# Police Aviation News PAvCon 2017 Report





# **Doncaster Sheffield Airport**

The prime reason for Doncaster being chosen for the PAvCon was the attraction of the base for the new, much lauded, fixed wing operation based at the Doncaster Sheffield Airport [DSA]. This international point of access to Yorkshire is, perhaps unfortunately, signposted from everywhere as "Robin Hood Airport."

Confusion over its very name was just part of the story. For a place with so many hangars visible there is a remarkable lack of spare accommodation. NPAS therefore commenced building a new hangar large enough to take their projected fleet of Vulcanair P-68R fixed wing aircraft and proposed having the event in another hangar then used by the Vulcan charity. It is now history that the other 'host' was unable to honour its obligations and that PAvCon was put into a nearby hotel. That said Vulcan did their very best to redress the balance of their errors and limited access to the aircraft was arranged for some

Delivery of the first P-68R is imminent but there are no plans to offer a full fixed wing service until 2018 and no flying in an alternative fixed wing type, perhaps to develop tactics and maintain pilot currency, has taken place.

The building is now structurally complete but not quite fit for use.



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# **Planning**

As a European event it was inevitable that the PAvCon Police aviation Conference would return to England. The first true PAvCon in 2009 was planned from the start to be held in a London hotel and the return event was also in a hotel although the latter was never planned that way. I am the first to concede that the 2017 PAvCon was by far the most difficult to plan and the most challenging to bring to fruition.

The final location was a great hotel. Set in extensive grounds the Best Western Premier Mount Pleasant in Great North Road lies close to the Robin Hood Airport between Doncaster and Bawtry. The hotel offered lots of outdoor space to do many things but restricted inside space that was to constrain the ultimate size of the exhibition area. The most important space though was the conference room and that was more than adequately furnished with comfortable seats and a perfect forum for PAvCon's World Class speakers.

The ninth edition of the conference, much loved by a significant element of police aviators and industry across Europe and America, was still something of a curiosity in Britain. It has taken many years to get Europe to see such events as a bright and interesting training ground for operational staff as well as a chance for senior ranks, the pen pushers and planners, to meet up.

For the hierarchy it was a good opportunity to provide an economical training ground for operational staff. Bringing the calibre of experts from across the world that was possible through PAvCon might cost an individual country many thousands of pounds but sharing with other countries could reduce those costs significantly and provide a broad based programme.



### The Event

Nonetheless there was a significant presence of the target market attending and they were able to soak up the mix of safety and technical presentations given by both home grown and specially flown in talent.

The event opened with a training day but unlike the police on mainland Europe the host agency for the event National Police Air Service [NPAS] decided that the nominal figure of 35 Euros per person was too high a price to pay for a slice of a world class trainer who cost thousands to bring to the event. This attitude contrasted sharply with the police in the Netherlands who flew officers in from Amsterdam, put them in a hotel and paid the nominal fee.

NPAS sent 10% of their reported 300 staff to the event, putting up speakers wholly from middle management. They promised to turn up on the day of their speaking slot and 'maybe both days.' In the event not all bothered to even arrive. Some key figures never made an appearance on any day. At an event where they were the host agency some were less than impressed.

The European Police Aviation event that the British police could not get to partly for financial reasons was attended by police officers from Australia, Canada, Mainland Europe and the USA—often at significant cost to the individual or agency. They saw the need for the diverse training opportunities and networking the event offered.



Marking the PAvCon event—mugs and coasters unique to the venue and organisers.





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Years after its formation NPAS continues to struggle with its image and in all too many instances police forces served by the centralised air operations are in dispute over how much they pay and how little they feel they get.

Here was a perfect opportunity to redress the problems by putting on a world class show at little or no cost to the strained budgets and virtually no planning effort. Unfortunately there was a general perception that the organisation and its management staff did not try hard enough—although of course there are always exceptions to that perception. The exceptions though were not enough in number to undo the massive damage to the image of NPAS. It is fair to say NPAS dispute my take on the event.

