

Commercial Space Transportation License

License Number: LLO 01-064 (Rev 6)

**LOCKHEED MARTIN
COMMERCIAL
LAUNCH SERVICES,
INC.**

**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. Lockheed Martin Commercial Launch Services, Inc. is authorized to conduct:

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

(ii) 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 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.



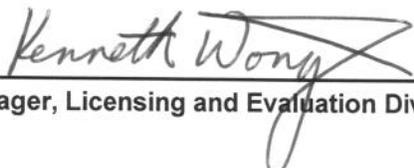
US Department
of Transportation
Federal Aviation
Administration

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

Original Issued On: December 14, 2001

Revision 6 Issued On: November 29, 2011

Revision 6 Effective On: December 14, 2011



Manager, Licensing and Evaluation Division

Revision History:

Original License - Issued December 14, 2001

Revision 6 - Issued November 29, 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 current License Order No.
LLO 01-064B.
- 4) In section (ii): Pluralized "flight" and "vehicle", deleted
"an" before "Atlas V 400", and replaced "or" with "and".
- 5) Following "...set forth in", insert "the latest revisions to".
- 6) Redesignated License No. LLO 01-059 to "LLO 01-064 (Rev 6)."

License Order No. LLO 01-064A (Rev 6)

OFFICE OF
COMMERCIAL SPACE TRANSPORTATION
LICENSE ORDER REGARDING

LAUNCH

AUTHORIZED BY LICENSE NO. LLO 01-064 (Rev 6)
ISSUED TO

LOCKHEED MARTIN COMMERCIAL LAUNCH SERVICES INC.

1. Authority: This Order is issued to Lockheed Martin Commercial Launch Services, Inc. (LMCLS), under 51 U.S.C. Subtitle V, chapter 509, and 14 C.F.R. Ch. III.
2. Purpose: This Order modifies License No. LLO 01-064 (the license) initially issued on December 14, 2001, and renewed effective December 14, 2006, by the Federal Aviation Administration's (FAA) Office of Commercial Space Transportation (Office), authorizing LMCLS to conduct launches; and prescribes as conditions to License No. LLO 01-064 (Rev 6) certain requirements applicable to those launches.
3. Definitions: For purposes of License No. LLO 01-064 (Rev 6) and any orders issued by the FAA pertaining to activities covered by License No. LLO 01-064 (Rev 6), "launch" shall mean (a) flight and (b) pre-flight ground operations as defined in paragraphs (a) and (b) below.
 - (a) "Flight" shall mean the flight of an Atlas V 401, 411, 421, 431, or 521 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-01-064B (Rev 5). A nominal flight is concluded upon LMCLS's last exercise of control over the Atlas V 401, 411, 421, 431, or 521 launch vehicle, including the safing of Atlas V 401, 411, 421, 431, or 521 launch vehicle stages or components that reach Earth orbit, following separation of the payload.

License Order No. LLO 01-064A (Rev 6)

- (b) "Pre-flight ground operations" shall mean LMCLS's pre-flight preparation 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.
4. License Term: The term of License No. LLO 01-064 authorizing LMCLS 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: November 29, 2011

Effective: December 14, 2011

Revision History:

Original License Order - Issued December 14, 2001

Revision 1 - Issued October 28, 2002

- 1) Change the first sentence of paragraph 2 from "This Order amends License No. LLO 01-064 (the license) issued concurrently by the ..." to "This Order modifies License No. LLO 01-064 (the license) issued on December 14, 2002, by the ...".
- 2) Change paragraph 3(ii) from "'Pre-flight ground operations' shall mean LMCLS's pre-flight preparation of an Atlas V 401 launch vehicle at CCAFS, beginning with the arrival of the Atlas V 401 launch vehicle at CCAFS." to "'Pre-flight ground operations' shall mean LMCLS's pre-flight preparation 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."

- 3) Delete paragraph 5(a) which read:

Within 30 days of the effective date of this order, LMCLS shall submit to the FAA an accident investigation plan (AIP) that meets the requirements in 14 CFR § 415.41 for reporting, responding to, and investigating mishaps that occur during pre-flight ground operations.

