



# NEWSLETTER

## Places going fast for FSOA's anniversary Conference & Exhibition

Places are being booked up fast for the FSOA'S Autumn Conference & Exhibition, which will celebrate 25 years of the organisation and its work to improve all aspects of football and stadium safety.

The event will take place on October 3rd and 4th 2017 at the Crowne Plaza Hotel, in Stratford-upon-Avon, giving organisations in the events industry the chance to showcase their products and services whilst networking with experts.

Preparations are already well under way for the event, which is set to include a packed programme of talks and activities, real-life insights into football stadium safety and Q&As with high-profile speakers.

As part of the celebrations, guests are invited on a boat trip along the River Avon on October 3rd, whilst we are delighted to announce football legend Kevin Keegan as the guest speaker at the evening dinner on October 4th.

The event is once again being sponsored by Showsec and Dallmeier.

John Newsham, FSOA Business Development Manager, said: "The event is always popular as it provides a platform for industry experts to share knowledge and best practice, whilst showcasing their own services and products.

"The conference will mark the 25th anniversary of the FSOA and so we wanted to make it an extra special occasion. It will be a celebration of the work that has taken place over the years to improve all aspects of stadium safety whilst looking forward to the future and how the roles of safety officers and stewards are constantly changing and developing.

"We are pleased that exhibition space is already being booked and places for members are already going fast. Preparations are well under way to ensure the event is another huge success. We look forward to seeing you all there!"



# Autumn Conference & Exhibition 2017

*celebrating 25 years of the*



## October 3rd and 4th 2017

Crowne Plaza Hotel \* Stratford-upon-Avon

Talk to high-profile experts in football safety and the events industry \* Network and expand your client base \* Showcase your company's products & services \* Learn more about the benefits of becoming a corporate member of the FSOA \* Listen to guest speakers \* Free one-day delegate pass for all safety officers in League One & below who are members of the FSOA

Plus: Boat trip drinks reception along the River Avon

*...And special guest speaker*

**Kevin Keegan**

**BOOK  
YOUR  
PLACE  
NOW!**

T: 01254 841771 / E: [info@fsoa.org.uk](mailto:info@fsoa.org.uk) / [www.fsoa.org.uk](http://www.fsoa.org.uk)

# Let's talk about steward training...

## FSOA Business Development Manager, John Newsham, looks back over 25 years of the FSOA, ever-changing training regulations for stewards - and why something needs to be done going forward

The FSOA all started with the late Mike Holford QPM on October 29th 1992. Mike was the founder of the association and was the safety officer at Nottingham Forest FC. The inaugural meeting was held at Nottingham Forest when 28 safety offices attended. The objectives discussed at that inaugural meeting included promulgating best practice, improving safety, developing safety officer expertise and enhancing the role of stewards.

We started with the red book back in 1995 (some of you who were around then will still remember that!) before the NVQ 2 spectator control the same year. In 1996, we had the first training package and then the revised red book in 1998. The year 1999 saw the football stewarding qualification (The FSQ), which was overseen by the then safety officer Clive Warne.

In 2003, the second edition of the training package module 7 was introduced (Racism and disability discrimination) whilst 2005 saw the revised second edition and also (CEMS) certificate in event match day safety and the city and guilds NVQ2 spectator safety. Module 8 was also introduced (conflict management) and then the SIA (the security industry) came to light.

The year 2010 saw the introduction of the new and latest training package (on the ball), which was produced by the football authorities to which the FSOA and the SGSA contributed to. This training package provided an innovative and interactive resource that satisfied the NVQ level 2 requirements. It represented then - and still does today - a commitment to supporting the highest level of stewarding.

In 2011 the SGSA worked with the Home Office, the UK football policing unit and the Health and Safety Executive to give us advice on how to safely identify and dispose of pyrotechnics. They also produced a number of other documents such as a guide to safety at sports grounds, safety management, accessible stadia and control rooms.

Since then we have seen other training documents introduced, such as crowded places, which has been brought in due to the ongoing threat of terrorist activities at sports grounds. The new NCFE level 2 qualification is another but this requires assessments to be bolted on.

With this flurry of training documents, funding became widely available to training providers so that clubs could tap into this via a training provider and train their stewards free of charge. This was great for safety officers who then engaged with a training provider and let them get on with training and certificating their stewards.

So what are we left with now, 25 years later?

In my view, the system is a mess. It used to be simple and effective and safety officers trained their own staff. But over time, as regulations - and the job role of stewards - continued to change and after the government got burned with training funding, the money is now NOT available. The whole thing has become confusing and expensive. But it doesn't have to be.

What we need to do is find a way to certificate stewards at the end of their training and assessments (the key word here is 'assessments') and get back to training them in-house. We have the training packages available to us including crowded places and griffin which the CTAs will deliver for free.

