

## Integrated Electronic Enclosure Systems

Many modern electronic systems used in military applications must meet stringent environmental and reliability requirements. Environmental requirements include temperature, shock, vibration and electromagnetic interference/compatibility (EMI/EMC). Reliability includes extended operating life under extreme environmental factors and platform interface requirements such as power transients and interface compatibility.

The foundation for a reliable and survivable system starts with the enclosure or structure that is used to integrate the system. Electromechanical assemblies used to integrate the system function and provide interface to the platform or other systems are integral components of system reliability, performance and cost.

With over 50 years of military and high reliability experience on US Navy submarine and surface vessel platforms and other military systems, Falstrom delivers Electronic Enclosure Systems that are the foundation for the integration of military systems. Falstrom enclosure systems can be integrated with electromechanical assemblies and primary power designed by customers or selected in collaboration between customers and Falstrom. Falstrom offers electromechanical solutions including:

- Power supplies
- Transformers and magnetics
- Cable assemblies, connectors and wire harnesses
- EMI filters and gaskets
- Transient suppressors
- Circuit card chassis & electronic racks
- Fans



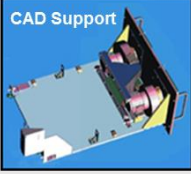
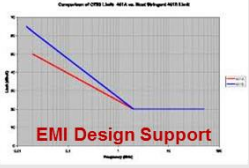






Falstrom has delivered hundreds of integrated communication, power and test equipment systems to the US Navy and Air Force ready for integration of the primary functions.

In addition, Falstrom supplements customer capabilities with EMI/EMC, Component Engineering, welding consultation, manufacturing optimization and CAD services.



## Turn Key Integrated Electronic Enclosure Systems

**EMI Design Support** graph data (approximate):

Frequency (MHz)	Attenuation (dB)
10	10
100	20
1000	30
10000	40
100000	50
1000000	60

## Falstrom Engineering Services

Falstrom offers a Turn Key approach for integrating electromechanical assemblies into electronic enclosures (or structures) as a foundation for high reliability systems. Electromechanical assemblies can be fully customer specified or implemented in collaboration with Falstrom specialty engineering services.

### EMI/EMC:

- Intra-system design consultation
- EMI/EMC filter and gasket selection and implementation
- Cable design guidance
- EMI/EMC Control Plans
- Transient analysis and protection guidance

### Component Engineering:

- Specification Control Drawings
- Component application and selection guidance
- Reliability predictions

### Welding Consultation:

- Weld procedures preparation

### Manufacturing Optimization:

- Cable construction
- Enclosure layout guidance

### Computer Aided Design:

- Design conceptualization
- Full engineering packages