision 2 - Issued September 11, 2007

- 1) Replaced McDonnell Douglas Corporation with Boeing Launch Services and MDC with BLS.
- 2) Redesignated License No. LLO 01-060 with "(Rev 2)" following

Revision 3 - Issued April 8, 2011

- 1) Due to transfer of code, redesignated Authority to read: "51 USC, Subtitle V, Ch. 509"
- 2) Replaced "Associate Administrator for" with "Office of" prior to all the name Commercial Space Transportation
- 3) Removed "on flight azimuths and transporting classes of payloads to orbital destinations" as the words are unnecessary. These conditions are specified in the License Order No. LLO 01-060B.
- 4) Removed "commercial space" preceding "launches" in first paragraph, and preceding "flights under (ii) of the second paragraph.
- 5) Redesignated License No. LLO 01-060 with "(Rev 3)" following

License Order No. LLO 01-060A (Rev 3)

OFFICE OF
COMMERCIAL SPACE TRANSPORTATION
LICENSE ORDER REGARDING

LAUNCHES

AUTHORIZED BY LICENSE NO. LLO 01-060
ISSUED TO

BOEING LAUNCH SERVICES

1. Authority: This Order is issued to Boeing Launch Services (BLS) under 51 U.S.C. Subtitle V, Chapter 509, and 14 C.F.R. Ch. III.
2. Purpose: This Order modifies License No. LLO 01-060 issued on April 17, 2001, renewed on April 28, 2006, and transferred to BLS on September 11, 2007, by the Office of Commercial Space Transportation (Office), authorizing BLS to conduct launches; and prescribes as conditions to License No. LLO 01-060 certain requirements applicable to those launches.
3. Definitions: For purposes of License No. LLO 01-060 and any orders issued by the Office pertaining to activities covered by License No. LLO 01-060:
 - (a) "Launch" shall mean (i) flights and (ii) pre-flight ground operations as defined in this section.
 - (b) "Flight" shall mean the flight commencing from a Delta first stage ignition 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-01-060B, issued concurrently by the Office. A nominal flight is concluded upon BLS's last exercise of control over the Delta II launch vehicle, including the safing of Delta launch vehicle stages or components that reach earth orbit following separation of the payload.

License Order No. LLO 01-060A (Rev 3)

3. "Pre-flight ground operations" shall mean BLS's operations at CCAFS associated with the conduct of any launches, beginning with the arrival of the launch vehicle or payload at CCAFS.
4. License Term: The term of License No. LLO 01-060 authorizing BLS to conduct launches is five (5) years from the effective date of the license (May 1, 2011).

OFFICE OF COMMERCIAL SPACE TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

By: 
Kenneth Wong, Manager
Licensing and Evaluation Division

Issued: April 8, 2011

Effective: May 1, 2011

Revision History:

Original License Order - Issued April 17, 2001

Revision 1 - Issued April 28, 2006

- 1) Removed all references to Delta III.
- 2) In paragraph 2, replaced "concurrently" with "on April 17, 2001, and renewed on April 28, 2006".
- 3) Modified paragraph 13 to indicate that "the term of the license is five years from the effective date of the renewal of the license (May 1, 2006)".
- 4) Redesignated License Order No. LLO 01-060A with "(Rev 1)" following.

Revision 2 - Issued September 11 2007

- 1) Replaced McDonnell Douglas Corporation with Boeing Launch Services and MDC with BLS.
- 2) Eliminated paragraphs 4 through 12, and renumber paragraph 13 as paragraph 4.
- 3) Redesignated License Order No. LLO 01-060A with "(Rev 2)" following.

Revision 3 - Issued April 8, 2011

- 1) Due to transfer of code, redesignated Authority to read: "51 U.S.C. Subtitle V, Ch. 509".

License Order No. LLO 01-060A (Rev 3)

- 2) Replaced "Associate Administrator for" with "Office of" prior to all the name Commercial Space Transportation.
- 3) In paragraph 2, replaced "amends" with "modifies"; moved "and" to be after "renewed on April 28, 2006," and inserted "transferred to BLS on September 11, 2007".
- 4) Removed "commercial space" in all instances preceding "launch" or "flight".
- 5) Replaced "shall be deemed" with "is" for the sake of plain English.
- 6) In paragraph 4, changed term of the authorization from the effective date of the "May 1, 2006" to "May 1, 2011" incorporating the renewal for additional five year period beyond that originally introduced in License Order No. LLO 01-060E (now obsolete).
- 7) Redesignated License Order No. LLO 01-060A with "(Rev 3)" following.