- 4) Delete paragraph 6(c) which read:

At least 60 days prior to the first flight under the license, LMCLS shall submit to the FAA the most current versions of the following documents:

- (1) Evolved Expendable Launch Vehicle EWR 127-1 Range Safety Requirements (Tailored) for the Atlas V Launch System.
- (2) Atlas V Range Safety System Report.

Revision 2 - Issued July 1, 2003

- 1) Add the Atlas V 521 to paragraph 3(i).
- 2) Change paragraph 13 from "The term of License No. LLO 01-064 authorizing LMCLS to conduct launches is five (5) years from the effective date of this license" to "The term of License No. LLO 01-064 authorizing LMCLS to conduct launches is five (5) years from December 14, 2001."

Revision 3 - Issued February 11, 2005

- 1) Change error in date of original license in paragraph 2 from "December 14, 2002" to "December 14, 2001."
- 2) Add the Atlas V 431 to paragraph 3(i).

Revision 4 - Issued March 24, 2006

- 1) Add the Atlas V 411 to paragraph 3(i).

License Order No. LLO 01-064A (Rev 6)

Revision 5 - Issued December 13, 2006

- 1) Add the Atlas V 421 to paragraph 3(i).
- 2) Eliminate paragraphs 4 through 12, and renumber paragraph 13 as paragraph 4.
- 3) In paragraph 4, formerly paragraph 13, change term of the authorization from originating December 14, 2001, to December 14, 2006.

Revision 6 - Issued November 29, 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 01-064 with "(Rev 6)" following.
- 4) In paragraph 2, inserted "initially" before "issued"; inserted after "2001," the following "and renewed effective on December 14, 2006"; and replaced "AST" with "Office".
- 5) For the sake of consistency, renumbered sub-paragraphs (i) and (ii) to (a) and (b), respectively.
- 6) In paragraph 4, inserted after "five (5) years from " the text "the effective date of this license order", and deleted "December 14 2006".
- 7) Redesignated License Order No. LLO 01-062A with "(Rev 6)" following.

License Order No. LLO 01-064B (Rev 5)

OFFICE OF
COMMERCIAL SPACE TRANSPORTATION
LICENSE ORDER REGARDING

FLIGHT

AUTHORIZED BY LICENSE NO. LLO 01-064 (Rev 6)
ISSUED TO

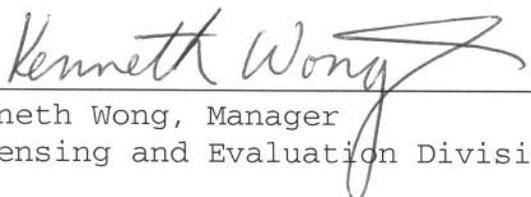
LOCKHEED MARTIN COMMERCIAL LAUNCH SERVICES INC.

1. Authority: This Order is issued to Lockheed Martin Commercial Launch Services, Inc. (LMCLS), under 51 U.S.C. Subtitle V, chapter 509, and 14 C.F.R. Ch. III.
2. Purpose: This Order modifies License No. LLO 01-064 (the license) initially issued on December 14, 2001, and renewed effective December 14, 2006, by the Federal Aviation Administration's (FAA) Office of Commercial Space Transportation (Office), authorizing LMCLS to conduct launches; and prescribes as conditions to License No. LLO 01-064 (Rev 6) certain requirements applicable to the authorization to conduct flights.
3. Authorization: LMCLS is authorized to conduct flights:
 - (a) Using Atlas V 401, 411, 421, 431, and 521 launch vehicles;
 - (b) From Cape Canaveral Air Force Station (CCAFS), Florida;
 - (c) On launch azimuths, inclusive between 93.5 to 94.5 degrees for the Atlas V 401 and 431, of 84.8 degrees for the Atlas V 411, inclusive between 92.5 to 93.4 degrees for the Atlas V 421, and inclusive between 85.5 to 86.5 degrees for the Atlas V 521;
 - (d) Transporting (i) U.S. government payloads and (ii) non-government communication satellites, to geosynchronous transfer orbit as described in the LMCLS license application; and

License Order No. LLO 01-064B (Rev 5)

- (e) According to the launch vehicle, launch vehicle systems, and safety management program represented in the LMCLS license 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: November 29, 2011

Effective: December 14, 2011

Revision History:

