Commercial
Space
Transportation
License

License Number: LLO 01-062 (Rev 2)

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 IV Medium (M) and Delta IV Medium-Plus (M+) launch vehicles, from Cape Canaveral Air Force Station (CCAFS), FL, as identified in license orders issued by the Federal Aviation Administration; and

(ii) pre-flight ground operations at CCAFS associated with the flights, as identified in paragraph (i) of this license, of Delta IV M and Delta IV M+ launch vehicles.

This license is granted subject to the terms, conditions, and limitations set forth in the latest revisions to 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 On: September 6, 2001
Revision 2 Issued On: September 1, 2011
Revision 2 Effective On: September 6, 2011

Kenneth Wong
Manager, Licensing and Evaluation Division
Revision History:

Original License – Issued September 6, 2001

Revision 1 – Issued September 11, 2007
   1) Replaced McDonnell Douglas Corporation with Boeing Launch Services.
   2) Redesignated License No. LLO 01-062 with "(Rev 1)" following.

Revision 2 – Issued September 1, 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 Commercial Space Transportation".
   3) In section (i): After "Delta IV", inserted "Medium" and "Medium-Plus, before their respective abbreviations. Removed "on flight azimuths and transporting classes of payloads to orbital destinations" as the words are unnecessary; these conditions are specified in the current License Order No. LLO 01-062B (Rev 3).
   4) In section (ii): Pluralized "flight" and "vehicle", deleted "a" before "Delta IV M", and replace "or" with "and".
   5) Following "...set forth in", insert "the latest revisions to".
   6) Redesignated License No. LLO 01-062 with "(Rev 2)" following.
License Order No. LLO 01-062A (Rev 3)

OFFICE OF
COMMERCIAL SPACE TRANSPORTATION
LICENSE ORDER REGARDING

LAUNCH

AUTHORIZED BY LICENSE NO. LLO 01-062 (Rev 2)
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 01-062 initially issued on September 6, 2001, renewed effective on September 6, 2006, and transferred to BLS under License No. LLO 01-062 (Rev 1) on September 11, 2007, by the Federal Aviation Administration's (FAA) Office of Commercial Space Transportation (Office), authorizing BLS to conduct launches; and prescribes as conditions to License No. LLO 01-062 (Rev 2) certain requirements applicable to those launches.

3. Definitions: For purposes of License No. LLO 01-062 (Rev 2) and any orders issued by the Office pertaining to activities covered by License No. LLO 01-062 (Rev 2), "Launch" shall mean (a) flight and (b) pre-flight ground operations as defined in paragraphs (i) and (ii) below.

(a) "Flight" shall mean the flight of a Delta IV M or M+ 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-01-062B (Rev 3), issued concurrently by the Office. A nominal flight is concluded upon BLS's last exercise of control over the Delta IV M or M+ launch vehicle, including the safing of Delta IV M or M+ launch vehicle stages or components that reach Earth orbit, following separation of the payload.
License Order No. LLO 01-062A (Rev 3)

(b) "Pre-flight ground operations" shall mean BLS’s pre-flight preparation of a Delta IV M or M+ launch vehicle at CCAFS, beginning with the arrival of the Delta IV M or M+ launch vehicle at CCAFS.

4. License Term: The term of License No. LLO 01-062 (Rev 2) authorizing BLS to conduct launches is five (5) years from the effective date of this license order.

OFFICE OF COMMERCIAL SPACE TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

By: Kenneth Wong, Manager Licensing and Evaluation Division

Issued: September 1, 2011
Effective: September 6, 2011

Revision History:

Original License Order - Issued September 6, 2001

Revision 1 - Issued May 30, 2002

1) Change the first sentence of paragraph 2 from "This Order amends License No. LLO 01-062 issued concurrently by the ..." to "This Order modifies License No. LLO 01-062 issued on September 6, 2001, by the ...".

2) Change paragraph 7(c) from:

In addition to paragraphs (a) and (b) of this section, at least 60 days prior to the first flight under the license, MDC shall submit to the FAA the most current versions of the following documents: ...