NPAS have been regular visitors to the event in Europe but each of the attendees was 'management' so this years event did gain a little in exposing a handful of grass roots attendees to what is on offer year in and year out. In general it would seem that the old hands among PAvCon attendees and speakers noted that those few embraced the event with enthusiasm even though they were not present for the day 1 training.

Aside from the TFO's from the south west of the UK local enthusiasm for the event pretty much lay in the arms of the private sector.

Equally challenged financially the Civil Air Patrol put up a good show and with a characteristic show of blatant cajoling managed to get one of their aircraft as close to the action as possible and then arranged for the loan of an MX-8 sensor turret from L3 Wescam to enhance the appearance of their tiny machine. It may have been a dummy but it was there attached to their airframe.

The autogyro on display at PAvCon was the AutoGyro Cavalon which was brought to the event by CAP member, Jim Hughes. As an autogyro instructor Jim flies his own autogyro, but he's also the Operations Manager at RotorSport UK. The Cavalon, now certified for commercial operations, was on loan to the CAP who, in conjunction with RotorSport and L3 Wescam are exploring the concept of adding an electrooptical camera turret, complete with thermal imager to the autogyro. This will improve the autogyro's capability, by an order of magnitude, as a cost effective aircraft for aerial reconnaissance, aerial survey and air to ground photography. The CAP team that attended PAvCon also included Ian Povey, a member of the CAP and also a commercial drone operator who is also a 'subject expert' with regard to drone operations.



In recent weeks they were heavily involved with academics at the Centre for Search Research in a trial termed O'Donnell Revisited in Northumberland and ensured that the story got out into the media as well as giving as presentation to the conference. All easily achieved without having recourse to a set of expensive trained media personnel.

Aside from the CAP the local input was from a drone flying company [COPTRZ] and the flying in of the locally based EC135T2 from Carr Gate near Wakefield for a few hours each day. Inclement weather played a factor in the timing of the presence of the NPAS helicopter [G-POLB], but it managed to attend for part of each day. Its crew were of course welcome additions to the operational staff numbers but of course they were pretty much glued to the aircraft and not able to take in much of the event inside the hotel.

The event though is about the programme and its content. No-one in Europe has any issues with the varied programme served up since 2006 partly because they know they can and do ask for special subject material to be included at any time.

This year was no different but PAvCon proposed to increase the UAV content based on both NPAS and European pressures. The Belgian State Police have an active programme to fly and test unmanned aircraft and brought examples of their small fleet with them.

Following this general focus PAvCon also asked NPAS what they wanted in the programme. There was no reply for almost six months and as a result the programme was primarily selected from the most relevant and interesting material from the past and the requests from Europe.

## **Opening Rounds**

After the welcomes to the attendees from the organisers and NPAS [Captain Ollie Dismore the Director of Operations and Chief Superintendent Tyron Joyce the Accountable Manager] Glenn Daley, the former 9/11 helicopter pilot with the New York PD gave his excellent presentation on High Rise Rescue. How poignant that only days after the end of PAvCon London was to be stricken by just such a fire. Glenn knows High Rise Rescue and it is a really good presentation. I have heard it perhaps five times and yet it is new, crisp and thought provoking each time I hear it. Glenn introduces new material each time and I noted a fresh 2017 London Bridge area rooftop image in the line up. You simply cannot hear it enough times.

And it works as well. Glenn worked with the police in the UAE a few years ago and the year after they were involved in the real thing with a serious high rise fire. Because they had faced up to the problem and considered what they might be capable of they were able to act effectively even though barely trained up



on techniques. As Glenn regularly chides his audience—"Never say you can do a job that you have not trained and trained for again. If you do you will pay the price of failure." That statement fits a great deal of police aviation scenarios.

There is little doubt that the inferno in London was beyond a helicopter rescue effort but there were no plans in place anyway so the point is lost. You might wonder though whether this hour of distant images and sound advice at the conference came back to haunt anyone in the room.

