

# **THE AVIATION SECURITY INDUSTRY**

**Statistics:** Each year around 220 million passengers fly nearly 2 billion kilometres in UK-regulated airspace with a total of 2 million flights a year. It is a complex and diverse industry that includes:

- 200 aircraft operators and 80 balloon operators
- 16,600 aircraft
- 51,000 pilots
- 12,000 maintenance engineers
- 2,400 air traffic controllers
- 145 aerodromes
- 1,800 tour operators selling holidays to 28 million people

There are more than 50 passenger-carrying airlines in the UK, with 200,000 people employed in air transport jobs, and a further 600,000 in aviation-related employment. This figure is set to rise as more and more people and freight move by air, despite reaction to 9/11 and recent alerts. Around 3 million tones of cargo and well over £100 billion worth of trade passes through Britain's airports every year. Around 230 million passengers annually use British UK airports, with nearly half of them travelling through Heathrow.

**Annex 17 of the Chicago Convention:** to which the UK is a signatory, is the internationally agreed document dealing with aviation security. The UK is also a very prominent member of the International Civil Aviation Organisation (ICAO), with its recommendations incorporated in national regulations. Regulation (EC) No 2320/2002 of the European Parliament and of the Council establishes common rules in the field of civil aviation security.

**Threats:** Aviation security staff deal with air rage, drunkenness, assault, smuggling and crime, as well as the threat of international terrorism – highlighted since the events of 9/11 and underlined in the UK in the last couple of years. Other security concerns include stowaways, espionage, human trafficking, illegal immigration, theft, sabotage, hijack and environmental protest. Heightened security, including the deployment of sky marshals, continues to make headlines. The threat posed by knives and other relatively unsophisticated weapons surprised some people, and has most certainly increased the number of potentially lethal items being impounded at airports. Other methods suggested to tighten security that have been implemented in some cases include passenger profiling, intensive security staff screening and training, personal and baggage searches, and military and police deployments. The dangers of missile attack have seldom been discussed publicly although thousands of such weapons have been found in Afghanistan.

**Aims of Aviation Security:** The primary objective of aviation security is 'to safeguard passengers, crew, ground personnel and the general public against acts of unlawful interference perpetrated in flight or within the confines of an airport. Aviation security also seeks to protect aircraft and facilities serving civil aviation, such as fuel, catering, air navigation facilities and the premises of listed cargo agents against acts of unlawful interference.' Aviation security officers are employed to 'prevent unlawful interference against civil aviation'. In practice this breaks down into two broad responsibilities: to detect unauthorised weapons, explosives and incendiary materials; to prevent these being carried onboard an aircraft or into a restricted zone. As well as key attributes for any security officer, the most significant difference between domestic security and aviation security is the use of technologies that support the underpinning knowledge, like X-ray machines, explosives-detection techniques, image capture capabilities, biometrics and a host of others.

An airport will have a security group including police, Special Branch, Customs & Excise, Immigration, the Department for Transport (DfT) Aviation Security Inspectors and the aviation industry. It will agree processes to identify security and criminal risks, and the roles and responsibilities of the different agencies. The security plan will be jointly owned and routinely revisited to take into account future developments. All cargo must be screened to ensure that it does not carry prohibited articles. This process involves a number of techniques, which must be carried out by an independent validator.

**Aviation Security Policy:** Following the 2002 Wheeler Review, UK airports now operate a Multi-Agency Threat and Risk Assessment (MATRA) system. A MATRA group actively involves all security stakeholders – uniformed police, Special Branch, Revenue & Customs, Immigration, government Aviation Security Inspectors, and aviation industry representatives from airport operators, air carriers, cargo agents, general aviation and other commercial concerns.

**The Methodology:** is to identify the full range and size of security and criminal risks at an airport, and the roles and responsibilities the different agencies have in addressing them. It covers what controls are currently in place and what further action is required. The aim is to produce a security plan that is jointly owned and can be routinely revisited to take into account future developments, like changes in the type, volume or profile of services operating at that airport, or responding to new or differing crime trends or threat intelligence.

## **Aviation Security Training Hierarchy**

Aviation security training is generally divided into a number of levels. All delegates should be subject to criminal record and counter-terrorist checks. The Department for Transport is responsible for the security of all means of transport, and that includes airports, ports, tunnels and bridges. It authorises security instructors through a number of courses, including aircrew instructors, aviation security instructors, and recognition of firearms, explosives and incendiary devices. Training aids/videos/DVDs are available to properly authorised training providers. Details of aviation security training and approved training providers are available on the Department for Transport website. Although precise details of programmes vary between different training providers, these levels and course content are generally as described in the following paragraphs.

