

PYROTECHNIC DUAL-CARRIAGE: BRU-57

Dual-carriage release system for fighter platforms

The L3Harris BRU-57 is a pyrotechnic actuated system, qualified for flight on the F-16 Block 40 and above, and was selected as the dual carriage system of choice for the Korean KF-21. The BRU-57 is compatible with 500 lbs and 1,000 lbs Joint Direct Attack Munitions (JDAM) and the Joint Standoff Weapon (JSOW). This dual carriage system offers the ability to carry multiple store types, increasing aircraft stores capacity and reducing the number of missions required.

The BRU-57 is comprised of two BRU-46 pyrotechnic bomb release units (BRU). The BRU-46 offers a manual ground safety handle, independent and automatic latching hooks, and semi-automatic swaybraces for safe and rapid loading and unloading of the store.

The BRU-57 interfaces with the aircraft via a MIL-STD-1760 Class II interface, where the logical interface automatically adapts to either a legacy protocol or a Universal Armament Interface Type I protocol, depending on the first message type transmitted by the aircraft. Once initialized, the BRU-57 will implement a MIL-STD-1760 Class II interface for each store and the BRU-57 will configure the stores as MIL-STD-1553 remote terminals, allowing the aircraft to communicate directly with each store.

The BRU-57 is qualified to MIL-STD-7743, MIL-STD-810 and MIL-STD-461/462.

SPECIFICATIONS

Weight	265 lbs
Dimensions	70 L x 7 H x 29 W in (at mounting)
Ejection Method	Pyrotechnic
Store Class (MIL-STD-8591)	500, 1,000 lbs
Store Diameter Range	8 to 20 in
End-of-Stroke Velocity for 500 lbs Store	14.5 - 16.2 ft/sec
End-of-Stroke Velocity for 1,000 lbs Store	10.2 - 12.2 ft/sec
Pitch Control	Settable for each piston (three settings)



BRU-57



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BENEFITS

- > Carries multiple store types providing greater mission flexibility
- > Pilot and aircraft exposure minimized by a reduction in missions due to increased store capacity
- > Compatible with MIL-STD-1760 and MMSI stores
- > Safety Interlock: Manual ground safety handle
- > Safe and rapid store loading using independent and automatic latching hooks, and semi-automatic swaybraces
- > Reliable pyrotechnic ejection

FEATURES

- > MIL-STD-1760 Class II interface to aircraft and MIL-STD-1760 stores
- > UAI type I logical interface
- > Two mounting lugs with 30-inch spacing
- > Rugged store presence indicator switches
- > Dual cartridges with clear visual indicators
- > Nose, center and tail arming units
- > Adjustable pitch valves and positive arming attachments

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L3Harris Technologies, Inc.

1025 W. NASA Boulevard
Melbourne, FL 32919

[L3Harris.com](https://www.l3harris.com)