

**Office of the Associate Administrator for
Commercial Space Transportation**

**Financial Responsibility Requirements
as Determined by the Maximum Probable Loss
(MPL) Process**

**As of
December 21, 2001**

ACTIVE LICENSES ¹

Orbital Launches Launch Operator

Vehicle Company	Year	Launch Site	U.S. Government Property (\$M)		Third Party (\$M)	
Atlas II/IIA	2000	CCAFS	Pre-flight:	\$44	Pre-flight:	\$45
Lockheed Martin			Flight:	\$53	Flight:	\$113
Atlas IIAS	2000	CCAFS	Pre-flight:	\$55	Pre-flight:	\$45
Lockheed Martin			Flight:	\$78	Flight:	\$135
Atlas IIIA & IIIB	2000	CCAFS	Pre-flight:	\$44	Pre-flight:	\$30
Lockheed Martin			Flight:	\$53	Flight:	\$149
Atlas V 401	2001	CCAFS	Pre-flight:	\$7	Pre-flight:	\$9
Lockheed Martin			Flight:	\$12	Flight:	\$45
Delta II	2000	CCAFS	Pre-flight:	\$34	Pre-flight:	\$24
McDonnell Douglas			Flight:	\$45	Flight:	\$76.5
Delta III	2000	CCAFS	Pre-flight:	\$29	Pre-flight:	\$24
McDonnell Douglas			Flight:	\$56	Flight:	\$126
Delta IV M or M+	2001	CCAFS	Pre-flight:	\$18	Pre-flight:	\$3
McDonnell Douglas			Flight:	\$37	Flight:	\$261
Delta II	1996	VAFB	Pre-flight:	\$42	Pre-flight:	\$10
McDonnell Douglas			Flight:	\$48.8	Flight:	\$40
Pegasus	1994	VAFB	Pre-flight:	\$3	Pre-flight:	\$10
Orbital Sciences			Flight:	\$1	Flight:	\$28
Pegasus	1997	CCAFS	Pre-flight:	\$1	Pre-flight:	\$10
Orbital Sciences			Flight:	\$1	Flight:	\$37.5
Pegasus	1997	WFF	Pre-flight:	\$1	Pre-flight:	\$10
Orbital Sciences			Flight:	\$1	Flight:	\$43.5
Taurus	1996	VAFB	Pre-flight:	\$27.2	Pre-flight:	\$10
Orbital Sciences			Flight:	\$2.3	Flight:	\$40
Pegasus	1999	KMR	Pre-flight:	\$27	Pre-flight:	\$10
Orbital Sciences			Flight:	\$1	Flight:	\$57

¹ For all tables, the date shown in the Year column is the date of the MPL study. The dollar values shown for U.S. Government property and Third-party losses are as assigned in the applicable license orders. Those values are periodically and routinely reassessed over time. During such a reassessment, if the MPL values are confirmed to remain valid, the report's date is not changed. If the values are revised and new license orders issued, the date of the report will also be revised.

ACTIVE LICENSE ²

Orbital Launches Launch Specific

Vehicle Company	Year	Launch Site	U.S. Government Property (\$M)	Third Party (\$M)
Zenit – 3SL Sea Launch	2000	Pacific Ocean	\$Zero	\$10

ACTIVE LICENSE

Sub-Orbital Launches Launch Specific

Vehicle Company	Year	Launch Site	U.S. Government Property	Third Party (\$)
Tachyon Interorbital Systems	2000	Western Range	\$Zero	\$250K
Terrier Orion Astrotech	2001	WTR	Pre-flight: \$Zero	Pre-flight: \$Zero
			Flight: \$140K	Flight: \$4.5M

² Past practice for launch specific licenses was to not discriminate between pre-flight and flight phases for the purposes of establishing financial responsibility requirements based on the MPL. Thus, assigned dollar values for U.S. Government and Third-party losses were the higher of the values determined for each phase – pre-flight and flight. This will no longer be the case for future launch specific licenses in that MPL values will be assigned for both phases of the two loss categories.

INACTIVE OR EXPIRED LICENSES

Orbital Launches Launch Operator

Vehicle Company	Year	Launch Site	U.S. Government Property (\$M)	Third Party (\$M)
Atlas	1989	CCAFS	Pre-flight: \$60	Pre-flight: \$30
Lockheed Martin			Flight: \$75	Flight: \$164
Delta	1989	CCAFS	Pre-flight: \$60	Pre-flight: \$30
McDonnell Douglas			Flight: \$80	Flight: \$164
Athena-1	1996	VAFB	Pre-flight: \$10	Pre-flight: \$10
Lockheed Martin			Flight: \$27	Flight: \$117
Athena-2	1998	VAFB	Pre-flight: \$20	Pre-flight: \$10
Lockheed Martin			Flight: \$72	Flight: \$117

INACTIVE or EXPIRED LICENSES

Orbital Launches Launch Specific

Vehicle Company	Year	Launch Site	U.S. Government Property (\$M)	Third Party (\$M)
Conestoga EER Systems	1994	WFF	\$73.5	\$13
Conestoga EER Systems	1995	WFF	\$88	\$13
Delta 7920-10 McDonnell Douglas	1993	VAFB	\$48.8	\$41
Athena-1 Lockheed Martin	1996	VAFB	\$27	\$117
Athena-1 Lockheed Martin	1997	SFA	\$32	\$21
Athena-2 Lockheed Martin	1997	SFA	\$81.2	\$36
Pegasus Orbital Sciences	1992	CCAFS	\$15	\$15
Pegasus XL Orbital Sciences	1997	Spain	\$Zero	\$48
Scout LTV	1990	WFF	\$21.6	\$10
Scout LTV	1990	VAFB	\$1.6	\$10
Titan Lockheed Martin	1989	CCAFS	\$80	\$215

INACTIVE or EXPIRED LICENSES

Sub-Orbital Launches Launch Specific

Vehicle Company	Year	Launch Site	U.S. Government Property (\$M)	Third Party (\$M)
Black Brant IX Conatec	1988	WSMR	\$1	\$10
Prospector Orbital Sciences	1990	CCAFS	\$1	\$12.5
SMLV AMROC	1989	VAFB	\$1	\$12
Starfire SSI	1989	WSMR	\$1	\$10
Starfire EER Systems	1992	WSMR	\$2.5	\$10
Starfire Black Brant Class EER Systems	1994	WSMR	\$3	\$10
Talos Castor I Orbital Sciences	1991	KTF	\$0.3	\$10
SASSY Flea Society for Amateur Scientists	2000	VAFB	\$Zero	\$3

INACTIVE OR EXPIRED LICENSE

Sub-Orbital Launches Launch Operator

Vehicle Company	Year	Launch Site	U.S. Government Property (\$M)	Third Party (\$M)
Aries Orbital Sciences	1991	WSMR	Pre-flight: \$1	Pre-flight: \$10
			Flight: \$1	Flight: \$10

ACRONYMS

AMROC	American Rocket Corporation
CCAFS	Cape Canaveral Air Force Station, Florida
KMR	Kwajalein Missile Range, Pacific Ocean
KTF	Kauai Test Facility, Hawaii
LTV	Ling Temco Vought
SFA	Spaceport Florida
SMLV	Single Module Launch Vehicle
SSI	Space Services, Incorporated
VAFB	Vandenberg Air Force Base, California
WFF	Wallops Flight Facility, Virginia
WSMR	White Sands Missile Range, New Mexico
WTR	Woomera Test Range, Australia