



ACE PYLON



THE ACE PYLON CONCEPT

The ACE Pylon (Adaptable Capability Enhancement Pylon) permits installation of a self-protection system without giving up weapons stations. The concept is adaptable to accommodate high performance fighter aircraft, large fixed-wing aircraft as well as light attack aircraft with varying stores carriage dimensions and mass capacities.

The ACE Pylon combines the features of a weapons pylon with a modular countermeasures pod. The ACE Pylon contains a bomb ejector rack, which may be transferred from an existing weapons pylon, and quick-access stores umbilical interface facilities, allowing it to carry stores in lieu of a standard pylon. The interface to the wing is tailored to the aircraft's existing pylon-to-wing interface of each specific application.

Integrating Electronic Warfare sensor and effector capabilities into a stores carrying pylon is a well proven concept, where Terma have delivered thousands of integrated pylon systems for many different F-16 users.

Significant advantages include

- Performance optimization of the hosted systems offering e.g. spatial antenna separation and effective expendable countermeasure deployment
- Minimal aircraft modification compared with typical fuselage installation concepts
- Retaining full stores carriage capability of the platform compared with podded solutions

The ACE Pylon overall length and self-protection equipment arrangement is also tailorable to the application, in particular by minimizing installation height when it is possible to locate the Pylon tail cone in front of the wing flap.

As the ACE Pylons may directly replace the outermost weapons pylons, the typical configuration will be a symmetrical LH/RH shipset pair for maximum sensor coverage and symmetrical flare dispensing.



EQUIPMENT ARRANGEMENT

Self-protection suites can be incorporated in stages and with several levels of complexity, e.g.:

1. Chaff/Flare Dispensers (Countermeasures Dispenser System, CMDS)
2. Missile Warning System (MWS) combined with CMDS
3. Radar Warning Receiver (RWR) combined with MWS and CMDS
4. Electronic Countermeasures Jamming system (ECM) combined with MWS