Original License Order - Issued December 14, 2001

Revision 1 - Issued July 1, 2003

- 1) Change the first sentence of paragraph 2 from "This Order amends License No. LLO 01-064 (the license) issued concurrently by the ..." to "This Order modifies License No. LLO 01-064 (the license) issued on December 14, 2002, by the ...".
- 2) Change paragraph 3(a) from "Using the Atlas V 401 launch vehicle" to "Using an Atlas V 401 or 521 launch vehicle."
- 3) Change paragraph 3(c) from "On any launch azimuth from 96 to 97 degrees, inclusive" to "On any launch azimuth, inclusive, between 93.5 to 94.5 degrees for the Atlas V 401, and between 85.5 to 86.5 degrees for the Atlas V 521."

Revision 2 - Issued February 11, 2005

- 1) Change paragraph 3(a) from "Using the Atlas V 401 or 521 launch vehicle" to "Using an Atlas V 401, 431 or 521 launch vehicle."
- 2) Change paragraph 3 (c) from "...between 93.5 to 94.5 degrees for the Atlas V 401..." to "...between 93.5 to 94.5 degrees for the Atlas V 401 and 431,...".
- 3) Change error in date of original license in paragraph 2 from "December 14, 2002" to "December 14, 2001."

Revision 3 - Issued March 24, 2005

- 1) Change paragraph 3(a) from "Using the Atlas V 401, 431, or 521 launch vehicle" to "Using an Atlas V 401, 411, 431 or 521 launch vehicle."
- 2) Change paragraph 3 (c) from "On any launch azimuth, inclusive, between 93.5 to 94.5 degrees for the Atlas V 401 and 431, and between 85.5 to 86.5 degrees for the Atlas V 521;" to "On any launch azimuth, inclusive between 93.5 to 94.5 degrees for the Atlas V 401 and 431, of 84.8 degrees for the Atlas V 411, and inclusive between 85.5 to 86.5 degrees for the Atlas V 521;".

Revision 4 - Issued December 13, 2006

- 1) Change paragraph 3(a) from "Using the Atlas V 401, 421, 431, or 521 launch vehicle" to "Using an Atlas V 401, 411, 421, 431, or 521 launch vehicle."
- 2) Change paragraph 3 (c) from "On any launch azimuth, inclusive between 93.5 to 94.5 degrees for the Atlas V 401 and 431, of 84.8 degrees for the Atlas V 411, and inclusive between 85.5 to 86.5 degrees for the Atlas V 521;" to "On launch azimuths, inclusive, between 93.5 to 94.5 degrees for the Atlas V 401 and 431, of 84.8 degrees for the Atlas V 411, inclusive between 92.5 to 93.4 degrees for the Atlas V 421, and inclusive between 85.5 to 86.5 degrees for the Atlas V 521;"
- 3) Eliminate paragraphs 4 through 8.

License Order No. LLO 01-064B (Rev 5)

Revision 5 - Issued November 29, 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 01-064 with "(Rev 6)" following,
- 4) In paragraph 2, inserted "initially" before "issued"; inserted after "2001," the following "and renewed effective on December 14, 2006, " 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 01-064A (Rev 6).
- 6) In sub-paragraph (a), replaced "or" with "and" ; then pluralized "vehicle".
- 7) In sub-paragraph (e), replaced "FAA" with "Office".
- 8) Redesignated License Order No. LLO 01-064B with "(Rev 5)" following.

OFFICE OF
COMMERCIAL SPACE TRANSPORTATION
LICENSE ORDER REGARDING

PRE-FLIGHT GROUND OPERATIONS

AUTHORIZED BY LICENSE NO. LLO 01-064 (Rev 6)
ISSUED TO

LOCKHEED MARTIN COMMERCIAL LAUNCH SERVICES INC.

1. Authority: This Order is issued to Lockheed Martin Commercial Launch Services, Inc. (LMCLS), under 51 U.S.C. Subtitle V, chapter 509, and 14 C.F.R. Ch. III.
2. Purpose: This Order modifies License No. LLO 01-064 (the license) initially issued on December 14, 2001, and renewed effective December 14, 2006, by the Federal Aviation Administration's (FAA) Associate Administrator for Commercial Space Transportation (Office), authorizing LMCLS to conduct launches; and prescribes as conditions to License No. LLO 01-064 (Rev 6) certain requirements applicable to the authorization to conduct pre-flight ground operations.
3. Authorization: LMCLS is authorized to conduct pre-flight preparation 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.

