



EAGLE EYE<sup>™</sup>  
INNOVATIONS

# RPAS TRAINING AND CONSULTANCY FROM THE EXPERTS



# EXPERTISE YOU CAN TRUST

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PASSION LED US HERE

# INTRODUCTION

Eagle Eye Innovations is a UK-based Group specialising in Remotely Piloted Aircraft Systems (RPAS) training, turn-key operational services, enhanced security services, consultancy, and research & development (R&D) across the whole spectrum of aircraft weight classes; from sub-25kg (CAA accredited) through to Medium Altitude Long Endurance (MALE) systems, for commercial and defence customers globally.

With thousands of hours on all types of RPAS, EEI have trained professionals from all industries and are passionate about helping the world benefit from the growth of the technology in a safe and effective manner.



## ABOUT EEI

The expanding EEI Group is system agnostic, focusing solely on bringing ex-military operational and training expertise to support customer requirements.

From its inception in 2014, EEI has grown to become the only RPAS service company in the UK that caters for all types and weight classes of RPAS, with over 60 years of combined experience of RPAS aviation within the team.

Current elements of the EEI Group include:

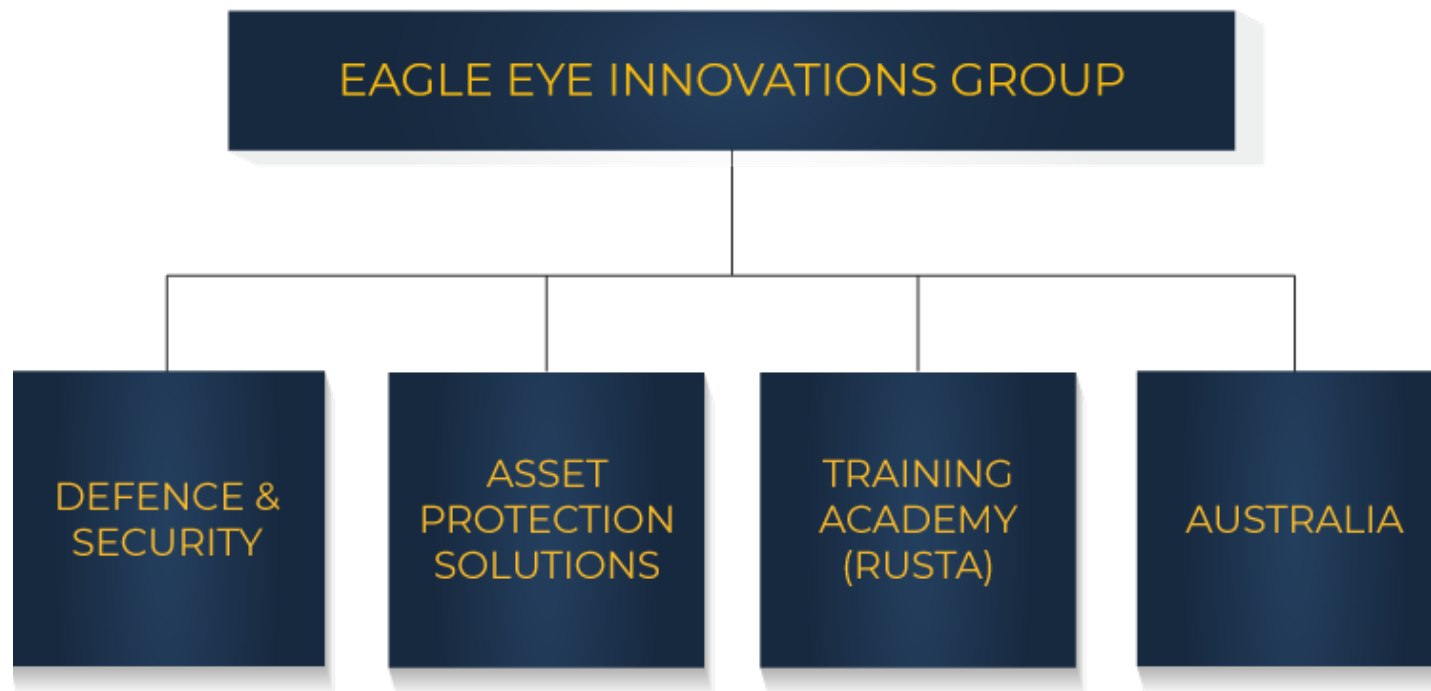
- Defence and Security
- Asset Protection Solutions (APS)
- RUSTA
- EEI Australia

