Pegasus was specifically developed to provide cost-effective access to space for the small satellite community. The Pegasus air-launch system is the industry's workhorse, providing launch services for technology demonstration, scientific investigation, remote sensing and communications missions. The three-stage Pegasus boosts small satellites weighing up to 1,000 pounds (450 kilograms) into low-Earth orbit. Pegasus is carried aloft by an L-1011 carrier aircraft to approximately 39,000 feet (12,000 meters) over open ocean, where it is released and then free-falls in a horizontal position for five seconds before igniting its first stage rocket motor. In a typical mission Pegasus delivers its payload into orbit in a little over ten minutes.

**Pegasus "Firsts"**
World's first privately developed space launch vehicle.

Maiden 1990 mission marked the first all-new, unmanned space launch vehicle developed in the U.S. in more than 20 years.

First winged vehicle to accelerate to eight times the speed of sound.

First air-launched rocket to place satellites into orbit, using its carrier aircraft as an "air breathing reusable first stage."

**Facts At A Glance**
World's leading small-class space launch vehicle.

43 missions conducted; flawless record since late 1996.

Launches conducted from California, Virginia, Florida, the Canary Islands and the Kwajalein Atoll in the Marshall Islands.

**System Features**
Inertially guided three stage solid rocket propulsion

Horizontal satellite integration and simplified launch operations

Carrier aircraft provides on-board payload monitoring and control

Air-launched mobility enables launch from anywhere, worldwide:
- Demonstrated launch capability from U.S. Air Force Western Range (WR), Eastern Range (ER), NASA's Wallops Flight Facility, Canary Islands and Kwajalein launch sites
- Flight-proven with a demonstrated success record:
  - 43 missions conducted
  - 29 consecutive fully successful missions

Flexibility to support unique user needs
**Performance**

Flight verified systems performance

Optional Hydrazine Auxiliary Propulsion System (HAPS)
- Precision injection capability
- Increased performance to higher LEO altitudes

Any inclination can be achieved by varying launch point

**Payload Accommodations**

Standard Accommodations
- Temperature, humidity control
- Class 8 (100,000) cleanliness

Enhanced Accommodations
- Class 7 (10,000) cleanliness
- Nitrogen purge

Flight-Proven Dual Payload Accommodations

**Payload Accommodations**

More Information

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For additional information and a complete Pegasus Users Guide, please visit:  
www.NorthropGrumman.com/  
LaunchSystems/Publications/  
Pegasus_UsersGuide.pdf

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