



## Northrop Grumman Completes Design of Commercial Aircraft Protection System

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ROLLING MEADOWS, Ill., Aug 22, 2005 /PRNewswire-FirstCall via COMTEX/ -- Northrop Grumman Corporation (NYSE: NOC) has received U.S. Department of Homeland Security approval of its design for the Guardian(TM) protection system, a Counter-Man Portable Air Defense System (Counter-MANPADS) intended to protect commercial aircraft from attack by ground-based, shoulder-fired missiles.

The company recently passed the last of three critical design reviews for its Guardian(TM) protection system, which is based on the proven military directional infrared countermeasures (DIRCM) technology it currently has in production for the U.S. military and several international customers. Northrop Grumman's commercial DIRCM version is being developed under Phase II of the Department of Homeland Security's Counter-MANPADS program.

The first of the design reviews involved hardware development, while the second focused on software. The third, completed in April, called for installing the system on an actual aircraft. Northrop Grumman is now finalizing the fabrication and integration of pre-production prototypes before it begins operational testing and evaluation of its C-MANPADS aboard an MD-11 airliner later this month and a Boeing 747 later this year.

"The successful completion of design work on our Guardian counter-MANPADS system is a significant milestone, particularly since we did so a full month ahead of schedule," said Bob Del Boca, vice president of Infrared countermeasures and laser systems in Northrop Grumman's Defensive Systems Division. "We are well on our way to obtaining FAA (Federal Aviation Administration) certification for our system and are looking forward to proceeding to Phase III of the Department's program."

According to the Department of Homeland Security, the Counter-MANPADS program is focused on demonstrating the viability, economics and effectiveness of adapting existing military technology to protect commercial aircraft from the MANPADS threat. Northrop Grumman's Guardian(TM) system makes use of multi-band laser and other technology from the company's proven military countermeasures system.

The Northrop Grumman DIRCM system operates automatically by detecting a missile launch, determining if it is a threat and activating a high-intensity infrared countermeasure system to track and defeat the threat. The only such system currently in production, Northrop Grumman's Nemesis AN/AAQ-24(V) is being installed on several hundred military aircraft, including more than 20 different fixed- and rotary-wing platforms for the U.S. military and several allied countries, including the United Kingdom, Australia and Denmark.

Northrop Grumman's Defensive Systems Division is a component of Northrop Grumman's Baltimore-based Electronic Systems sector -- a world leader in the design, development, and manufacture of defense and commercial electronic systems, including airborne radar, navigation systems, electronic countermeasures, precision weapons, airspace management systems, communications systems, space sensors, marine and naval systems, government systems and logistics services.

SOURCE Northrop Grumman Corporation

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