This evolving structure allows EEI to harness the UK's industry-leading expertise to support international customers. Significantly, within the sub-25kg sector, EEI's training entity 'RUSTA' is the longest running Civil Aviation Authority (CAA) accredited organisation, setting the benchmark in commercial training.



EEI expertise does not stop at Pilots, the available skill sets are far wider, with Sensor Operators (SO), Mission Intelligence Coordinators (MIC) and key support staff such as RPAS maintenance and communications specialists.

In addition to this air element, EEI has several Force Protection and Security RPAS experts who give the organisation the ability to provide RPAS enhanced security services and ensures that EEI can effectively integrated air and land to provide fully integrated, layered solutions for customers.



# SERVICES OVERVIEW

Harnessing ex-military experience and qualifications across many different types of aircraft, EEI is unique in being able to provide services across the whole spectrum of RPAS weight classes. Our training is delivered to commercial and defence customers worldwide.

## BESPOKE TRAINING DESIGN

Training can't always be out-of-the-box. With instructors trained through the Royal Air Force Central Flying School (CFS) and experts in the Defence Systems Approach to Training (DSAT), EEI can develop assured, auditable training solutions bespoke to your requirements.



## RUSTA RPAS TRAINING (SUB-25KG)

RUSTA is the EEI sub-25kg RPAS training academy and is the longest running CAA accredited organisation, helping customers to understand rules and regulations while developing their own valuable RPAS operations.



## EMERGENCY SERVICES TRAINING

RPASs have revolutionised Emergency Services operations. EEI instructors have a vast experience in training Emergency Services, and have designed a bespoke course to ensure that, as well as basic piloting, operators are proficient in the tactical application of RPAS to support their operations.





## RPAS TRAINING (25-150KG)

EEl has expertise in the mid-weight category (25kg to 150kg) meaning our instructors can design and build training, in relationships with equipment manufacturers, to ensure customers receive expert tactical training. This ensures operators are proficient in piloting, as well as the effective employment of sensors, to meet the operational output.



## RPAS TRAINING (MALE)

Leading the industry within the UK, EEl has a wealth of MQ-9 Reaper, Watchkeeper and Hermes-450 experience capable of delivering world class synthetic and live RPAS training, from basic phase to front line. Significantly, EEl is a valued training partner of the RAF MQ-9 Reaper Force, providing daily synthetic instruction to front line crews.



## INTELLIGENCE ANALYSIS COURSE

EEl has harnessed ex-MQ-9 Reaper Intelligence Coordinator expertise to build a bespoke RPAS Intelligence Analysis course, assisting customers with exploiting collected information and helping inform decision-making cycles to maximum effect.



## CONSULTANCY AND R&D

The EEl expertise across the RPAS weight classes is industry-leading. EEl is passionate about utilising this knowledge to help enhance and grow the technology for all customers worldwide.



## RPAS OPERATIONAL SERVICES

With many thousands of hours operating RPAS across the world, EEl has the expertise to support customers operational requirements, from Concepts of Operations (CONOPS) development and support services, through to 'turn-key', EEl-led operational services globally.



## RPAS DERIVED RISK MANAGEMENT

EEl Asset Protection Solutions (APS) utilises ground and air-based security experts, EEl can provide security services to customers from risk profiling and management through to 'turn-key' operational services to help protect customers vulnerable assets.



# RPAS BESPOKE TRAINING DESIGN

EEL has a pedigree in training design across all classes of RPAS and can design bespoke world class training to suit your needs.