Some of you who are fortunate enough to have a budget for training stewards are probably fine and will continue with your own systems. Maybe you have even set up a centre for training them and, if so, that is credit to you. But the majority of clubs don't have a budget and struggle to train and certificate their stewards.

As a risk manager and having had 29 years as a practitioner in the industry, I really don't think that we have looked closely enough at how the role of stewards has changed over these years. Do we really understand what we are asking them to undertake regarding their duties? It is not only their role that has changed but the environment in which they work. Stadiums have had to become more diverse in their use and some stadiums have become more complex by design. Couple that with the way society has also changed and the very real threat of terrorism, and I think it is time to re-evaluate how we train our stewards and in what.

There are more and more games now that are police-free and by this definition it will - or should - alter the way that our stewards are trained. We should therefore be looking at the structure of what they are classified as in the safety team and re-evaluate the levels and standard of stewarding. The pay structure required for each club should also be looked into. We have to be mindful though in whatever we do going forward that we maintain the professionalism that Mike Holford set out to achieve when the FSOA was set up and what we all have achieved as an organisation over the past 25 years.

I am currently looking into some alternatives for the FSOA and I hope to have them ready to present to you at the October conference.

# Integrating Drones into Crowd Safety and Security Management

A report by Crowd Safety & Event Management specialist,  
Sol Management Services

## Introduction

My last posting 'Do Drones Assist or Hinder Event Safety' has been read by over 1,000 people, thank you. This short follow on paper will explore the case for using drones to enhance Crowd Safety and Security Management. Currently the management of events is mainly from a two-dimensional perspective relying on inputs from a limited number of fixed CCTV positions and verbal feedback from ground staff. A third 'elevated' drone dimension can offer 360-degree video streaming of crowd positions, directly into a control room or management centre, to see situations develop that are not visible from the ground. This enables management to monitor conditions in real time, such as the build-up of potentially dangerous crowd density conditions or security infringements, enabling fully informed safety and security decisions.



## What is a drone?

A drone is defined as any aircraft without a pilot on board, collectively known as an Unmanned Aerial Vehicle (UAV). These flying machines can be flown by a pilot using a remote device, via a tether from the ground or autonomously with software controlled flight plans. Two types of multi-rotor drones will be considered for use in Crowd Safety and Security Management namely, battery powered with remote controllers and tethered with attached power sources and controllers.

Multi-rotor is a generic term applied to different drones that can take off vertically, hover or fly in any direction consisting of different sizes, weights and rotor numbers. Although flight times differ from drone to drone, depending on battery size, most ready to fly drones that carry a camera will fly for around 20 - 25 minutes. This can limit the availability with drones needing battery changes on a regular basis. They can also fly autonomously, once programmed, to locations along set routes.

Tethered drones draw power up through the tether providing no limitations on the length of time the drone can stay in the air if a continuous power source is plugged into the ground controller. This type of tethering technology can also provide greater bandwidth and better video quality compared to wireless drones. These types of drones provide a stable platform in the sky feeding video for long periods of time. Some are extremely mobile and compact with deployment times of under 60 seconds when close to strategic points of interest.

## How to identify Qualified Drone Companies and Pilots?

The use of drones always carries an element of risk near public places. Contact with sharp fast moving propellers, mechanical/electronic failure, 'fly away' if control is lost between the pilot and drone or unstable weather conditions are some of the scenarios that could lead to a crash into people or structures. Engaging an experienced, qualified and registered drone operator can help mitigate and avoid these types of risks while having public liability insurance covers the cost of flying.

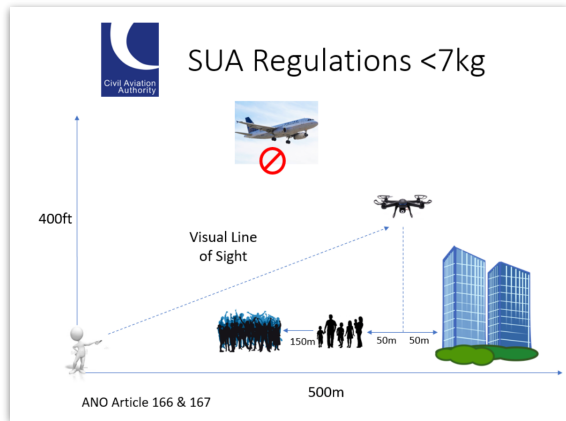
There is no UK Pilot License for drones so it is important to distinguish between commercial and leisure drone pilots. To receive a Civil Aviation Authority (CAA) Permission for Commercial Operations (PfCO) licence, which enables companies to advertise and earn money for drone services, the following elements must be completed and approved.

