



## RPAS & ISR DIVISION

**Remotely piloted air systems (RPAS) and intelligence, surveillance and reconnaissance (ISR) training and consultancy delivered by ex-military operators and instructors.**



We are a team of ex-military specialist senior instructors and subject matter experts (SMEs), many of whom hold recognised MoD postgraduate level qualifications in the application of ISR skills.

We bring over 200 years of pan-service multi-domain operational experience to our delivery of RPAS training and consultancy services. Many of our team maintain strong links with UK Armed Forces as active reservists, giving them continued insights into current approaches.



## EXPERIENCED OPERATORS PROVIDING BESPOKE SOLUTIONS

We understand that RPAS services aren't just about flying a platform; what you use your platform for and what you do with the information you collect is key. That's why we use our combined expertise in intelligence fusion and RPAS operations to support all aspects of RPAS activity.

Our collective experience in the air, maritime and land environments spans the full spectrum of potential use cases, enabling us to provide tailored training and support to all aspects of your RPAS visual line of sight (VLOS) and beyond visual line of sight (BVLOS) operations.

Our strength lies in harnessing these diverse skillsets across multiple roles on crewed and uncrewed platforms and applying them to meet customer needs. We can also draw on the specialist knowledge and over 400,000 hours of military aviation experience across the other divisions within Inzpire, as well as the wider company group as required; this allows us to craft tailored solutions for clients. As a result, we deliver training in all aspects of operating RPAS and provide ISR and RPAS support options across a broad spectrum of platform size, operational scale and type of activity.



# WHAT WE OFFER



**Our team are experts in all aspects of the intelligence cycle and RPAS operations within both military and civilian sectors, with experience in:**

- ISR platforms and sensors
- Mission planning and execution
- Fundamental, advanced and operational training design and delivery for military and civilian audiences
- UAS and RPAS operations in both the VLOS and BVLOS environment
- ISR operations and tactics
- Tactical intelligence processing, exploitation and dissemination (PED) and fusion
- ISR management (intelligence requirements management and collection management)
- Air, maritime and land ISR operations

## ISR AND RPAS CONSULTANCY

Our experienced ISR and RPAS SMEs can support programmes in a variety of ways:

- UAS operations advice
- Independent platform and sensor evaluation
- Provision of operational ISR and RPAS crews
- Dynamic intelligence analysis through PED support
- UAS managed services and 'turnkey' solutions
- Capability and requirements management

## RPAS TRAINING PARTNER

We deliver training in all aspects of RPAS activity:

- Training needs analysis
- RPAS course design
- RPAS training delivery
  - Foundation to advanced UAS level
  - Theoretical and practical elements (simulated and live fly)
  - Face-to-face or remote delivery
- Generic or specific platform/sensor training
- 'Train the trainer' programmes
- 'White Force' support, including exercise design, control and delivery of dynamic scenarios

## FUTURE BVLOS TRAINING SUPPORT

Whilst RPAS BVLOS operations are currently limited by policy, we're proud to be helping lead the evolution of UK airspace into the third age of UK aviation as part of the National Air Traffic Services (NATS) BVLOS Operations Forum.

Our support to developing BVLOS operations and preparing clients to be BVLOS RPAS operators includes:

- ISR and RPAS concepts development
- Requirements generation and management
- Trials, test and evaluation support (production and co-ordination)
- Technical demonstrations and independent equipment studies



# CASE STUDIES



## BVLOS OPERATIONS

**Maritime Coastguard Agency (MCA) and National Police Air Service (NPAS) Trials of medium altitude long endurance (MALE) uncrewed air system (UAS) in UK Airspace.**

We delivered operational expertise to support multiple elements of an innovative trial of RPAS to enhance search and rescue (SAR) capabilities in UK and international airspace.

## OUR SUPPORT INCLUDED

### Requirements capture informing trial planning

We undertook months of critical planning activity to ensure the desired trial outcomes were fully captured. We also developed the concept of operations and standard operating procedures to provide the framework for operations.

### Stakeholder coordination

Our team played a crucial role in identifying and engaging with a wide variety of stakeholders and were integral to facilitating the trial permissions required.

### Trial scenario design

We designed multiple mission scenarios of increasing complexity to demonstrate how a UAS could be used by both agencies, including operating BVLOS in unsegregated and uncontrolled airspace. These scenarios aimed to prove the UAS could operate safely and effectively at long ranges whilst sharing the airspace with other users, which would be essential for future integrated SAR support efforts.



### Trial data capture

Collaborating with multiple agencies, we produced a detailed trial plan to support, coordinate and underpin all activity within the demonstration. We then monitored and coordinated the trial elements whilst recording all available data. After each mission we evaluated all learning points, ensuring these were recognised, captured and critically assessed by all involved before the next event.

### Integration with crewed and uncrewed rescue assets

A significant element of the demonstration was an Automatic Dependent Surveillance-Broadcast (ADS-B) and Traffic Collision Awareness System trial involving both crewed and uncrewed aircraft. We designed and managed serials to demonstrate how ADS-B could support safe deconfliction between UAS and crewed assets within the same airspace.

### Capability development

We created a comprehensive summary of all trial activity to provide a body of evidence to support future BVLOS capability developments.





## TACTICAL LEVEL TRAINING

### UAS and ISR training for a European Air Force

We delivered a five-week-long UAS and ISR course to personnel from the Air Force of a European nation, in support of their procurement of a new ISR platform. Personnel studied an adapted version of Inzpire's UAS and RPAS ISR Tactics Course, which had been tailored to suit the customer's unique requirements. These included local area mission planning tasks, mission preparation and tactical employment of UAS. Delivery of both classroom-based and live flying elements took place on site in the host nation, supporting their air force in the development of their own indigenous ISR capability as well as helping them gain an understanding of how to manage and integrate their UAS into the NATO Joint ISR (JISR) system. This enabled their operators to better understand how to tactically employ their UAS platforms.

## STRATEGIC LEVEL TRAINING

### UAS Operational Concepts course delivered to the Belgian MoD

This course provided multi-domain training to personnel involved in UAS procurement, giving students the skills and knowledge to make strategic decisions regarding the purchase and requirements management of RPAS.

Through theory and practical exercises to test analysis of requirements and solutions, the students were also provided with critical knowledge of ISR processes from an operational perspective. As a result, the Belgian MoD was enabled in its decision making in preparation for integrating RPAS platforms such as Sky Guardian into their force.

**For more information,  
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