Through a holistic appreciation of the RPAS market, EEL can conduct in-depth training needs analysis framed around your complex RPAS capabilities, and anticipated mission roles, to develop world leading classroom, synthetic, and live fly training.

EEL training design conforms to a Systems Approach to Training which is flexible, modular, and has micro-learning principles at its core. This approach to training design ensures your people can get the training they need, when and where they need, it in a cost effective and efficient manner.

Instructors have an extensive background in the Defence Systems Approach to Training (DSAT) which is recognised globally as the gold standard in training. In addition to military instructional qualifications, EEL instructors have Level 3 Awards in Education and Training.









# RUSTA RPAS TRAINING

## SUB-25KG

RUSTA is accredited as a Recognised Assessment Entity (RAE) by the UK's Civilian Aviation Authority (CAA). This accreditation allows RUSTA to deliver the A2 Certificate of Competency (A2 CofC) and the General Visual Line of Sight Certificate (GVC). RUSTA prides itself on the high-quality training offered to all customers, whatever the intended use of the RPAS.

Lessons are delivered live by our experienced instructors so enabling questions to be answered and the lessons set at a pace that is comfortable and relevant to your training requirement.

All of our instructors are ex-military and have a background in RPAS operations around the world, uniquely placing us to offer tactics and training relevant to your operation.



RUSTA





## 3-DAY TRAINING COURSE

### AIM

The aim of the course is to train RPAS users to proficiently operate aircraft and understand regulations to enable them to safely and effectively meet their RPAS needs. Successful completion of the course will result in the award of an A2 Certificate of Competency (A2 CofC) or General Visual Line of Sight Certificate (GVC) under EEIs RAE status.

The A2 CofC is purely theoretical culminating with an examination. The GVC comprises of a theoretical element, a theoretical examination, and a practical skills assessment.

### WHO SHOULD ATTEND?

Candidates with little or no previous experience who wish to be taught the fundamentals of operating RPAS safely.

### COURSE LENGTH

The course length is 3 days and is conducted at EEIs facilities near Lincoln, UK. Training can be delivered at the customer's location provided that the course attendance is 8 or more. Practical elements will need to be carried out at a pre-approved EEI flight site, or at customer sites after a successful risk assessment is undertaken by EEI.

### GROUND SCHOOL

All candidates will be expected to complete pre-course learning through EEIs e-learning platform, followed by classroom-based instructor led theory which culminates in a written examination. Modules include:

- Introduction to RPAS
- Air Law Responsibilities
- RPAS Operating Principles
- Airmanship & Aviation Safety
- Human Performance
- Meteorology
- Navigation & Charts
- RPAS General Knowledge
- Operator Responsibilities
- Operating Procedures

On successful completion of the theory phase of our course, students will be issued a certificate, however, this does not accredit them in any practical aspects of RPAS use.

### FLIGHT SKILLS ASSESSMENT (GVC)

The flying element teaches the candidates how to operate the aircraft safely and competently. Once EEI instructors are satisfied that the candidate is operating in accordance with the Civil Aviation Publication (CAP) 722, and the Air Navigation Order (ANO), they will conduct an evaluated flight test.

Candidates will perform the following assessed tasks in planning (including risk assessment), briefing, aircrew discipline, safety, airmanship, emergency handling, general handling.

Following successful completion of this test, the candidate will receive their GVC certification that will allow them to apply to the CAA for an Operational Authorisation in order to fly their RPAS within UK airspace.



## 5-DAY TRAINING COURSE

### AIM

The 5-day course encompasses all elements of the 3-day course, with the addition of 2 days dedicated flight training to teach the student how to fly the aircraft and manipulate sensors to support a wide range of RPAS applications.

### WHO SHOULD ATTEND?

Candidates will be taught the skills to operate RPAS both professionally and tactically.

Applicable to a wide range of customers such as Wedding Photographers, Ergonomists, Film Makers, Security Services and Police Forces.