To:

In addition to paragraphs (a) and (b) of this section, at least 60 days prior to the first flight under the license, or as approved in writing by the FAA, MDC shall submit to the FAA the most current versions of the following documents: ...

Revision 2 - Issued September 11, 2007

1) Replace "McDonnell Douglas Corporation" with "Boeing Launch Services," and MDC with BLS.

2) In section 2, add "and renewed on September 6, 2006" and in section 4, formerly section 14, "the term of License No. LLO 01-062 is five years
License Order No. LLO 01-062A (Rev 3)

from September 6, 2006," incorporating the renewal for an additional five year period introduced in license order No. LLO 01-062E.

3) Eliminate sections 4 through 12 that restated regulations, and renumber section 13 as section 4.

Revision 3 - Issued September 1, 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 Commercial Space Transportation".

3) With exception of its first use under paragraph 2., redesignated License No. LLO 01-062 with "(Rev 2)" following.

4) In paragraph 2, replaced "amends" with "modifies"; inserted "initially" before "issued"; replaced "and renewed on September 6, 2006" with "renewed effective on September 6, 2006, and transferred to BLS under License No. LLO 01-062 (Rev 1) on September 11, 2007"; and replaced "AST" with "Office".

5) For the sake of consistency, renumbered sub-paragraphs (i) and (ii) to (a) and (b), respectively.

6) In sub-paragraph (a), after "Delta IV M", replaced "and" with "or"; inserted "(Rev 3) following LLO-01-062B," and following "Delta IV", inserted "M or M+".

7) In sub-paragraph (b), following both uses of "Delta IV", inserted "M or M+".

8) In paragraph 4, inserted after "the effective date of this license" the word "order", and deleted "(September 6, 2011)".

9) Redesignated License Order No. LLO 01-062A with "(Rev 3)" following.
License Order No. LLO 01-062B (Rev 3)

OFFICE OF
COMMERCIAL SPACE TRANSPORTATION
LICENSE ORDER REGARDING

FLIGHT

AUTHORIZED BY LICENSE NO. LLO 01-062 (Rev 2)
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 01-062 initially issued on September 6, 2001, renewed effective on September 6, 2006, and transferred to BLS under License No. LLO 01-062 (Rev 1) on September 11, 2007, by the Federal Aviation Administration's (FAA) Office of Commercial Space Transportation (Office), authorizing BLS to conduct launches; and prescribes as conditions to License No. LLO 01-062 (Rev 2) certain requirements applicable to the authorization to conduct flights.

3. Authorization: BLS is authorized to conduct flights:

(a) Using Delta IV M and Delta IV M+ launch vehicles;

(b) From Cape Canaveral Air Force Station (CCAFS), Florida;

(c) On any launch azimuth from 95 to 110 degrees, inclusive;

(d) Transporting (i) U.S. government payloads to any orbit; and (ii) non-government communication and Earth science satellites to orbits as described in the application; and
License Order No. LLO 01-062B (Rev 3)

(e) According to the launch vehicle, launch vehicle systems, and safety management program represented in the BLS application as of the date of this Order, and any amendments to the license application approved by the Office, in writing.

OFFICE OF COMMERCIAL SPACE TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

By: Kenneth Wong, Manager
Licensing and Evaluation Division

Issued: September 1, 2011
Effective: September 6, 2011

Revision History:
Original License Order - Issued September 6, 2001

Revision 1 - Issued May 30, 2002

1) Change the first sentence of paragraph 2 from "This Order amends License No. LLO 01-062 issued concurrently by the ..." to "This Order modifies License No. LLO 01-062 issued on September 6, 2001, by the ...".

2) Change paragraph 6(b) from:

No later than 90 days prior to the first flight under the License, MDC shall submit to the FAA an analysis that identifies hazards and assesses risks to public health and safety and safety of property associated with nominal and non-nominal flight of the Delta IV launch vehicle, and that demonstrates compliance with 14 C.F.R. § 415.35(a).