1. Ground School Course and Theory Test
2. Minimum Flight experience
3. Flight Assessment Test
4. Adequate Public Liability Insurance
5. Approved Company Operations Manual

Pilots that complete 1, 2 & 3 can fly under an approved PfCO utilising the company Operations Manual and Insurance. Following PfCO approval an additional Operational Safety Case (OSC) based on a robust risk assessed safety argument, can be

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developed and submitted to the CAA. If approved this can result in a reduction of the standard flight distances illustrated.



People flying a consumer drone for leisure purposes do not need a licence if the drone is under 7kg in weight and they adhere to the CAA regulations illustrated in Figure 1. Employing and paying a leisure pilot to conduct aerial work is illegal. Something that is particularly dangerous near large crowds without flight planning, risk management and insurance safe guards. Contravening standard regulations could lead to a prosecution with a fine or in extreme cases a custodial sentence particularly when pilots cause injury to people.

Standard CAA regulations include not flying within 50m of populated areas, vehicles and structures (150m for crowds of 1,000+ or congested crowded urban areas), flying below 400ft and a maximum range of 500m while keeping the drone in a visual line of sight at all times and staying away from areas of controlled airspace such as airports as illustrated.

### Data Protection, Consent and Limitations

Awareness of the Data Protection Act regarding the use of identifiable images of people is essential when flying a drone with a camera on board. With public pictures it is advisable to seek consent from anyone whose image may be recognisable in the footage or stills before publishing. This is especially important when children are involved. Always ask permission or preferably get a signed consent form from a legal guardian before filming in areas a child may be present.

Commercial pilots adhere to a pre-planning process that includes gaining the land, building or location owners consent. One key outcome of this structured evaluation is the to ensure the customer and drone company agree the job is feasible enabling a clear briefing for the pilot and crew. There can be real limitations on what can be achieved with regards to flying times, distances, locations, particularly flying in classified air space and near airports, night flying, public accessible spaces and licensing conditions. The CAA guidance illustrated in Figure 1 must be observed at all times unless an OSC has been obtained.

### Crowd Management Planning Operations

Mass crowds can gather at many outdoor locations and for a multitude of reasons.

- Fixed stadia - set infrastructure hosting regular events e.g. football, rugby, motor racing
- Open air sites - temporary venues built for purpose e.g. music festivals, outdoor sports
- Road events - streets used by participants e.g. marathons, carnival, mass demonstrations

While it should be recognised that each public event has a unique set of planning requirements Crowd Safety and Security Management tends to follow a predictable route. The starting point is to fully understand the attraction, crowd profile, demographics, needs, expectation and likely behaviour while also assessing the venue or location suitability. Specific security requirements such as a proportionate response to the threat level, ensuring the safety of high profile guests, dealing with large groups of unruly people or applying protective measures to perceived weakness within event perimeters or access. Other influences that have the potentially to affect the planning and delivery process could include weather, transport issues, conflicting events and particularly media hype which should all be taken into consideration.

Based on information gathered, predictions can then be made on the likely crowd behaviour during each event phase e.g. Arrival, Ingress, Movement, Egress and Dispersal. Venue footprint design and capacity considerations, information, communication, staffing levels and management processes can then be developed. Incident management and emergency management can then be layered into the planning. A suitable risk assessment at each stage of these processes should take place to validate and ensure crowd safety.

On a practical level, each phase of the event operation should be examined and assessed to understand how drones can add value. Clearly if they are impracticable, do not fit operational requirements or the venue has flying limitations, it is not worth trying to force the issue.

### Where can drones support operational delivery

Drones operated within the CAA regulations can improve safety at large events by monitoring and providing video feeds to assist with the supervision and control of crowds, traffic management, perimeter security, site inspections and act as an Aerial Survey platform. A view from an elevated position enables event organisers, security and crowd management personnel to see a situation develop not visible from the ground. Drones can provide:

- Aerial ground surveys to support venue design considerations
- Real time Crowd Safety and Traffic assessment information at mass gatherings
- Perimeter integrity and building inspection
- Monitor the build-up of potentially dangerous crowd density situations
- A pop up 'eye in the sky' to provide control rooms and management personnel with live cctv coverage of blind spots and incidents at events
- Historic record of events and incidents recorded for evidence or training purposes

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## How drones can enhance decision making

### Road Event

Maintaining safe movement of crowds and not exposing them to a risk of overcrowding is essential at any event. Within the 2016 London Assembly Police and Crime Committee report on the Notting Hill Carnival the police warn of the risk of a 'Hillsborough' scale tragedy. Met Police public order Commander David Musker told the committee "last year we came exceptionally close to a major catastrophic failure of public safety where members of the public would face serious injury". The report mentioned the All Saints Road, close to Tavistock Gardens where the safety barriers collapsed on three occasions because of the large number of people crowding around the static sound systems in the road.