### COURSE LENGTH

The course length is 5 days and is conducted at EELs facilities near Lincoln, UK. Training can be delivered at the customer's location provided that the course attendance is 8 or more. Practical elements will need to be carried out at a pre-approved EEL flight site, or at customer sites after a successful risk assessment undertaken by EEL.

### CONTENT

The 2 dedicated days of flight instruction cover:

- **Aircraft Handling (AH) Phase** – minimum of 2 flights teaching candidates the best practise operating procedures and building confidence with the aircraft.
- **Mission Element (ME) Phase** – minimum of 2 flights teaching camera manipulation and management to collect the product and maximise its effectiveness.



## NATIONAL VOCATIONAL QUALIFICATION (NVQ) LEVEL 3

### CERTIFICATE IN THE REMOTE PILOTING OF RPAS FOR COMMERCIAL OPERATION

#### AIM

Accredited by Pro Qual, our NVQ Level 3 gives candidates the opportunity to gain a civilian qualification in RPAS operations, alongside their theory and practical training.

#### WHO SHOULD ATTEND?

This qualification is appropriate for those candidates who wish to learn the basics of RPAS operations. The course is suitable also for those who may wish to seek employment within the RPAS sector.

#### COURSE LENGTH

The course length is 5 days.

#### CONTENT

Modules include:

- Knowledge of Regulations
- Safety Issues
- Pre-Flight Processes and Procedures
- Flight Manoeuvres
- Post Flight Procedures
- Emergency Procedures

Candidates must complete 2 mandatory units:

- Knowledge of RPAS Operations
- Flight Skills for RPAS



## NATIONAL VOCATION QUALIFICATION (NVQ) LEVEL 4

### DIPLOMA IN THE REMOTE PILOTING OF RPAS FOR COMMERCIAL OPERATION

#### AIM

Accredited by Pro Qual, our NVQ Level 4 course gives candidates the opportunity to gain a civilian qualification in RPAS operations, together with the theory and practical training.

#### WHO SHOULD ATTEND?

This qualification is appropriate for those candidates who wish to learn advanced RPAS operations. The course is suitable also for those who may wish to seek, or are employed, within the RPAS sector.

#### COURSE LENGTH

The course length is 5 days.