OFFICE OF COMMERCIAL SPACE TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

By: _____


Kenneth Wong, Manager
Licensing and Evaluation Division

Issued: November 29, 2011

Effective: December 14, 2011

Revision History:

Original License Order - Issued December 14, 2001

Revision 1 - Issued October 28, 2002

- 1) Change the first sentence of paragraph 2 from "This Order amends License No. LLO 01-064 (the license) issued concurrently by the ..." to "This Order modifies License No. LLO 01-064 (the license) issued on December 14, 2002, by the ...".
- 2) Change paragraph 2 from "LMCLS is authorized to conduct pre-flight preparation of an Atlas V 401 launch vehicle at CCAFS, beginning with the arrival of the Atlas V 401 launch vehicle at CCAFS" to "LMCLS is authorized to conduct pre-flight preparation 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."

Revision 2 - Issued February 11, 2005

- 1) Change error in date of original license in paragraph 2 from "December 14, 2002" to "December 14, 2001."

Revision 3 - Issued December 13, 2006

- 1) Eliminate paragraphs 4 and 5.

Revision 4 - Issued November 29, 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 01-064 with "(Rev 6)" following.
- 4) In paragraph 2, inserted "initially" before "issued"; inserted after "2001," the following "and renewed effective on December 14, 2006"; and replaced "AST" with "Office".
- 5) Redesignated License Order No. LLO 01-064C with "(Rev 4)" following.

OFFICE OF
COMMERCIAL SPACE TRANSPORTATION
LICENSE ORDER REGARDING

FINANCIAL RESPONSIBILITY REQUIREMENTS

Under License No. LLO 01-064 (Rev 6)
Issued to

LOCKHEED MARTIN COMMERCIAL LAUNCH SERVICES INC.

1. Authority: This Order is issued to Lockheed Martin Commercial Launch Services, Inc. (LMCLS), under 51 U.S.C. Subtitle V, chapter 509, and 14 C.F.R. Part 440.
2. Purpose: This Order modifies License No. LLO 01-064 (the license) initially issued on December 14, 2001, and renewed effective December 14, 2006, by the Federal Aviation Administration's (FAA) Associate Administrator for Commercial Space Transportation (Office), authorizing LMCLS to conduct launches; and prescribes financial responsibility requirements for licensed launch activities in accordance with 14 C.F.R. Part 440.
3. Liability Insurance: LMCLS shall maintain a policy or policies of liability insurance (or otherwise demonstrate financial responsibility) in accordance with 14 C.F.R. § 440.9(b) as follows:
 - (a) Six Million Dollars (\$6,000,000) for covered claims resulting from pre-flight ground operations performed at CCAFS for all Atlas V 400 and 500 series launches.
 - (b) For covered claims resulting from flight of a licensed launch:
 - (1) Forty Five Million Dollars (\$45,000,000) for Atlas V 401.
 - (2) One Hundred Twelve Million Five Hundred Thousand Dollars (\$112,500,000) for Atlas V 411.
 - (3) One Hundred Ninety-Three Million Five Hundred Thousand Dollars (\$193,500,000) for Atlas V 421.

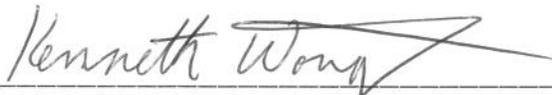
License Order No. LLO 01-064D (Rev 8)

- (4) Two Hundred Sixty One Million Dollars (\$261,000,000) for Atlas V 431.
- (5) One Hundred Ninety-Three Million Five Hundred Thousand Dollars (\$193,500,000) for Atlas V 521.

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. LMCLS 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) Seven Million Dollars (\$7,000,000) for covered claims resulting from pre-flight ground operations performed at CCAFS for all Atlas V 400 and 500 series launches.
- (b) For covered claims resulting from flight of a licensed launch:
 - (1) Twenty-One Million Dollars (\$21,000,000) for Atlas V 401.
 - (2) One Hundred Million Dollars (\$100,000,000) for Atlas V 411, 421, 431, and 521.