License Order No. LLO 01-060B (Rev 3)

OFFICE OF
COMMERCIAL SPACE TRANSPORTATION
LICENSE ORDER REGARDING

FLIGHTS

AUTHORIZED BY LICENSE NO. LLO 01-060
ISSUED TO

BOEING LAUNCH SERVICES

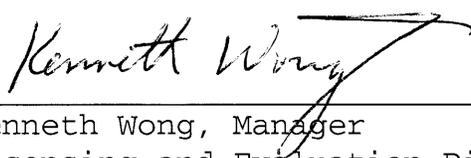
1. Authority: This Order is issued to Boeing Launch Services (BLS) under 51 U.S.C. Subtitle V, Chapter 509, and 14 C.F.R. Ch. III.
2. Purpose: This Order modifies License No. LLO 01-060 issued on April 17, 2001, renewed on April 28, 2006, and transferred to BLS on September 11, 2007 by the Office of Commercial Space Transportation (Office), authorizing BLS to conduct launches; and prescribes as conditions to License No. LLO 01-060 certain requirements applicable to the authorization to conduct flights.
3. Authorization: BLS is authorized to conduct flights:
 - (a) Using Delta II 7925 launch vehicles on launch azimuths from 93 to 110 degrees, inclusive;
 - (b) Using Delta II 7420-10 launch vehicles on launch azimuths of 65 degrees and from 93 to 110 degrees, inclusive;
 - (c) From Cape Canaveral Air Force Station (CCAFS), Florida;
 - (d) Transporting (i) U.S. government payloads to any orbit and (ii) non-government communications payloads that are designed to operate in low earth orbit, medium earth orbit, and geostationary earth orbit; and

License Order No. LLO 01-060B (Rev 3)

- (e) According to the launch vehicle, launch vehicle systems, and equipment designs and the safety management program including organization, personnel, functions and procedures represented or referenced in the BLS application as of the date of this Order, and any modifications to the license application approved by AST in writing.

OFFICE OF COMMERCIAL SPACE TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

By:


Kenneth Wong, Manager
Licensing and Evaluation Division

Issued: April 8, 2011

Effective: May 1, 2011

Revision History:

Original License Order - Issued April 17, 2001

Revision 1 - Issued April 28, 2006

- 1) Removed all references to Delta III.
- 2) In Section 2, replaced "concurrently" with "on April 20, 2001, and renewed on April 28, 2006."
- 3) Redesignated License Order No. LLO 01-060B with "(Rev 1)" following.

Revision 2 - Issued September 11 2007

- 1) Replaced McDonnell Douglas Corporation with Boeing Launch Services and MDC with BLS.
- 2) Eliminated paragraphs 4 through 8.
- 3) Redesignated License Order No. LLO 01-060B with "(Rev 2)" following.

Revision 3 - Issued April 8, 2011

- 1) Due to transfer of code, redesignated Authority to read: "51 U.S.C. Subtitle V, Ch. 509".
- 2) Replaced "Associate Administrator for" with "Office of" prior to all the name Commercial Space Transportation.
- 3) In paragraph 2, replaced "amends" with "modifies;" moved "and" to be after "renewed on April 28, 2006," and inserted "transferred to BLS on September 11, 2007".
- 4) Removed "commercial space" in all instances preceding "launch" or "flight".
- 5) Redesignated License Order No. LLO 01-060B with "(Rev 3)" following.

OFFICE OF
COMMERCIAL SPACE TRANSPORTATION
LICENSE ORDER REGARDING

PRE-FLIGHT GROUND OPERATIONS

AUTHORIZED BY LICENSE NO. LLO 01-060
ISSUED TO

BOEING LAUNCH SERVICES

1. Authority: This Order is issued to Boeing Launch Services (BLS) under 51 U.S.C. Subtitle V, Chapter 509, and 14 C.F.R. Ch. III.
2. Purpose: This Order amends License No. LLO 01-060 issued on April 17, 2001, renewed on April 28, 2006, and transferred to BLS on September 11, 2007 by the Office of Commercial Space Transportation (Office), authorizing BLS to conduct launches, and prescribes as conditions to License No. LLO 01-060 certain additional requirements applicable to the authorization to conduct pre-flight ground operations.
3. Authorization: BLS is authorized to conduct pre-flight ground operations at Cape Canaveral Air Force Station (CCAFS) associated with the conduct of flights beginning with the arrival of the Delta launch vehicle or payload at CCAFS.

OFFICE OF COMMERCIAL SPACE TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

By: 
Kenneth Wong, Manager
Licensing and Evaluation Division

Issued: April 8, 2011

Effective: May 1, 2011

License Order No. LLO 01-060C (Rev 3)

Revision History:

Original License Order - Issued April 17, 2001

Revision 1 - Issued April 28, 2006

- 1) In Section 2, replaced "concurrently" with "on April 17, 2001, and renewed on April 28, 2006."
- 2) Redesignated License Order No. LLO 01-060C with "(Rev 1)" following

Revision 2 - Issued September 11 2007

- 1) Replaced McDonnell Douglas Corporation with Boeing Launch Services and MDC with BLS.
- 2) Eliminated paragraphs 4 and 5.
- 3) Redesignated License Order No. LLO 01-060C with "(Rev 2)" following

Revision 3 - Issued April 8, 2011

- 1) Due to transfer of code, redesignated Authority to read: "51 U.S.C. Subtitle V, Ch. 509".
- 2) Replaced "Associate Administrator for" with "Office of" prior to all the name Commercial Space Transportation.
- 3) In paragraph 2, replaced "amends" with "modifies"; moved "and" to be after "renewed on April 28, 2006," and inserted "transferred to BLS on September 11, 2007".
- 4) Removed "commercial space" in all instances preceding "launch" or "flight".
- 5) Redesignated License Order No. LLO 01-060C with "(Rev 3)" following.

