Northrop Grumman Modernizes LITENING Secure Data Links for US Marine Corps Aircraft

Integrated on the LITENING pod (centerline), the Advanced Tactical Datalink (ATDL) enables fast, secure, two-way transfer of video and data from the F/A-18 strike fighter. (Photo Credit: U.S. Marine Corps)

Updated data link is the first to incorporate the BE-CDL waveform, which enables faster communications

From Northrop Grumman

ROLLING MEADOWS, Ill. – Dec. 5, 2024 –Northrop Grumman Corporation (NYSE: NOC) has been selected by the U.S. Marine Corps to provide Advanced Tactical Data Links (ATDL) in LITENING electro-optical/infrared (EO/IR) targeting pods on F/A-18 aircraft. ATDL's technology allows for faster transfer speeds compared to previous waveforms, enabling more rapid decision making.

The LITENING pod's ATDL is the first tactical aircraft data link to use the Bandwidth Efficient Common Data Link (BE-CDL) waveform, which enables faster communications.

ATDL's secure, two-way, multi-band link allows for the transmission of video, still images and metadata to enhance mission precision.

Operators in the air and on the ground can view the same live video feed simultaneously.

Expert:

James Conroy, vice president, navigation, targeting and survivability, Northrop Grumman: "LITENING's high-definition

sensors on the advanced EO/IR targeting pod gather critical information, enabling more rapid decision making. The ATDL enhancement is like upgrading to better Wi-Fi by building on LITENING's already proven data links, making live feeds immediately available on the ground – a critical capability in our modern environment."

Details:

The ATDL is a replacement for the Plug-and-Play II data link and can be added to any fourth generation or newer LITENING pod, including the G4, SE, LDP, Color and Large Aperture variants. It incorporates an updated processor, software-defined radio, wideband antenna and improved data recorder. LITENING is the first targeting pod to include the BE-CDL waveform, which enhances interoperability and increases data transfer rates for video, still images and metadata. Previous LITENING data link integrations include NET-T, which functions like a secure airborne Wi-Fi router, and other data terminals including the Mobile Ad-hoc Network and Freedom 550 radios which can connect multiple users across aircraft generations and domains.

LITENING is an electro-optical/infrared targeting pod on aircrafts that detects, acquires, identifies and tracks targets at extended ranges. LITENING enables a wide range of missions, including precision targeting, air superiority, close air support, surveillance and humanitarian assistance. The pod's modular design allows for upgrades over time to keep pace with evolving mission needs. Northrop Grumman has delivered more than 900 LITENING pods to U.S. and international customers.