**Level 1 Security Screeners** provides a detailed programme covering all aspects of the security screening process and access control as required by national and regional specifications. Course duration would be around 15 working days and usually hosted on-site with access to the relevant screening equipment. The course would be taken by screeners and supervisors. It should cover such subjects as:

- Threat To Aviation
- Organisation Of Countermeasures
- Security Programmes
- Physical Screening Options
- Introduction To Physical Screening Of Passengers, And Metal Detectors
- Introduction To Improvised Incendiary Devices, Improvised Explosive Devices, Explosives Recognition And Detonator Recognition
- Recognition Of Firearms And Ammunition, Including Revolvers And Semi-Automatic Pistols And Component Parts
- Improvised Pistols, One-Shot And Fully Automatic Weapons
- Bladed Weapons
- Introduction To X-Ray Theory And Image Recognition

- X-Ray Operator Interfaces, Health & Safety
- Introduction To Cabin Baggage
- Baggage Search Theory
- Prohibited Items And Confiscation Procedures
- Dangerous Goods And International Requirements
- Boarding Cards And Tickets
- Passenger Screening And Body Language
- Security Awareness And Dealing With Incidents.
- Lifting Techniques, Health & Safety
- Special Needs Passengers
- Unattended Bags
- Use Of Radio Equipment And Secure Procedures
- Access Control Principles And Systems
- Vehicle Search
- Closed-Circuit Tv Function And Operation
- Surveillance Equipment And Night Vision
- Report Writing.

***Level 2 Security Supervisors*** supervise the screening and access control operation. They must first qualify at level 1. The course should last two to three days and cover:

- Role Of The Supervisor In Maintaining Standards, And Key Responsibilities
- Equipment Performance And Testing Procedures For Metal Detectors And X-Ray Machines
- Dealing With Customer Objections To Screening, And Conflict Avoidance
- Reporting Procedures And Requirements
- Managing Screener Performance
- Emergency Procedures To Deal With Weapons And Devices
- Cabin Baggage Systems And Management Information.

***The Level 3 Managers*** course should be a one-week in-depth programme covering many aspects of aviation security management. It should cover:

- Threats To Civil Aviation, And Countermeasure Philosophy
- Role Of Police
- Role Of Explosive Ordnance Device Teams
- Weapons And Explosives Recognition Requirements
- Physical Screening Techniques
- Role Of Technology
- National And Regional Programmes And Requirements
- Contingency Planning
- Airline Security Programmes
- Hijack Management And Crew Response
- Perimeter Protection
- Intruder Detection
- Hold Baggage Screening
- Airport Security Planning.

***Level 4 Security Awareness*** is suggested as a four-hour programme, including:

- Threat To Aviation
- Your Part In Securing The Airport
- Pass System And Audit Procedures
- Dealing With Security Situations

- Evacuation In The Case Of Security Alerts.

**Level 5 Senior Managers** is another four-hour programme, covering:

- Threat Review And Current Update
- Organisation Of Countermeasures, National And Regional Responsibilities
- Review Of Regional Programmes And Training Courses
- Evacuation Procedures And Role Of Explosive Ordnance Device Teams.

**Level 6 Hold Baggage Screening Operators** will probably take five to seven days for people already qualified at level 1, and ten days for complete novices. The exact programme will depend on the screening equipment in use, previous training and levels of X-ray experience.

**Level 7 Security Instructors** Training should be tailored to enable instructors to work with training managers to establish their own training programmes. Instructors should have attended all levels of training.

Other training should include emergency procedures and annual refresher courses.

**Other aviation security training courses include:**

**RFX – Recognition of Firearms and Explosives:** This course is intended for those who fall into any of the following categories, having attended an RFX course at least 2 years previously:

- Aviation Security Instructors of airports, airlines and their agents.
- In-flight catering agents.
- Air cargo agents.
- Equivalentents in other modes.

**Aviation Security Training:** This is a foundation course which is mandatory for aircrew and cabin crew. The training modules reflect the current climate and heightened threat levels and focuses on preparing the last line of defence with correctly trained operating crews. The training objectives include:

- Threat assessment
- Relevant industry standards and liabilities
- Hotac transfers & security
- Catering security
- Least risk bomb locations
- Bomb threat response procedures
- Domestic and international legislation
- Aviation security threats
- Personal and group responsibilities
- Communications techniques
- Employee profiles
- Health and Safety at Work considerations
- Personal challenges
- Down route security measures
- Cabin security procedures (areas of responsibility)
- Passenger boarding assessment

- Hand baggage security considerations
- Restricted Zone access
- Physical security measures

**Conflict Management & Restraint Training:** The course is designed to fit your needs; our team will visit you and together you will decide on what you require and how best to construct your course to be cost effective and practical.

Classroom Theory Options:

- Communication in conflict
- Preparing for conflict
- Principle of control
- Mental illness in the aviation environment
- Performance under pressure

**Scenario Based Training:** *Short scenarios on board an aircraft to pressure test acquired skills and touch on performance under pressure:*

- Breakaways
- Grip and Grab (G'n'G) releases
- Forearm defence & flinch response
- Pressure points
- Edged weapon defence
- Strangle defences & counters
- Empty hand striking
- Empty hand restraint
- Restraint applications

Flight Deck Protection for Business Jets:

- Fighting from Seats
- Doorway Defence

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