## NORTHROP GRUMMAN

## Northrop Grumman Introduces Viper™ 2.1 Laser

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APOPKA, Fla., Nov. 19, 2014 /PRNewswire/ -- Northrop Grumman Corporation's (NYSE: NOC) Laser Systems business unit has announced its new Viper<sup>™</sup> 2.1 laser, featuring a form factor and interface for use on all directed infrared countermeasure (DIRCM) systems.



The Viper<sup>™</sup> 2.1 is the latest in the family of Viper<sup>™</sup> lasers designed specifically for DIRCM systems. After five years of funding, development anc testing, the Viper<sup>™</sup> 2.1 will soon be ready for full-scale production alongside the venerable Viper<sup>™</sup> family of DIRCM lasers. Viper<sup>™</sup> lasers have bee fielded and are in full operation on approximately 55 different types of rotary- and fixed-wing aircraft, protecting the aircraft, crew and cargo in every theatre of conflict.

Manufactured and tested at Northrop Grumman facilities in Apopka and Rolling Meadows, Illinois, more than 3,100 Viper<sup>™</sup> lasers have been delivered as part of comprehensive and integrated aircraft survivability equipment (I-ASE) protecting both U.S. and ally warfighters.

The Viper<sup>TM</sup> 2.1 benefits from new design features that take the Viper<sup>TM</sup> family of lasers to the next level in aircraft protection. The new features include higher power, increased efficiency, reduced parts count, simplified optical path alignment, reduced weight, streamlined manufacturability and significant reliability enhancements.

Viper<sup>™</sup> 2.1 also benefits from theNorthrop Grumman approach toward modular open system architecture for integrated avionics systems, including aircraft survivability equipment. Designed to provide laser power through either direct or fiber coupling, the system can be used in a variety of configurations of DIRCM or I-ASE suites.

"The value of performance of our DIRCM systems stem from our intentional design approach toward a modular open systems architecture," Jeffrey Q. Palombo, vice president and general manager, Land and Self Protection Systems Division, Northrop Grumman Electronic Systems. "Viper 2.1 can be used in forward-fit or back-fit applications, simultaneously enabling increased survivability, reliability and cost savings."

Northrop Grumman is a leading global security company providing innovative systems, products and solutions in unmanned systems, cyber, C4ISR, and logistics and modernization to government and commercial customers worldwide. Please visit <u>www.northropgrumman.com</u> for more information.

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