

Drone Effectiveness Workshop

The British Army is calling for manufacturers to participate in Drone Effectiveness Workshop to test the resilience of their Uncrewed Aircraft Systems (UAS) against simulated jamming effects. The workshop will be conducted between 10th to 14th February 2025. This pilot workshop is open for up to five UK registered Companies, each granted a one-day testing slot for up to five sub-10 kg Uncrewed Air Systems (UAS). Companies participate at their own cost and risks.

System

A complete system to consist of:

- 1-5x multi-rotor UAS - including batteries and appropriate chargers.
- 1-5x FPV Goggles or screens with antenna - including batteries and appropriate chargers.
- 1-5x Controllers - including batteries and appropriate chargers.
- 1-5x Remote Antenna Solution (complete with mast) - This antenna solution must allow complete control of the UAS Platform and deliver the operating range stated in Requirement X while allowing the operator to be located at least 30m away.
- 1-5x 30m extender cables for Remote Antenna Solution - if amplifiers are required to achieve the operating range of 20km these must be included.
- 1-5x Monitor for external display of video feed.

Workshop Highlights

Controlled environment. Evaluate the UAS within a secure, indoor facility at MOD Boscombe Down.

Realistic Scenarios. Experience simulated jamming of GPS, control, and video signals across commercial frequencies (2.0-6.0 GHz) as if the jammer were approaching the UAS from 10km to 100m whilst the UAS remained a simulated 20km from its The Ground Control Station (GCS).

Analysis. Receive a *written/verbal* report detailing the jamming effects experienced and the window within which the UAS control is affected and eventually lost.

Actionable Insights. Gain valuable data on UAS performance in a contested environment, enabling companies to make informed design and operational decisions.

Eligibility

Companies must be able to achieve the following:

- Systems and operators to prepare and employ those systems must be delivered to MOD Boscombe Down within the specified timelines.
- UAS must be designed to EASA C4 standard (or equivalent), and no larger than 10kg.
- UAS must be of a multi-rotor design.
- UAS antennas must be SMA/RP-SMA/U.FL/MMCX to allow for the insertion of a RF attenuator.
- The GCS must be able to attenuate power output.
- Companies are to bring their own pilot/operator.
- All members of the company's party that attend the event must hold the right security clearances to enter MOD Boscombe Down. Only citizens of NATO and the Multinational Industrial Security Working Group (MISWG) countries will be allowed on-site. Companies participating in the Drone Effectiveness Workshop must submit a list of all personnel who will attend the workshop at MOD Boscombe Down providing the following details by [date]:

- Full Name including Rank/Title
- Nationality
- Date of birth
- Failure to supply the above details before the specified date will result in access to BCE being denied.

All companies must adhere to MOD Boscombe Down site rules provide the following information operate their drones:

- Supplier Risk Assessment
- Copy of any operating /safety instructions.
- List of any hazardous materials the equipment might have
- Staff Competency statement to operate their platform.
- Confirmation of Platform Operating Frequencies and RF Power Levels (Effective Radiate Power) or declaration they operate in license free bands.

The Authority intention is to choose up to five companies for the workshop. The Authority retains the right to exercise its discretion in support of the above requirement and select a greater or fewer number of systems.

Please note that this workshop is an opportunity to gain valuable data on UAS performance in a contested environment, enabling companies to make informed design and operational decisions, the workshop is not part of any formal invitation to tender and will not result in a formal contract.

Please note: Submission must be sent to Army-Comrcl-Futures-Mailbox@mod.gov.uk by X December 2024 containing subject' [62045000] Drone Effectiveness Workshop'.