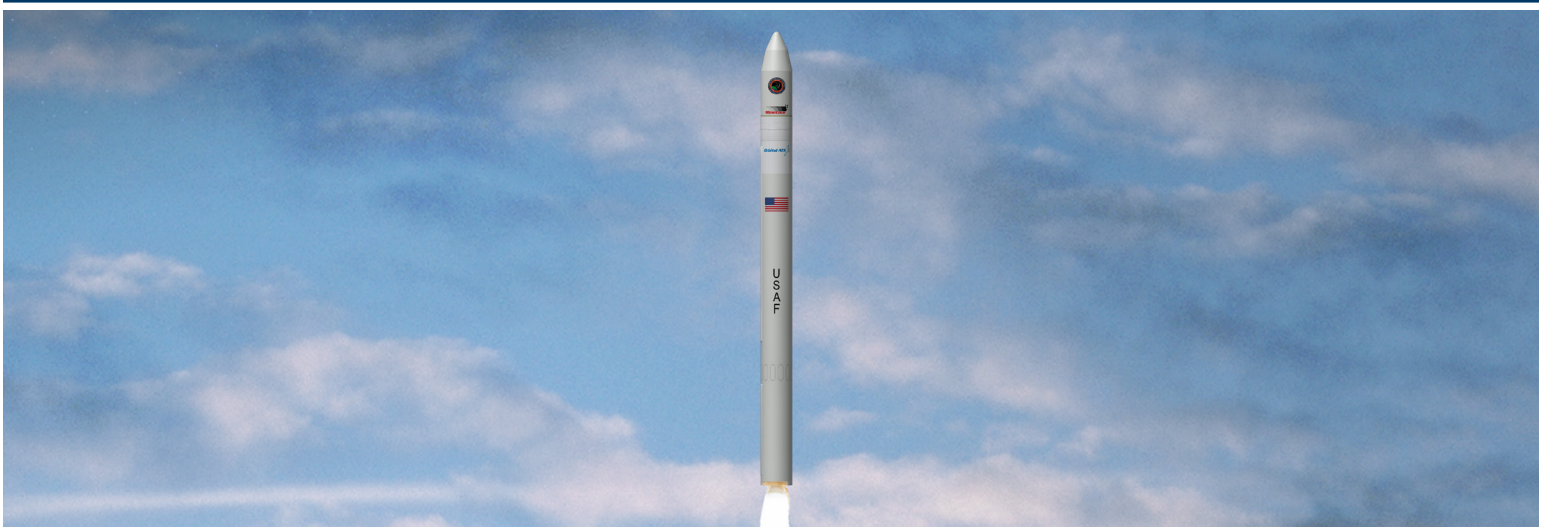


Minotaur VI

Space Launch Vehicle

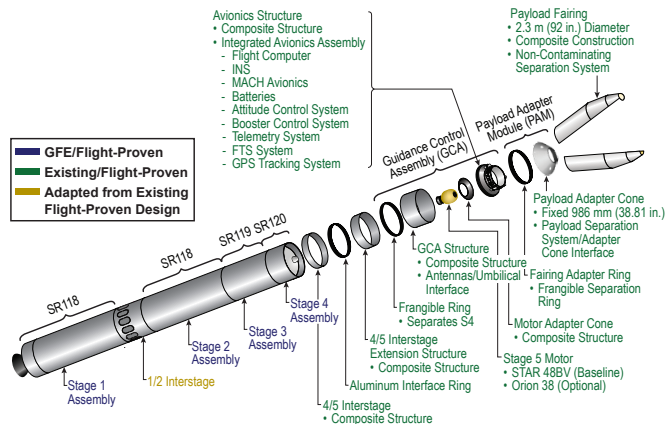
FACT SHEET



Overview

Minotaur VI is an evolutionary version of the flight proven Minotaur IV+ Space Launch Vehicle (SLV), providing a cost-effective and capable space solution for U.S. Government-sponsored spacecraft. The combination of four government-furnished solid rocket stages, a commercial solid rocket upper stage, and Orbital ATK's flight-proven systems and processes provide unmatched value and performance. The integration of government motors with commercial boosters and state-of-the-art hardware is one of Orbital ATK's unique strengths that spans several decades of experience.

The Minotaur VI vehicle adds a lower stage to the existing and flight demonstrated Minotaur IV+ vehicle for a significant increase in performance with only a modest increase in cost. The only new structure required is the 1/2 interstage, which is adapted from a heritage flight proven design to minimize risk. For elliptical or high energy missions, a STAR™ 37 upper stage option is available.



Expanded view of the Minotaur VI launch vehicle.

