

# **BRU-78 DUAL-CARRIAGE SYSTEM**

## Increases weapon carriage capability

### The L3Harris BRU-78 doubles the number of stores carried with minimal impact to the aircraft operational flight program and no changes to the aircraft hardware or structure.

L3Harris' newest generation of smart, multiple weapon carriage systems is designed for use on large unmanned aerial vehicles (UAVs) and light attack armed reconnaissance/ counterinsurgency (LAAR/COIN) platforms. BRU-78 is designed for weapons 500-pounds and smaller using conventional, MIL-STD-1760 and Universal Armament Interface (UAI) communications.

L3Harris-patented electronics are installed in the fairing of the BRU-78 and allow for carriage of a wide array of precision-guided munitions, including the GBU-12/49/59 laser-guided bombs, GBU-38/52/54 joint direct attack munitions (JDAMs) and GBU-39/53 small diameter bombs. BRU-78's innovative and patented bus buffer system permits the aircraft to communicate with the carried weapons like they are electrically connected directly to the aircraft main bus. The system uses two L3Harris-designed BRU-71 ejector units as the mechanical interface to the weapons and includes both the MIL-STD-1760 and miniature munitions stores interface (MMSI) umbilicals.

The BRU-78 is currently being qualified for flight on the MQ-9 Reaper. It is qualified to MIL-STD-7743, MIL-STD-810, and MIL-STD-461/462.



#### BENEFITS

- Ability to carry more weapons provides greater mission flexibility
- Increased number of stores improves pilot safety by reducing the number of missions required
- > Automatic and independent hooks enable safer loading
- Adjustable pitch valves and positive-arming attachments decrease loading time



BRU-78 SYSTEM SPECIFICATIONS		
Electrical	Physical	
MIL-STD-1760 and UAI signal set:	Dual BRU-71 pneumatic ejector units:	
- Dual redundant MIL-STD-1553 communications	- 3000 psi operating pressure	
- 115 VAC, 3-phase	- Store-sensing switches	
- High bandwidth 1 (GPS) and 3	- Arming units	
- 28 VDC 1 (10 amps per store)	Dimensions: 61 x 23 x 7 in (L x W x H)	
- 28 VDC 2	Weight: 88 lbs	
- Address lines	Two mounting lugs with 14-inch spacing	
- Connector-mated status		
- Structure ground		
Release consent		



BRU-71/A - PNEUMATIC WEAPONS RELEASE RACK



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#### BRU-78 DS8121 MC

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