Before crowds move through the streets a risk analysis techniques will document potential problems underpinning a risk management strategy to manage or mitigate those risks. Crowd safety is not only a function of how much space is being occupied, it also relates to how quickly spaces fill up. Having a tethered drone available that can be swiftly deployed adjacent to a known problem areas will enable the police and carnival management to observe the movement and build-up of crowds in real time. Informed decisions can then be made on crowd movement and actions taken to prevent dangerous levels of crowd density occurring.

### Open Air site

Organisers of festivals have many moving parts to manage however, perimeter security and revellers breaking in is always at the forefront of management priorities. Previously large numbers of 'break-ins' have led to an increase in attendance, contravening the licensed agreement and compromising health and safety also increase cases of crime, drug use and other illegal activities. Although vastly improved perimeter fencing has greatly reduced the number of 'break-ins' management needs to ensure the festival perimeter is not breached and more importantly if this does happen, a fast response to eject people based on identification, tracking and co-ordination with security response teams.

Traditional surveillance involves manned watch towers, statutory CCTV cameras and mobile security response squads which intruders can sidestep and be out of sight. Through 'Waypoint Tracking' (pre-programmed to follow set routes) drones can provide imagery for general reconnaissance to ensure perimeter integrity. A drone can be equipped with night vision cameras and thermal sensors, providing imagery that the human eye is unable to detect. Drones can also quickly cover large, difficult areas, produce minimal noise and be very cost effective providing real time information for security personnel on the ground. With flight speeds in excess of 16m/s (60km/hr) drones provide a rapid response to incidents. They can circle the location and monitor threats from a safe distance, feedback live video enabling control room staff to assess the situation and direct security response teams if required.

### Emergencies

Although the emergency services will be called shortly after a major incident, traveling to the event and becoming effective on site can take 15 minutes or longer. During this period, using venue resources, it is necessary to rapidly disperse workers and the public away from imminent danger, handle casualties and contain the situation without further injury or loss of life. The on-site management team require access to up-to-date information enabling informed decision over resource deployments until the emergency services arrive.

Today multiple terrorist incidents can occur in and around the same event venue. Thankfully these are extremely rare. However, examples around the world have shown how an initial major disruptive terrorist incident can be followed by secondary or tertiary actions such as explosive devices in the path of evacuees or gunman randomly shooting the crowd. To prevent further attacks from reaching members of the public will require dealing with the displacement of non-injured crowds and directing them along secure exit routes into safe holding areas. A drone can be positioned to detect, verify, validate and provide imagery to support decisions to minimise the consequences of an attack, from a position of relative safety above the incident. This initial response will support the organisers' duty of care to staff and spectators while taking reasonable steps to ensure their safety during the difficult initial stages of an emergency.

### Conclusion

Drones offer a wide range of benefits when integrated into the event planning and delivery processes. They provide a real-time perspective of crowd movements, venue integrity and incident feedback enabling up-to-date decisions to be made by management teams to support public safety.

### Sol Management Services

Sol Management Services provide Crowd Safety and Event Management Services. This includes the integration of drone related planning and delivery activities across the events industry. While working with leading drone companies to offer real time provision of imagery enabling management teams to make informed decisions in support of public safety.

## Results of survey into standardised code words

Following the March AGM the FSOA commissioned a survey into the general use of code words used around the country by stewards and stadium safety staff.

This was to establish whether the use of a standardised use of code words at all stadiums and events would be more beneficial or whether each individual ground should continue with their own system of code words.

The outcome of the survey was that 10% of members actually replied to the survey. This indicates that most seem to be happy with what they have in place.

However, 53% of those that did reply were not in favour of a standardised system and 47% were in favour of standardising it.

We therefore conclude from these results that we have a status quo and that there is no need to introduce a standardised system regarding code words.

It also indicated that colours rather than numbers were most often used for coded messages from the responses received.

CODE BLACK, CODE BLACK ALERT, CODE RED, CODE BLUE, CODE GREEN are the most popular.

# MEMBER NEWS

Please join us in giving a warm welcome to our new FSOA corporate partners, Dashboard Technology Ltd.

The next NW regional meeting will take place in early August at Liverpool FC. Info will go out once a date has been agreed.

### With best wishes to our retiring members:

Bryan Lawton, Oldham Athletic FC; John Little, Carlisle United FC and Charlie Coxen, formerly of Manchester United. Bryan will remain a member of the FSOA despite retiring from Oldham. Everyone from the FSOA, and especially the NW region, thank them for their hard work and wish them well for the future.

For more information about the FSOA, to learn more about the benefits of being a member, to book your place at our Autumn conference or to enquire about advertising in this newsletter for as little as £50 per month (+VAT), visit [www.fsoa.org.uk](http://www.fsoa.org.uk), email [info@fsoa.org.uk](mailto:info@fsoa.org.uk) or call 01254 841771.

