



MPE
Quality, Reliability, Performance

Company Bulletin

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One of Marshall's turret crew training simulators for the Ajax AFV



An MPE EMP powerline filter



The British Army's Ajax fighting vehicle

Filters for Ajax AFV training simulator

During 2016 the Marshall Aerospace and Defence Group was chosen to supply 25 new Ajax simulator shelters to Lockheed Martin. The simulators will facilitate the training of turret crews on the British Army's Ajax, the new multi-role family of medium armoured fighting vehicles (AFVs) designed to be the medium weight core of the British Army's deployable Intelligence, Surveillance, Target Acquisition and Reconnaissance (ISTAR) capability.

The primary role of Ajax is to provide accurate and timely information to support decisionmaking at all levels, providing commanders with a survivable and capable Ground Mounted Manned Reconnaissance (GMMR) platform, which gives them the flexibility to perform a range of roles across the spectrum of conflict.

This is in support of a contract received by Lockheed Martin from General Dynamics Land Systems-UK, who are responsible for delivery of the Ajax simulator capability and service contract to the UK Ministry of Defence.

There are three variants of the training simulator:

- The Crew Turret Trainer (CTT), which provides a high-fidelity replica of the turret, complete with controls and high-definition imaging.
- The Appended Trainer (AT), which incorporates a full computing facility, generating the imagery for injection into an actual Ajax turret and giving students the ability to train inside their own vehicle.
- The Performance After Action Review (PAAR) module, which provides facilities for trainers to completely re-run the exercise and further develop students' skills.

Integral to each simulator shelter variant are customised EMP filters designed and manufactured by MPE.

Following extensive engagement and testing with Marshall during the design stage, MPE developed two 63A three-phase custom filters. These custom filters are designed to ensure EMP integrity and protection for each simulator shelter.

Marshall has now delivered the first batch of shelters, which have been used to prove the system capability, and to date MPE has manufactured and supplied 26 custom filters to support this. The follow-on units will be delivered over the next 12 months, giving the British Army the freedom to move them to wherever they are required, rather than having to bring troops to fixed locations. MPE will again be manufacturing filters throughout this period in support of the delivery phase.

This is the second contract that Marshall has won for training systems for Ajax, having also been selected to provide cabins for the driver training simulators.