OFFICE OF COMMERCIAL SPACE TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

By: 
Kenneth Wong, Manager
Licensing and Evaluation Division

Issued: November 29, 2011

Effective: December 14, 2011

Revision History:

Original License Order - Issued December 14, 2001

Revision 1 - Issued October 28, 2002

- 1) Change the first sentence of paragraph 2 from "This Order amends License No. LLO 01-064 (the license) issued concurrently by the ..." to "This Order modifies License No. LLO 01-064 (the license) issued on December 14, 2002, by the ...".
- 2) Change paragraph 6(b) from "Liability insurance in the amount of Nine Million Dollars (\$9,000,000) for covered claims resulting from pre-flight ground operations performed at CCAFS" to "Liability insurance in the amount of Three Million Dollars (\$3,000,000) for covered claims resulting from pre-flight ground operations performed at CCAFS."

Revision 2 - Issued July 1, 2003

- 1) In paragraph 6, add Atlas V 521 liability insurance values.
- 2) In paragraph 7, add Atlas V 521 government property insurance values.
- 3) In paragraph 12(b), delete the sentence, "LMCLS shall execute a reciprocal waiver of claims agreement (Attachment 1) with the Federal Aviation Administration, Department of Transportation, within 15 days of the effective date of this order."

Revision 3 - Issued February 11, 2005

- 1) In paragraph 6, change paragraph "(b)" to paragraph "(c)."
- 2) In paragraph 6, add Atlas V 431 liability insurance values as paragraph "(b)."
- 3) In paragraph 7 (b), change, "For Atlas V 521 launches" to "For Atlas V 431 and 521 launches."
- 4) Change error in date of original license in paragraph 2 from "December 14, 2002" to "December 14, 2001."

Revision 4 - Issued February 28, 2006

- 1) Reorganized "6. Liability Insurance" and "7. Government Property Insurance" to apply pre-flight ground operation insurance amounts to all Atlas V 400 and 500 series launch vehicles and to group insurance requirements for the licensed flights.

Revision 5 - Issued March 24, 2006

- 1) In paragraph 6.(b), change paragraphs "(2)" and "(3)" to paragraph "(3)" and "(4)"
- 2) In paragraph 6.(b), add Atlas V 411 liability insurance values as paragraph "(2)."
- 3) In paragraph 7 (b)(2), change "One Hundred Million Dollars for Atlas V 431 and 521." to "One Hundred Million Dollars for Atlas V 411, 431, and 521."

License Order No. LLO 01-064D (Rev 8)

Revision 6 - Issued December 13, 2006

- 1) Eliminate paragraphs 4, 5, and 8 through 12, and renumber paragraph 6 as paragraph 4 and paragraph 7 as paragraph 5.
- 2) In paragraph 4, formerly paragraph 6, former 6.(b), change paragraphs "(3)" and "(4)" to paragraph "(4)" and "(5)"
- 2) In paragraph 4, formerly paragraph 6, former 6.(b), add Atlas V 421 liability insurance values as paragraph "(3)."
- 3) In paragraph 5, formerly paragraph 7, former 7(b)(1), change, "Twelve Million Dollars (\$12,000,000) for Atlas V 401" to "Twenty One Million Dollars (\$21,000,000) for Atlas V 401.
- 4) In paragraph 5, formerly paragraph 7, former 7(b)(2), change, "One Hundred Million Dollars for Atlas V 411, 431, and 521." to "One Hundred Million Dollars for Atlas V 411, 421, 431, and 521."

Revision 7 - Issued August 22, 2007

- 1) In paragraph 4, changed (a) "Three Million Dollars (\$3,000,000)" to "Six Million Dollars (\$6,000,000)."

Revision 8 - Issued November 29, 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 01-064", inserted "(Rev 6)",
- 4) With exception of its first use under paragraph 2, redesignated License No. LLO 01-064 with "(Rev 6)" following.
- 5) In paragraph 2, inserted "initially" before "issued"; inserted after "2001," the following "and renewed effective on December 14, 2006"; and replaced "AST" with "Office".
- 6) Deleted paragraph 3; paragraphs have been renumbered appropriately.
- 7) Redesignated License Order No. LLO 01-062D with "(Rev 8)" following.