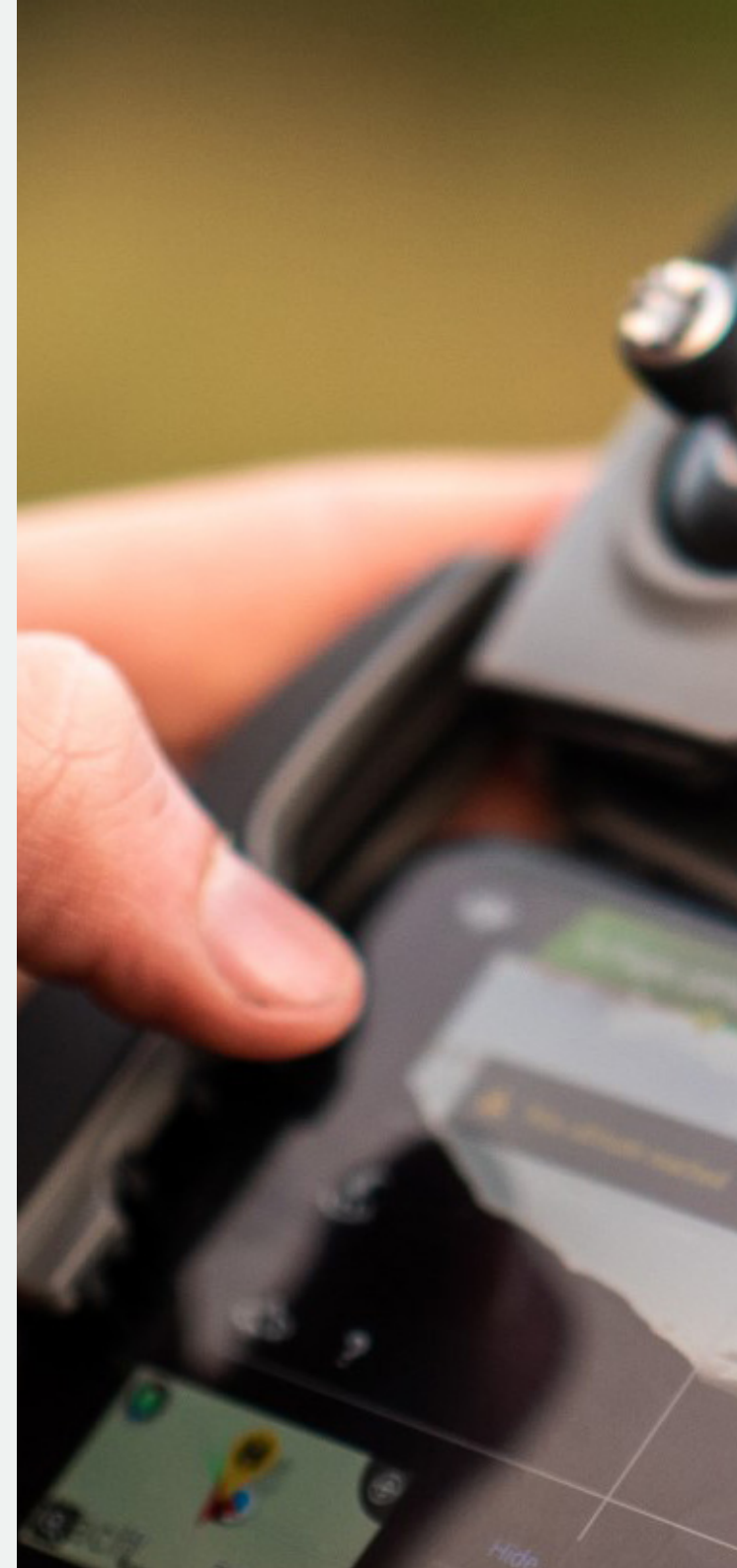
#### CONTENT

Modules include:

- Knowledge of Regulations
- Safety Issues
- Pre-Flight Processes and Procedures
- Flight Manoeuvres
- Post Flight Procedures
- Emergency Procedures

RPAS Candidates must complete 3 mandatory units:

- Knowledge of RPAS Operations
- Flight Skills for RPAS
- Developing an Operations Manual for the Remote Piloting of RPAS













# EMERGENCY SERVICES TRAINING

## AIM

This 5-day training course has been designed specifically for Emergency Services personnel, giving relevant training that reflects the advanced skills required to fly RPAS operationally when under pressure. The course syllabus includes the mandated requirements for theory and flying training, but with an emphasis on tactics and techniques used by Emergency Services personnel.

## WHO SHOULD ATTEND?

This bespoke Emergency Services Training course is designed for:

### Police

- Police Officers and Staff
- Collision Investigation
- Rural Crime
- Response
- Roads Policing
- Authorised & Specialist Firearms Officers
- Counter Terrorism Officers
- Regional Crime Teams
- Specialist Counter Terrorism Division

### Fire

- Rescue Service Agencies
- Fire & Rescue Services
- Fire Investigators
- Urban Search & Rescue Teams (USAR)

### Ambulance Services

- Hazardous Area Response Teams

## COURSE LENGTH

The course length is 5 days and is conducted at EEIs facilities near Lincoln, UK. Training can be delivered at the customer's location provided that the course attendance is 8 or more. Practical elements will need to be carried out at a pre-approved EEI flight site, or at customer sites after a successful risk assessment undertaken by EEI.

## CONTENT

The 2 dedicated days of flight instruction cover:

- **Aircraft Handling (AH) Phase** – minimum of 2 flights teaching candidates the best practise operating procedures and building confidence with the aircraft.
- **Mission Element (ME) Phase** – minimum of 2 flights teaching camera manipulation and management to collect the product and maximise its effectiveness.