For decades now the UK has been playing with the option of having a fire department helicopter and NPAS appear to be bidding to operate it on behalf of the fire people as no more than a means of transport. The recent 'once in a lifetime' fire might yet precipitate a need to offer rescue in the mix and that is going to cost a great deal of money and require a corporate review of the Glenn Daley 'High Rise Rescue' presentation. Of course getting to see it again is going to cost a great deal of money now!

The rest of Tuesday was taken up with presentations that included TFO Training in the Netherlands, Flight Safety and just a light touch on technology. The Belgian Police gave their take on operating unmanned aircraft and came up with the uncomfortable conclusion that for them operating unmanned craft was barely any cheaper than running their MD900 helicopters.

That Belgian conclusion has been raised before so it should not be too much of a surprise. Setting up a new unmanned operation is not without costs and the most expensive cost is as ever the 'crew' and they cost much the same whether they are police officer pilots or police officer drone pilots.

The final day of this years PAvCon was focussed on unmanned aircraft and the speakers brought in for this masterclass were people who knew the problems of old.

Fitting in with their finally requested format the session was led by NPAS although they have little history in the arena. The NPAS plan outlined by their lead on the subject, Russ Woolford, was to see how the 44 police services in the UK might avoid the fragmented delivery that led to the creation of NPAS in the manned regime. They see themselves as mentors to the others and to that end they have applied for funding to investigate a





'rationale to move into this space' to help the others. Whether they ever learned enough to that end from the overseas experts remains a mystery.

However, with very little experience in the use of drones it's probably fair to say that the NPAS speaker was eclipsed by speakers from Canada, from Belgium and by Paul Trimble of the CAP—all of these having clear hands on experience of such craft. Much to learn. Unfortunately he did not stay around for the advice and opinions of those others well qualified to speak on the subject he was endeavouring to learn about.



The Belgians brought their unmanned craft to the event

The next speaker was Dave Domoney from the Royal Canadian Mounted Police. He was given a significant promotional lead in to underline that he is currently the best informed operator in the world of unmanned craft in the use of police. When he attended his first PAvCon two years ago he was the operator of 86 of the craft. They were spread across Canada in the hands of widely dispersed trained officers.

In such a vast country access to conventional manned air support is nearly impossible so it follows the population in that 90% of Canadians live close to the US border. The unmanned craft allow the option of an eye in sky in the more remote areas.

Jaws dropped at the numbers involved in 2015 and for many the latest figures in the RCMP storyline had a similar effect. Last month Sgt Dave Domoney was the effective head of an operation with 206 unmanned aircraft. Most are quadcopters but the plan is to move towards using fixed wing and to narrow down the variety of craft used. Even for an operator with this level of expertise in the subject it is still an area of learning and a massive effort is being pointed towards not just operating these craft but stopping them in their tracks. Every-

one in government knows that ISIS are using similar craft to deliver explosives and worse in Syria. Under Dave the RCMP has deliberately wrecked more UAVs than the police in Europe have ever owned in their efforts to find the best way to halt rogue craft. Guns, nets, tasers and birds have been used by police across the world but nothing on this scale.

A few years ago the Merseyside Police operated a quad rotor costing £3,000. They dunked it forever in the River Mersey and lost the plot and abandoned the whole idea of ever operating a UAV again.

The RCMP suffered a similar problem during an operation. They were flying a \$160,000 machine when it too dived beneath the waters never to emerge again. The commander of that operation simply asked Dave how big a hit his budget was going to take and got on with the job. The machine was replaced without a murmur.

Both these instances clearly illustrate that the UK police are just playing at aviation. They do not really mean it. Aviation in all its forms is an expensive arena and heaven help those that forget that.







The rest of the hour-long and gripping Dave Domoney presentation entered areas of simply 'Classified' information and that included some disquieting facts that were simply lost on anyone who was missing from the room.

Dave retired from the RCMP a few days before the PAvCon event so we never did actually get to see him in the promised ceremonial red tunic he had promised us back in 2015. His time at the forefront of Drone technology has not passed though. He is being retained by the RCMP as the subject expert to cover the G7 in 2018. The leaders of the Group of 7 countries will convene at a remote Canadian resort on the St. Lawrence River approximately two hours northeast of Quebec City. The Fairmont Le Manoir Richelieu, a historic 250-room, five-star luxury resort in La Malbaie, Quebec, has been chosen as the venue the sixth time Canada has hosted the meeting but probably the first in which the services of a small drone will play such a large part.

