ADVANCED CARGO LOADING AND DELIVERY SYSTEM

THE EVOLUTION OF A LEGEND

Faster onload and offload, more accurate airdrops, networked cargo status and greater aircrew safety

The Collins Advanced Cargo Loading and Delivery System (ACLADS) brings a 1950s-designed cargo compartment into the 21st century. Advanced electronics and hardware cut aircraft loading and unloading times by 50% and significantly increase airdrop accuracy and aircrew safety.

Integrated software combines load planning, weight and balance calculations, as well as flight management systems integration into a single package. All leveraging our extensive experience integrating cockpit avionics and technologies.

The system simplifies legacy manual and labor-intensive processes such as preflight, loading and airdrop operations by integrating electronic monitoring and wireless operation.

Computer-controlled event sequencing reduces human error and greatly increases onload, offload, airdrop and emergency functions. Real-time, multi-domain connectivity options allow for dynamic logistics planning and execution in a connected environment.

KEY FEATURES AND BENEFITS

- Meets or exceeds current industry design criteria for modern military transport aircraft logistic and airdrop systems
- Saves time and money by reducing all logistic operations through automation and systems integration
- Reduces aircraft exposure in a combat environment and cuts the time to complete military operations involving air transport
- Offers the only digitally controlled airdrop and “one button” malfunction response system
- Secures, monitors and executes precision airdrops of cargo, vehicles and troops in all required tactical methods
- Flip rollers and underfloor winch decrease configuration change time and boost crew efficiencies
- Interoperable and integrated avionics packaging transmits cargo tracking and delivery data to logistics and command and control agencies across a secure and encrypted network
- Optional video camera for reverse taxi
ADVANCED SYSTEM ELEMENTS

ACLADS consists of a loadmaster station with touchscreen displays and highly portable hand-held devices that are proven, mil-spec and aviation-grade. With them, operators can command a network of lock control units and control panels to sense inputs, measure force and activate and release locks.

High-criticality software and processing hardware manages the automation, safety and precision required of modern airborne logistic systems.

Integrated with Collins Aerospace avionics equipment, ACLADS can transmit cargo data status in real time to command and control agencies.

KEY BENEFITS

• Reduces loading time by 50%
• Untethers loadmaster from cargo lock control handles, allowing mobile lock engagement and release
• Frees the loadmaster to oversee and direct ground loading equipment and personnel, dramatically increasing logistics velocity in contested environments
• Increases safety by automating and integrating airdrop and cargo compartment operations with real-time feedback to the entire aircrew
• Simplifies standard, irregular and emergency crew actions and allows for completely autonomous airdrops
• Provides real-time cargo status options in an advanced battlespace management system