# RPAS TRAINING

## 25-150KG & MALE

The extensive RPAS experience brought to the market by the EEI instructors and training designers means they truly understand the extensive training requirements that complex RPAS platforms necessitate. If you are looking to develop capability in the 25-150kg or MALE sectors of RPAS operations, bespoke training can be developed to meet your requirements.

Based on our experience, EEI has designed a modular, Commercial Off-the-Shelf (COTS), generic training solution for operators of the large and complex platforms within the global market. This course is designed to support professional aviators embarking on a career in RPAS operations. The modular design is flexible and enables pilots and payload operators to undertake focused training based upon their relevant experience, utilising a generic COTS RPAS simulator, and desktop trainer, to aid learning.

The course is designed to be system and weight agnostic, therefore can be fully customised to meet specific output requirements. More complex systems will require pre-requisite aviation training prior to commencement of the course, which EEI can help determine the output standard of, for candidates destined to undertake the training course detailed in the following section.







## RPAS INITIAL AVIATION TRAINING (R-IAT)

Candidates will be introduced to some of the basic principles needed as a foundation to build towards becoming RPAS operators. Modules include:

- Introduction to RPAS Operations
- RPAS in Modern Doctrine or Regulation
- Generic RPAS Capabilities
- Aerodynamics
- Meteorology
- Airspace Structure & Procedures
- Rules of the Air
- Navigation
- Aircraft and Peripheral Systems, including Communications Equipment
- Normal and Emergency Handling Procedures
- Satellite Communications (SATCOM)

Focused on the remote perspective, and building upon elementary aviation training, this course will be delivered through a combination of classroom-based lessons and practical simulator exposure of 8-10hrs. We believe this to be invaluable to give the candidates the 'air-minded' skills and situational awareness needed to understand the air environment.

Specifically for RPAS pilots, R-IAT is designed to follow an elementary flying training course such as the PPL, to develop key skills necessary for RPAS training. This will include simulator flying to develop skills such as procedural instrument flying and operating within a multi-crew environment. Other elements of training include basic aircraft handling, navigation and airmanship.

R-IAT for Payload Operators (PO) focuses on developing the skills required to operate multiple sensors and work within a multi-crew environment. In addition POs are trained in the 'co-pilot' role which is critical to aircraft systems management in support of the Pilot. This involves simulator flying to develop CRM, airmanship, sensor handling, and ISR techniques.

## RPAS BASIC AVIATION TRAINING (R-BAT)

R-BAT will build upon the skills gained during R-IAT, with a focus on aircraft positioning, sensor manipulation, and information exploitation. This course lasts approximately 6 weeks, depending on candidate numbers, and includes classroom-based lessons and synthetic exercises. Candidates will have access to software for consolidation and procedural training during self-study time.

The following modules are covered:

- ISR Fundamentals
- Role-specific Application
- Crew Resource Management (CRM)
- Human Factors
- RPAS Safety
- Datalinks
- Space
- Processing, Exploitation and Dissemination
- Payload Management and Sensor Search Techniques
- Mission Planning
- RPAS Meteorology
- Basic Electronic Warfare
- Tactical Airspace Management

Synthetic exercises will be conducted as a crew (Pilot & Payload Operator) to develop bCRM and airmanship, whilst exposing candidates to the operational applications they are likely to face. Desk top planning exercises will be conducted alongside the synthetic phase to consolidate learning.





## RPAS ADVANCED AVIATION TRAINING (R-AAT)

R-AAT is typically conducted as part of an operator's professional development after a consolidated period of flying, post type-specific qualification. This course is designed build upon a candidates operational experiences and enhance learning within a mission specific context. Additionally, bespoke modules can be designed into this course based on specific training requirements.