To:

No later than 60 days prior to the first flight under the License, MDC shall submit to the FAA an analysis that identifies hazards and assesses risks to public health and safety and safety of property associated with nominal and non-nominal flight of the Delta IV launch vehicle, and that demonstrates compliance with 14 C.F.R. § 415.35(a).

Revision 2 - Issued September 11, 2007

1) Replace McDonnell Douglas Corporation with Boeing Launch Services and MDC with BLS.

2) Eliminate "for which the FAA has accepted an BLS risk analysis as
License Order No. LLO 01-062B (Rev 3)

demonstrating compliance with 14 C.F.R. § 415.35(a), and section (6) of this order;” that restated regulations and referenced a removed section.

3) Eliminate section 4 through 8 that restated regulations.

Revision 3 - Issued September 1, 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 Commercial Space Transportation”.

3) With exception of its first use under paragraph 2., redesignated License No. LLO 01-062 with “(Rev 2)” following,

4) In paragraph 2, inserted “initially” before “issued”; inserted after “2001,” the following “renewed effective on September 6, 2006, and transferred to BLS under License No. LLO 01-062 (Rev 1) on September 11, 2007,”; and replaced “AST” with “Office”.

5) Removed “the” preceding the word “flight” which is then made plural; removed “of a launch vehicle” in all instances following “flights” as flight itself was already defined in License Order LLO 01-062A (Rev 3).

6) In sub-paragraph (a), inserted “M” between “Delta IV” and “and”; then replaced “Medium-Plus” with “M+”.

7) In sub-paragraph (e), replaced “FAA” with “Office’.

8) Redesignated License Order No. LLO 01-062B with “(Rev 3)” following.
License Order No. LLO 01-062C (Rev 3)

OFFICE OF
COMMERCIAL SPACE TRANSPORTATION
LICENSE ORDER REGARDING

PRE-FLIGHT GROUND OPERATIONS

AUTHORIZED BY LICENSE NO. LLO 01-062 (Rev 2)
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 01-062 initially issued on September 6, 2002, renewed effective on September 6, 2006, and transferred to BLS under License No. LLO 01-062 (Rev 1) on September 11, 2007, by the Federal Aviation Administration's (FAA) Office of Commercial Space Transportation (Office), authorizing BLS to conduct launches; and prescribes as conditions to License No. LLO 01-062 (Rev 2) certain requirements applicable to the authorization to conduct pre-flight ground operations.

3. Authorization: BLS is authorized to conduct pre-flight preparation of a Delta IV M or M+ launch vehicle at CCAFS, beginning with the arrival of the Delta IV M or M+ launch vehicle at CCAFS.

OFFICE OF COMMERCIAL SPACE TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

By: [Signature]
Kenneth Wong, Manager
Licensing and Evaluation Division

Issued: September 1, 2011
Effective: September 6, 2011
Revision History:

Original License Order - Issued September 6, 2001

Revision 1 - Issued April 9, 2002

1) Change the first sentence of paragraph 2 from "This Order amends License No. LLO 01-062 issued concurrently by the ..." to "This Order modifies License No. LLO 01-062 issued on September 6, 2002, by the ...".

2) Change paragraph 5 from:

Completion of Missile System Prelaunch Safety Package: The Missile System Prelaunch Safety Package, as required by EWR 127-1(T), must be approved by the 45th Space Wing's Safety Office prior to MDC moving the first Delta IV launch vehicle to the launch pad at Complex 37B.

To:

Completion of Missile System Prelaunch Safety Package: The Missile System Prelaunch Safety Package, as required by EWR 127-1(T), must be approved by the 45th Space Wing's Safety Office prior to MDC loading cryogenic propellants into the Delta IV launch vehicle on the launch pad at Complex 37B.

Revision 2 - Issued September 11, 2007

1) Replace McDonnell Douglas Corporation with Boeing Launch Services and MDC with BLS.