FACTS AT A GLANCE

System Features

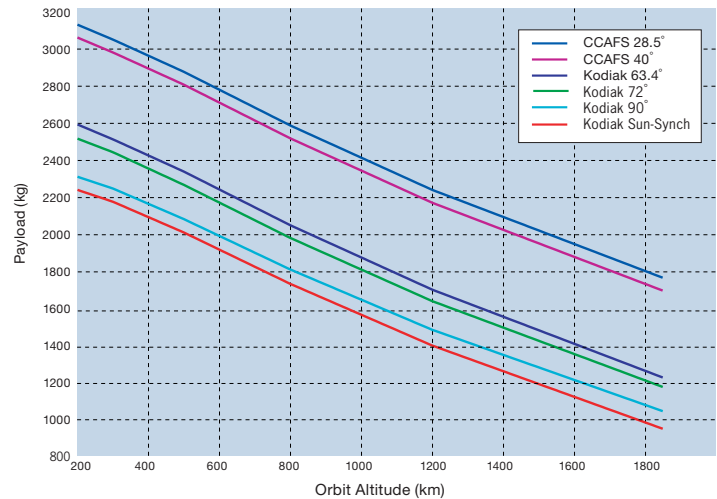
- Full spacecraft integration support, including mission management, spacecraft interface support (power, telemetry, sequencing, attitude control, and deployment), through launch operations and post-launch performance evaluation
- Flexible design enables multiple mission tailoring options
- Cost effective space launch
- Responsive launch solutions available
- Mission success is ensured by mature systems and processes
 - Orbital ATK's rigorous mission assurance program
 - Full Government insight and independent assessment
- Multiple spaceport launch capability (Florida and Alaska) using portable ground support equipment

The Minotaur family of launch vehicles are provided via the Orbital/ Suborbital Program (OSP) and managed by the U.S. Air Force Space and Missile Systems Center (SMC), Launch Enterprise, Experimental Launch and Test Division (LE/LEX), Rocket Systems Launch Program (RSLP) located at Kirtland Air Force Base, New Mexico.

Minotaur VI

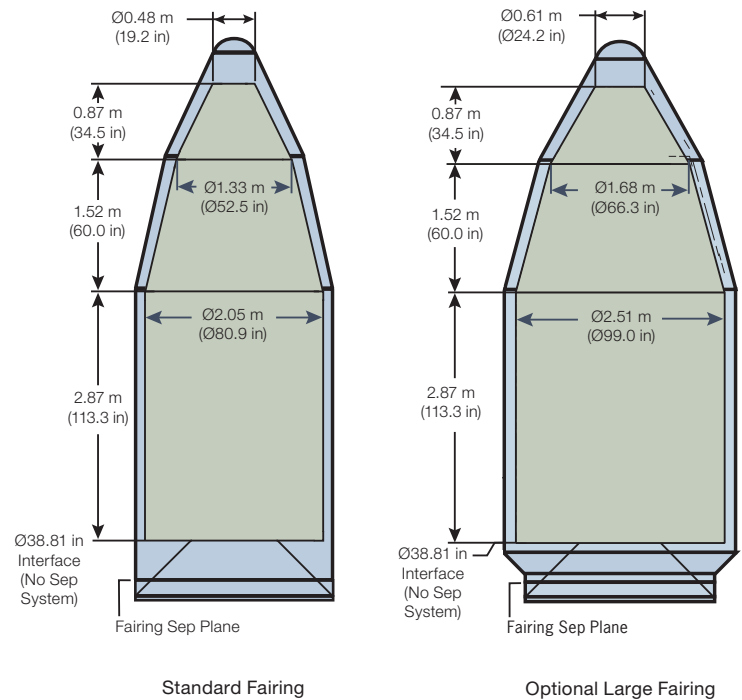
Performance

- System performance assured from extensive booster motor flight history
- Cold gas attitude control system readily accommodates a variety of spacecraft mission requirements, including precise separation pointing and post-boost maneuvers
- Minotaur VI+ uses the optional STAR™ 37 upper stage to provide up to 200 kg increased performance to LEO and support for HEO missions with the following capability:
 - 980 kg to MTO
 - 860 kg to GTO
 - 560 kg to TLI



Payload Accommodations

- Standard 2.34 m (92 in) diameter spacecraft fairing
- Optional 2.79 m (110 in) diameter spacecraft fairing available
- Mission-specific fairing access doors for spacecraft support
- Spacecraft and fairing assembly integrated independently from launch vehicle stages
- Well-defined launch environments derived from extensive flight data
- Temperature, humidity and cleanliness control through lift-off
- Standard 986 mm (38.81 in) diameter bolted interface with optional spacecraft support options
 - Single and multiple spacecraft adaptors
 - Various flight-proven spacecraft separation systems available, including low-shock designs
- Multiple Payload Adapter Fitting (MPAF) option
- Hydrazine upper stage for multiple orbit altitude capabilities or increased orbital insertion accuracy



Technical Details

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