The R-AAT ground school and synthetic phase will cover the following modules:

- Mission Command
- Flight Supervision
- RPAS Integration to Unsegregated Airspace
- Additional Advanced Payloads
- Launch and Recovery
- Advanced Meteorology
- Mission Planning
- Emergency Procedure Management
- Human Factors
- CRM

## RPAS INSTRUCTOR UPGRADE TRAINING (R-IUT)

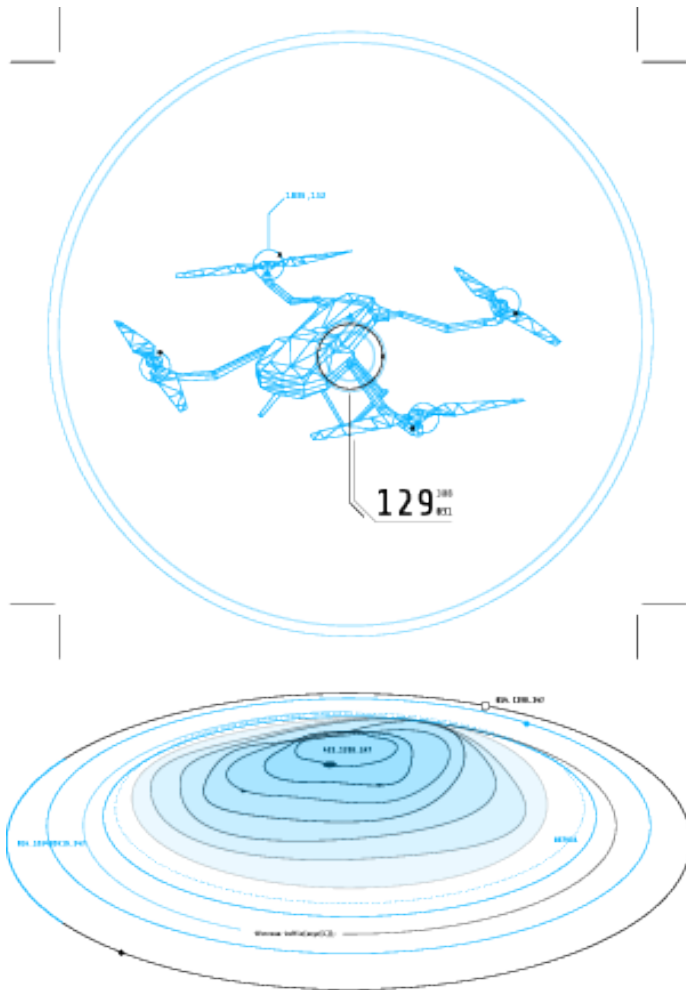
The R-IUT is designed for experienced RPAS operators that are selected for instructional roles and supervisory responsibilities.

EEL training is developed to a Systems Approach to Training standard which will begin with an introduction to training design and methodologies.

Candidates will undertake ground school and synthetic phases which ensure they develop the core skills necessary to build and deliver structured lessons in classroom, synthetic, and air environments. They will be taught how to identify, develop, and achieve specific training outcomes catering for all learning styles.

Following the theory-based elements of the course, candidates will practise their instructional techniques and assessment within the synthetic or air environment using the 'brief-monitor-debrief' instruction methodology. All practical elements will be delivered using a 'give and give-back' instructor demonstration and student practise methodology.

# INTELLIGENCE ANALYSIS COURSE



## AIM

To provide the student with the tools and skills to successfully analyse imagery to a high standard, developing valuable information products to inform the ISR cycle and Commander's decision-making.

## WHO SHOULD ATTEND?

The course is designed for personnel with a requirement for Imagery Analysis (IA) expertise. The course can be undertaken by anyone irrespective of previous experience.

## COURSE LENGTH

The course can range from a 2-day introduction course through to a 3-month intensive IA course in order to prepare an individual for employment in Intelligence roles.

