



# ECLIPSE™

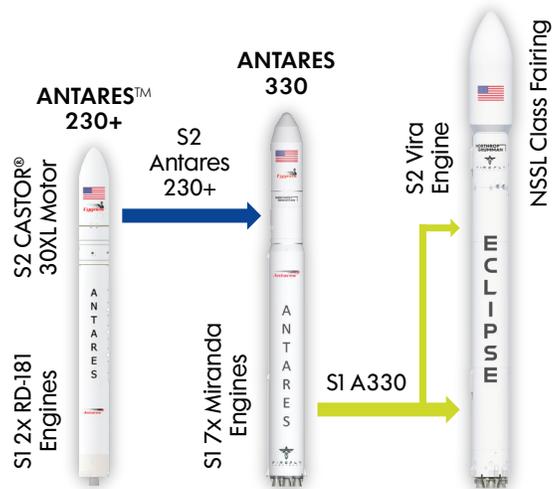
Firefly Aerospace and Northrop Grumman are co-developing Eclipse, a new medium launch vehicle that combines the best flight-proven technologies, systems, and mission experience from both companies.

## KEY BENEFITS

- ✓ Fills a void in the underserved medium-lift market.
- ✓ Supports commercial, civil, national security, and international launch markets.
- ✓ Delivers to customers' preferred orbits with competitive pricing.
- ✓ Lower cost and increased performance.
- ✓ Provides greater launch schedule availability from Wallops Island.



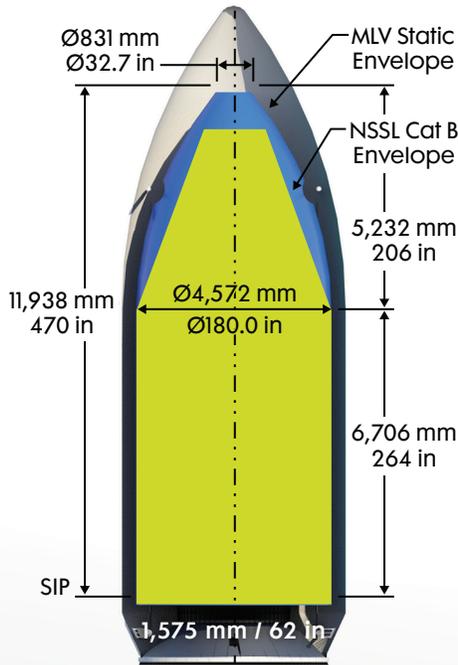
ECLIPSE



Eclipse is an evolutionary successor to the Antares launch vehicle, offering a significant leap in power, performance, and payload capacity.



# BUILT ON SUCCESS OF ANTARES AND ALPHA



## PAYLOAD ACCOMMODATIONS

<b>FAIRING DIAMETER</b>	5.4 m outer diameter
<b>ENVELOPE DIAMETER</b>	4,572 mm / 180 in
<b>ENVELOPE HEIGHT</b>	11,938 mm / 470 in
<b>INTERFACES</b>	Up to 4,000 mm / 157 in
<b>STANDARD</b>	1,575 mm, 2,624 mm

Eclipse offers a 5-meter class payload fairing that can be customized based on customer needs.

ECLIPSE

### PAYLOAD PERFORMANCE

<b>LEO, 200 KM</b>	16,300 kg
<b>GTO</b>	3,200 kg
<b>TLI</b>	2,300 kg

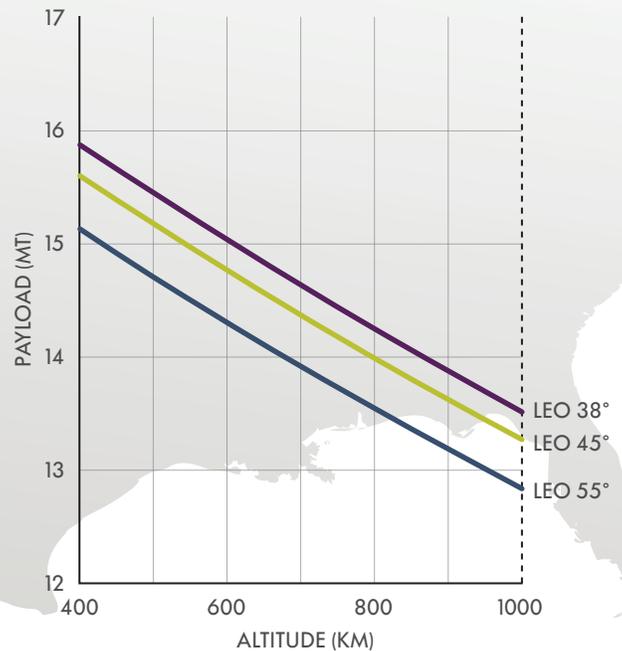
### ARCHITECTURE

<b>VEHICLE LENGTH</b>	59 m / 192 ft
<b>VEHICLE STAGES</b>	2

### PROPULSION

<b>PROPELLANT</b>	Liquid Oxygen / RP-1
<b>PROPELLANT FEED</b>	Turbopump
<b>STAGE 1 ENGINES</b>	7x Miranda
<b>STAGE 1 THRUST</b>	7,161 kN / 1,610,000 lbf (vac)
<b>STAGE 2 ENGINE</b>	1x Vira
<b>STAGE 2 THRUST</b>	890 kN / 200,000 lbf (vac)

### WALLOPS LAUNCH PERFORMANCE



### POINTS OF CONTACT

Northrop Grumman	Firefly Aerospace
Nicole Jordan	Aaron Prescott
425-306-6499	202-834-8312
nicole.jordanmartinez@ngc.com	aaron.prescott@fireflyspace.com

