



## MFJS – Multi-Frequency Jammer System

Pod solution for radar EW training

**The MFJS is an EW jammer pod for training of military ground, naval and airborne radar operators. The MFJS can also be used for development, testing and optimisation of new Electronic Countermeasure (ECM) techniques.**

Peacetime radar operation lacks the existence of radar jamming systems and therefore does not adequately prepare the warfighter for the combat situation to be expected. As a consequence the EW training of radar operators and fighter pilots under real EW conditions is a mandatory requirement.

The Multi-Frequency Jammer System provides the radar operator with an advanced jamming environment. The level can be adapted to the skills of the radar operator and modified during the training mission.

A multi-bit Digital Radio Frequency Memory (DRFM) forms the core of the system providing a broad ECM techniques toolbox including coherent and non-coherent ECM techniques.

Through the flexible ECM capability, the system is suitable for simulation of stand-off, escort, self-protection and stand-in jamming.

Main applications:

- Training of radar operators
- Missile threat simulation
- Radar threat simulation
- Testing of radar system vulnerability to ECM
- Development, optimisation, testing and verification of new radar ECM techniques

The system is equipped with dedicated filtering to prevent interference with IFF, GPS and weather radar.

MFJS is already integrated, certified and in service on Learjet a/c. Adaptation to other airborne platforms can be performed easily.

# Control and Programming

**MFJS provides real-time control over the jamming through a dedicated ECM operator. Jamming responses can be programmed by the customer using a ground support station providing full control over all parameters in the system.**

Programming of the system is performed in the ground support station through the definition of Pre Flight Messages. After programming the ground operator conducts the validation of the library and the verification of ECM with integrated hardware in the loop. The libraries are defined fully at customers discretion and are re-programmable in-flight.

The aircraft standard operator workstation provides an identical man machine interface with the ground support station. The prepared Pre Flight Messages are loaded into the system by a removable Compact Flash card.



The system includes dedicated measuring equipment for radar signals which enables in-flight adaptation of the library by the operator when needed and also supports radar and EW testing. Flight and mission data can be recorded on a Compact Flash card for post mission analysis.

Whatever your operational needs may be, MFJS will convince you.

## Outstanding features:

- Very high frequency range without gaps
- Full control over jamming
- Adaptable training levels
- Interaction of radar and ECM operator
- High number of training cycles per mission

## Functional Data

Frequency range	1-18 GHz
Instantaneous bandwidth	> 1 GHz
Technique generation	Multi-bit Digital Radio Frequency Memory (DRFM)
ECM techniques	Programmable, various coherent and non-coherent ECM techniques
Antenna system	45° slant Tx-antennas (1-2 GHz, 2-7 GHz, 6-18 GHz)
Dimensions (approx.)	Length: 270 cm, width: 60 cm, height: 40 cm
Weight (approx.)	280 kg
A/C mounting	NATO standard 14 inch lugs
Power consumption (approx.)	2 kVA max., 115 V / 400 Hz, 3 phases