License Order No. LLO 01-060D (Rev 3)

OFFICE OF
COMMERCIAL SPACE TRANSPORTATION
LICENSE ORDER REGARDING

FINANCIAL RESPONSIBILITY REQUIREMENTS

AUTHORIZED BY LICENSE NO. LLO 01-060
ISSUED TO

BOEING LAUNCH SERVICES

1. Authority: This Order is issued to Boeing Launch Services (BLS) under 51 U.S.C. Subtitle V, Chapter 509, and 14 C.F.R. Part 440.
2. Purpose: This Order modifies License No. LLO 01-060 (the License) issued on April 17, 2001, renewed on April 28, 2006, and transferred to BLS on September 11, 2007 by the Office of Commercial Space Transportation (Office), 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: BLS 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 following amounts:
 - (a) Liability insurance in the amount of Seventy Six Million Five Hundred Thousand Dollars (\$76,500,000) for covered claims resulting from a commercial space flight; and
 - (b) Liability insurance in the amount of Twenty Four Million Dollars (\$24,000,000) for covered claims resulting from pre-flight ground operations performed at CCAFS.

License Order No. LLO 01-060D (Rev 3)

5. Government Property Insurance: 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 and Kennedy Space Center. BLS 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 following amounts:
- (a) Insurance in the amount of Eighty Five Million Dollars (\$85,000,000) for covered property claims resulting from a commercial space flight; and
 - (b) Insurance in the amount of Fifty One Million Dollars (\$51,000,000) for covered property claims resulting from pre-flight ground operations performed at CCAFS.

OFFICE OF COMMERCIAL SPACE TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

By:



Kenneth Wong, Manager
Licensing and Evaluation Division

Issued: April 8, 2011

Effective: May 1, 2011

Revision History:

Original License Order - Issued April 17, 2001

Revision 1 - Issued April 28, 2006

- 1) Removed all references to Delta III, including paragraphs 6(b) and 7(b) in their entirety.
- 2) Replaced "concurrently" in paragraph 2 with "on April 17, 2001, and renewed on April 28, 2006."
- 3) Changed the enumeration of 6(a)(1) and 6(a)(2) to 6(a) and 6(b), respectively.

License Order No. LLO 01-060D (Rev 3)

- 4) Replaced 7(a) "For Delta II commercial space launches:
 - (1) Insurance in the amount of Forty Five Million Dollars (\$45,000,000) for covered property claims resulting from a commercial space flight; and
 - (2) Insurance in the amount of Thirty Four Million Dollars (\$34,000,000) for covered property claims resulting from pre-flight ground operations performed at CCAFS" with "(a) Insurance in the amount of Eighty Five Million Dollars (\$85,000,000) for covered property claims resulting from a commercial space flight; and(b) Insurance in the amount of Fifty One Million Dollars (\$51,000,000) for covered property claims resulting from pre-flight ground operations performed at CCAFS."
- 5) Replaced the first sentence under 12(a) that read "BLS shall submit evidence of insurance and the certifications required under section 10 of this Order no later than 30 days after the effective date of this Order." with "BLS shall submit evidence of insurance and the certifications required under section 10 of this Order no later than 30 days before commencement of licensed launch activities."
- 6) Redesignated License Order No. LLO 01-060D with "(Rev 1)" following

Revision 2 - Issued September 11 2007

- 1) Replaced McDonnell Douglas Corporation with Boeing Launch Services and MDC with BLS.
- 2) Eliminated paragraphs 4, 5, and 8 through 12, and renumber paragraph 6 as paragraph 4 and paragraph 7 as paragraph 5
- 3) Redesignated License Order No. LLO 01-060D with "(Rev 2)" following

Revision 3 - Issued April 8, 2011

- 1) Due to transfer of code, redesignated Authority to read: "51 U.S.C. Subtitle V, Ch. 509".
- 2) For the sake of consistency, replaced "Under" with "AUTHORIZED BY" in the title.
- 3) Replaced "Associate Administrator for" with "Office of" prior to all the name Commercial Space Transportation.
- 4) In paragraph 2, replaced "amends" with "modifies"; moved "and" to be after "renewed on April 28, 2006," and inserted "transferred to BLS on September 11, 2007".
- 5) Redesignated License Order No. LLO 01-060D with "(Rev 3)" following.