

THE VALUE OF PERFORMANCE.

**NORTHROP GRUMMAN**

## *Minotaur-C*

*Ground-Launched Space Launch Vehicle*

**T**he Minotaur-C launch vehicle provides a cost-effective and reliable launch capability for satellites weighing up to 3,500 pounds (1,590 kilograms). Minotaur-C is currently in production to support commercial, international, and select U.S. Government customers. The versatility and flexibility of the Minotaur-C family of vehicles provides the means to access space for a variety of payloads.

### **System Features**

Incorporates all solid propulsion stages, built commercially by Northrop Grumman using proven technologies to meet mission requirements

Leverages the best of Taurus®, Pegasus®, and Minotaur vehicles including Northrop Grumman MACH avionics

Provides substantial payload performance into a variety of low inclination low-Earth orbit (LEO), polar LEO, sun-synchronous LEO, geotransfer and interplanetary orbits

Designed for easy transportability, rapid set-up and launch from austere launch sites

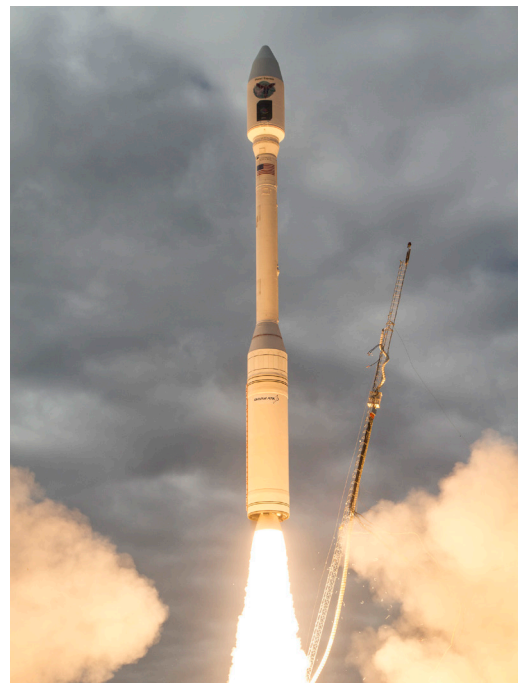
Streamlined vehicle/payload integration and testing through simplified avionics interfaces and offline payload encapsulation

Compatible with the U.S. Air Force Western Range (WR), Eastern Range (ER), NASA's Wallops Flight Facility, Pacific Spaceport Complex - Alaska (PSCA) and Reagan Test Site (RTS)

Flight-proven heritage with single and multiple payloads

### **Facts At A Glance**

The Minotaur-C incorporates advanced structural technology on Pegasus, Minotaur, Taurus and other operational launch systems.



The Minotaur-C launch vehicle is a variant of Northrop Grumman's highly successful Pegasus and Minotaur space launch vehicles.

## Minotaur-C Vehicle Configurations

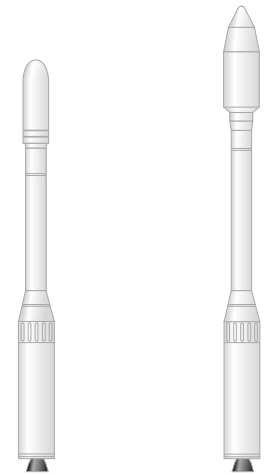
All major Minotaur-C configurations (SSLV, Standard and XL) have launched.

### Vehicle Statistics

Weight: 77,000 kg (170,000 lb)  
Height: 30 to 32 m (97 to 104 ft)

### Minotaur-C Configuration Numbering

	3	2	1	0
<b>Vehicle Configuration</b>	<b>Fairing Size</b>	<b>Stage 3 Motor</b>	<b>Stage 4 Motor</b>	
1 - SSLV Minotaur-C (Peacekeeper Stage 0, Std Stages 1, 2)	1 - 63" 2 - 92"	1 - Orion-38 3 - STAR-37	0 - <None> 3 - STAR-37	
2 - Standard Minotaur-C (Castor 120 Stage 0, Std Stages 1, 2)				
3 - Minotaur-C XL (Castor 120 Stage 0, XL Stages 1, 2)				



Typical Performance	3110 Minotaur-C XL	3210 Minotaur-C XL
400 km @ 28.5°	1,458 kg (3,214 lb)	1,278 kg (2,814 lb)
400 km @ Sun-Synchronous	1,054 kg (2,324 lb)	912 kg (2,008 lb)
Typical Performance	3113 Minotaur-C XL	
C3 -10 (km <sup>2</sup> /sec <sup>2</sup> )	530 kg (1,170 lb)	
C3 0 (km <sup>2</sup> /sec <sup>2</sup> )	425 kg (940 lb)	

### Flexible Payload Fairing Options

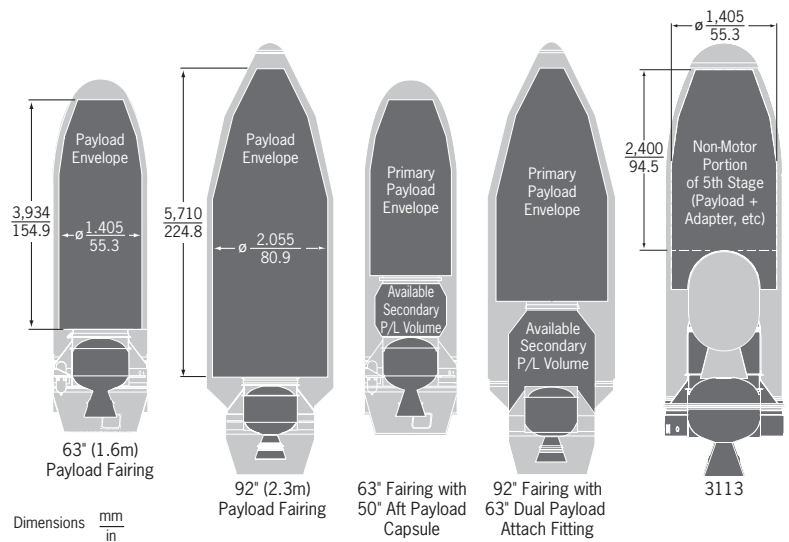
Two flight-proven fairings and two dual payload attach fittings are offered to provide cost-effective access to space for single and multiple payloads.

### Standard Payload Accommodations

Temperature, humidity control  
Class 8 (100,000) cleanliness

### Enhanced Accommodations

Class 7 (10,000) cleanliness  
Nitrogen purge



### More Information

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