

# MASS in Countermeasures Development



trusted to support secure operations



*MASS has developed a unique process that enables customers to take a platform protection requirement through to countermeasure tactic design, implementation, testing and deployment.*

MASS is the UK's leading independent provider of EW Operational Support (EWOS) products and services and, for many years, has supported the UK's Defence EW Centre with specialist expertise in countermeasure development.

The company has developed unique processes that provide customers with a structured method for taking a platform protection requirement through to countermeasure tactic design, implementation, testing and operational deployment. Countermeasure tactics comprise an ordered arrangement of active ECM, expendables and manoeuvre and cover RF and IR guided weapon systems. The MASS process uses a balanced approach to computer simulation, hardware-in-the-loop testing and field trials to gain best value for money from available resources. The key sub-processes are:

- Information Extraction and Verification (IEV)
- Threat Vulnerability Assessment (TVA)
- Countermeasure Development (CMDev)

## Information Extraction and Verification



Any countermeasure is only as good as the input data to the process that formed it. MASS has developed the IEV process to enable a customer to extract required information and build and verify effective threat weapon system and platform models. IEV procedures enable a customer to use weapon system and platform data from any source, secure or open, in a controlled and auditable manner. Hence, customers are able to introduce their own data, at a time that suits them, to create their own classified weapon system models. Rapid updates to the baseline models can be made as newer and more accurate data become available to the process.

FLY006/2

MASS is an independent UK Systems House with a strong Defence & Aerospace market focus, offering specialist skills in:

- Electronic Warfare
- Technology & Innovation
- Information Technology

**MASS (Head Office)**  
Grove House  
Rampley Lane  
Little Paxton St Neots  
Cambridgeshire PE19 6EL  
United Kingdom

Tel: +44 (0)1480 222600  
Fax: +44 (0)1480 407366

**MASS (Lincoln Office)**  
1 Alumina Court  
Tritton Road  
Lincoln  
Lincolnshire LN6 7QY  
United Kingdom

Tel: +44 (0)1522 502050  
Fax: +44 (0)1522 690250

E-mail: [systems@mass.co.uk](mailto:systems@mass.co.uk)  
Web Site: [www.mass.co.uk](http://www.mass.co.uk)

A Cohort plc Company



## Threat Vulnerability Assessment

Key to effective countermeasure tactics is exploitation of threat weapon system electronic and human operator vulnerabilities. The MASS TVA process enables a customer to analyse weapon system design features to identify and exploit, with countermeasures, potential areas of weakness.



## Countermeasure Development

Our trainers have extensive operational, technical and scientific EW experience that enables us to assist customers become self-sufficient in countermeasure development, through the provision of specialist knowledge and skills in the following areas:

- Countermeasure development processes;
- Engagement modelling and simulation tools;
- Platform susceptibility analysis techniques;
- Countermeasure tactic design.

The CM Dev process uses information generated by IEV and TVA and creates a set of potential countermeasures that exploit threat weapon system vulnerabilities. These are refined, incorporated into countermeasure tactic designs and optimised for specific EW equipment capabilities on the platform. MASS can offer these services using either customer-provided data or open source data, although it should be noted that higher quality input data delivers more effective countermeasures.