## CONTENT

The course is designed in a modular format enabling it to be tailored to the customer's requirements. The course is broken down into the following modules:

- Welcome to Imagery
- Infrastructure Studies
- Installation Studies
- Specialist Studies
- Full Motion Video
- Mission Intelligence Coordinator
- Military Studies (Maritime)
- Military Studies (Air)
- Military Studies (Ground)









EEl is a platform agnostic organisation that can deliver turn-key RPAS operational support services globally, with vastly experienced pilots, sensor operators, intelligence analysts, maintainers and operations support staff that have all previously served on Royal Air Force, United States Air Force, and British Army MALE RPAS Squadrons. This military expertise is valuable in providing RPAS operational support services to international militaries, government organisations, and the commercial sector. EEl's proven end-to-end ISR procedures and techniques, coupled with an unmatched depth of experience and CAA accreditations within the RPAS sector, ensures the delivery of timely effects to meet your requirements in a commercially competitive, self-sustaining manner, across the whole spectrum of RPAS weight classes.

## SERVICES OFFERED

### **Contractor Owned Contractor Operated (COCO) Services**

EEl will use technical and tactical expertise to fully understand your ISR requirements to help define the most suitable RPAS system, blended with highly experienced EEl RPAS operators and maintainers, to provide a comprehensive output driven solution, anywhere in the world and within your budget.

### **Government Owned Contractor Operated (GOCO) Services**

EEl will work closely with Governments, and other non-governmental organisations, to understand existing RPAS capabilities and provide RPAS expertise, from operators to maintainers, to seamlessly augment existing capability. EEl has proven operating structures in place to provide an assured output in line with Government safety standards and operating procedures for high value assets.

### **Operational Planning**

For customers new to the benefits of RPAS technology, EEl will provide an operational planning service to assist organisations with understanding how existing operations can be enhanced with the use of RPAS. Beginning with capability audits, requirements definition, and CONOPs development, EEl will work closely with customers to design, develop, train, and integrate a fully operational RPAS service, delivering effects that will enhance any existing ISR cycle and provide information advantage at the leading-edge of technology.

# CONSULTANCY

The experience and qualifications contained within EEI, across all weight classes of RPAS, are industry-leading. Our aim is to utilise this expertise to consult with any organisation that wishes to know more about RPAS technology and the benefits it can bring.

Across all weight classes of RPAS, EEI can provide support including;

- Understanding RPAS capabilities
- Development of RPAS requirements
- Selection of systems to meet customer requirements
- RPAS organisation integration
- Airspace integration
- Beyond Visual Line of Sight (BVLOS) operations
- Concept of Operations (CONOPs) development
- Operational support
- Training Needs Analysis
- Training Management Systems (TMS) design
- Training Assurance Services

EEI delivery team are ex-military operators and instructors with backgrounds in traditional and RPAS aviation. This unrivalled level of experience can help guide your company to ensure every aspect of a project is effectively delivered.

The RPAS sector is an exciting place to be with innovation driving rapid change, EEI are the perfect partner to assist organisations to understand this technology and safely integrate it in a cost effective manner.









# WHAT IS EEI ASSET PROTECTION SOLUTIONS?

EEI Asset Protection Solutions (APS) provides security focused risk management, utilising Remotely Piloted Aircraft System (RPAS). APS serves two purposes: to enhance and support ongoing EEI Group projects, and to facilitate APS-led opportunities. APS delivers tiered solutions comprising of rapid short-term deployments, training packages and long-term integrated, turn-key risk management strategies.

The APS management team of subject matter experts and experienced project developers has extensive military and private sector experience; this enables APS to produce a market leading, RPAS derived risk management solution in commercially sensitive and austere conditions.

The use of RPAS capability is required to mitigate against a technological criminal intent and technologically advanced peers, within domestic low risk and austere high risk operating environments. EEI APS will contribute to your risk management strategy to identify, treat, and mitigate future, emerging, and systemic risks to your organisation.

More information about EEI APS can be found in the EEI APS Brochure.



A close-up photograph of an eagle's eye, showing the intricate details of the feathers and the iris. A clock face is superimposed on the eye, with the hands pointing to approximately 10:10. The clock face is dark and semi-transparent, allowing the texture of the eye to be visible through it.

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