2) Eliminate sections 4, 5, and 6 that restated regulations.

Revision 3 - Issued September 1, 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 Commercial Space Transportation.

3) With exception of its first use under paragraph 2, redesignated License No. LLO 01-062 with "(Rev 2)" following.

4) In paragraph 2, inserted "initially" before "issued"; inserted after "2001," the following "renewed effective on September 6, 2006, and transferred to BLS under License No. LLO 01-062 (Rev 1) on September 11, 2007,"; and replaced "AST" with "Office".

5) In paragraph 3, following both uses of "Delta IV", inserted "M or M+".

6) Redesignated License Order No. LLO 01-062C with "(Rev 3)" following.
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 01-062 (the License) initially issued on September 6, 2001, renewed effective on September 6, 2006, and transferred to BLS under License No. LLO 01-062 (Rev 1) on September 11, 2007, by the Federal Aviation Administration's (FAA) Office of Commercial Space Transportation (Office), authorizing BLS to conduct launches; and prescribes financial responsibility requirements for licensed launch activities in accordance with 14 C.F.R. Part 440.

3. **Liability Insurance:** BSL 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 Two Hundred Sixty One Million Dollars ($261,000,000) for covered claims resulting from a licensed flight of a launch vehicle; and

   (b) Liability insurance in the amount of Six Million Dollars ($6,000,000) for covered claims resulting from pre-flight ground operations performed at CCAFS.

4. **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. BSL 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 Fifty Million Dollars ($50,000,000) for covered property claims resulting from a licensed flight of a launch vehicle; and

(b) Insurance in the amount of Twenty-Five Million Dollars ($25,000,000) 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: September 1, 2011
Effective: September 6, 2011

Revision History:

Original License Order - Issued September 6, 2001

Revision 1 - Issued September 6, 2006

1) Replace "concurrently" in paragraph 2 with "September 6, 2001 and renewed on September 6, 2006".

2) Deletion of paragraph 3. Paragraphs have been renumbered appropriately.

3) Change paragraph 7(a), now paragraph 6(a), from "Insurance in the amount of Thirty Seven Million Dollars ($37,000,000) for covered property claims resulting from a licensed flight of a launch vehicle;" to "Insurance in the amount of Forty Three Million Dollars ($43,000,000) for covered property claims resulting from a licensed flight of a launch vehicle;"

4) Change paragraph 7(b), now paragraph 6(b) from "Insurance in the amount of Eighteen Million Dollars ($18,000,000) for covered property claims resulting from pre-flight ground operations performed at CCAFS" to "Insurance in the amount of Twenty-One Million Five Hundred Thousand Dollars ($21,500,000) for covered property claims resulting
License Order No. LLO 01-062D (Rev 3)

from pre-flight ground operations performed at CCAFS.”

Revision 2 - Issued September 11, 2007

1) Replace McDonnell Douglas Corporation with Boeing Launch Services and MDC with BLS.

2) Eliminate sections 3 through 5, and 8 through 12 that restated regulations, and renumber Section 6 as Section 3 and Section 7 as Section 4.

Revision 3 - Issued September 1, 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 Commercial Space Transportation.”

3) Following “UNDER LICENSE NO LLO 01-062”, inserted “(Rev 2)”.

4) In paragraph 2, inserted “initially” before “issued”; replaced “and renewed on September 6, 2006” with “renewed effective on September 6, 2006, and transferred to BLS under License No. LLO 01-062 (Rev 1) on September 11, 2007”; and replaced “AST” with “Office”.

5) In paragraph 3, replaced “FAA” with “Office”.

6) In sub-paragraph 4(a): change “Forty Three Million Dollars ($43,000,000)” to be “Fifty Million Dollars ($50,000,000)”.

7) In sub-paragraph 4(b): Change “Twenty-One Million Five Hundred Thousand Dollars ($21,500,000),” to “Twenty-Five Million Dollars ($25,000,000)”.

8) Redesignated License Order No. LLO 01-062D with “(Rev 3)” following.