

PNEUMATIC MISSILE EJECT LAUNCHER (PMEL)

High-performance, air-to-air missile ejector

PMEL is a pneumatic launcher designed to eject modern medium- and long-range air-to-air missiles from high-performance manned and unmanned platforms.

RELIABLE, HIGHLY EFFICIENT EJECTION

L3Harris' PMEL is capable of ejecting stores up to 190 kilograms using less compressed air, at a lower pressure, than other launchers. This highly efficient performance, which is enabled by patented two-stage piston technology, significantly reduces turnaround time.

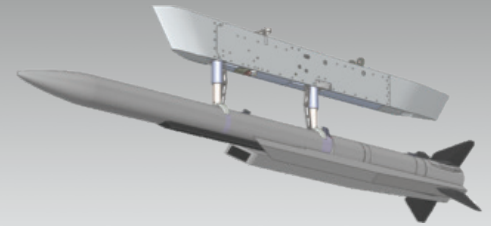
PMEL is also designed to reduce required personnel. During loading, the launcher makes use of a patented yoke alignment system, self-locating connector and automatic sway bracing to allow for rapid weapon loading with only two personnel.

SAFE CARRIAGE

L3Harris' PMEL is fitted with an in-flight operable lock (IFOL) to ensure maximum retention safety. Loading can be conducted with a charged reservoir to reduce aircraft downtime.

As a combined pylon and launcher unit, the PMEL is currently designed for use under the fuselage on modern high-performance fighter jets to reduce weight and frontal cross section. Development work is underway to adapt the unit for use within weapons bays as a standalone item.

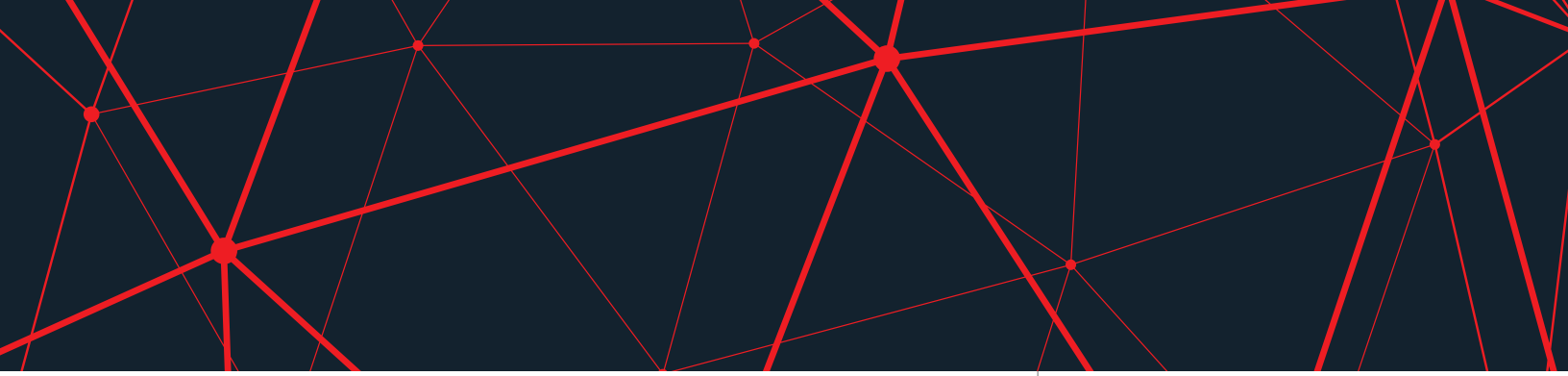
PMEL is not subject to International Traffic in Arms Regulation (ITAR) export rules, making it an ITAR-free solution for high-performance ejection of air-to-air missiles.



BENEFITS

- > Return-flight charging and safe loading, even while pressurized, minimize turnaround time
- > Two-person, rapid missile loading reduces manpower needs
- > Minimal maintenance requirements and no post-mission servicing requirements simplify operations
- > Pneumatic technology eliminates the need for pyrotechnics or post-flight consumable replenishment
- > IFOL ensures safe carriage





SPECIFICATIONS (LAUNCHER ONLY)

Weight	35 kg (77 lbs)
Dimensions (L x H x W)	969 x 272 x 120 mm (38.1 x 10.7 x 4.7 in) 969 x 272 x 171 mm (38.1 x 10.7 x 6.7 in) with yokes
Maximum store weight	190 kg (419 lbs)
Piston stroke	266 mm (10.5 in) over two stages
End-of-stroke velocity	> 8 m/s
Maximum store diameter	0.178 m (7.0 in)
Store interface	AMRAAM-style nose "button" hanger and center body hanger MIL-STD-1760 Type II electrical connection



FAST-ACTING PNEUMATIC EJECT SYSTEM

L3Harris has leveraged advanced core technologies in pneumatics, control system logic, piston design and low loss gas paths to develop the fast-acting, highly reliable PMEL.

Pneumatic Missile Eject Launcher (PMEL)

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Nonexport-controlled Information

L3Harris Technologies is an agile global aerospace and defense technology innovator, delivering end-to-end solutions that meet customers' mission-critical needs. The company provides advanced defense and commercial technologies across air, land, sea, space and cyber domains.



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