With that thought I guess we can assume there will be a further visit to PAvCon by this particular speaker. Just make sure you are in the room when he starts and finishes, you will leave much the wiser.

It was another Dave that took the rostrum after lunch. Dave Morton was another leading edge import, a person that had been a major influence in the creation of the rules and regulations for unmanned craft for the US FAA. His talk highlighted many of the problems that the UK CAA are known to face at the moment. Another 'do not miss' interlude.

Of current UK mainland operations there was nothing [they were invited] but Paul Trimble led us through CAP operations in cooperation with the PSNI using his Search Systems unmanned craft. The numbers remain low and type of operation quite bland in contrast to the north American storylines but they were an indicator. The videos showed how a net firing craft could intercept and knock down intruders but the effect was clumsy and images broadcast in the media just a few days later rang some alarm bells. The news item was on anew sport called Drone Racing. Here was surely an example of fast nimble craft that might give clunky nets, hawks and a whole tranche of other countermeasures a run for their money.

After this concentrated short course in leading edge UAV presentations I think we were all at least a little wiser than when we arrived and that perhaps is what drew us to this Yorkshire hotel in the first place.

Learning. Sadly, for some listening, it seems, is not a consideration in the acquisition of information!

Hopefully, the experience and the lesson shared by these 'subject experts' will by taken on board by the police and the fire & rescue services in the UK. Another UK speaker was Peter Roberts of 'The Centre for Search Research' who provided an insight into the recent (May 2017) 'Exercise Northumberland - O'Donnell Revisited' ahead of the final report. The CAP provided 4 aircraft, including a drone, for this important piece of research into the use of manned and unmanned aircraft, together with ground search parties, looking for missing persons.



As ever the evening was rounded off by Joseba Mendizabal, the indominable 'Rescue Pilot from Spain' who sent us off in good cheer with his tales of air operations across the land that do not understand their craft as well as they should do. As usual he was the only one to transfix the audience for 25 minutes over his allotted time! Everything started on time and stayed on time until the last moment.



## The Exhibition

This year the accommodation for the exhibitors was cosy. Far too cosy for most of us and especially as we originally had ideas of spreading out in a large hangar somewhere aeronautical! The exhibitors took it in good stead and squeezed in together as never before. There simply was insufficient room inside the hotel and both the CAP and ECS resorted to having outside exhibits close by. Secret conversations with potential customers on the booth space were definitely off the list of options but there were no complaints. Indeed complaints about PAvCon, its occasional trials and tribulations, simply did not happen.

Although numbers were down on last year this was mainly a space issue and for some a presence was little more than a coffee table in the right room with the right people wandering around. This was no venue for someone who does not at least understand the airborne law enforcement market place. Anyone who might have wanted some telling images of real aircraft was going to be mightily disappointed as there was just one fly-in aircraft, an EC135T2 update by Babcock. Even that was likely to a call away at any time to deal with an emergency. The example seen both days was G-POLB that had been converted and updated from the former G-SURY. No-one was saying whether the conversation had expelled the reputation that SURY had of being a bit of a 'rogue' aircraft. Everyone gets them, the runt of the litter, but all prefer not to be the operator of one.

Although Airborne Technologies were present their aircraft was not except in the form of images. In preparation for the big reveal at PAvCon various artworks were prepared by us and used on the advertising—but all to no avail. The last intimation was that it was due in the UK in a fast receding month of June and no-one has yet confirmed that.



Plenty new to see and soak up in the tight packed exhibit area. Ian Straw of the Vulcan to the sky group takes his own out of body experience [right] while outside too the new Dutch TFO trainees were able to take in a view of the Babcock interior upgrade fitted to the NPAS EC135T2. [all PAR]







We do know that the near complete hangar that was supposed to be the original draw for PAvCon at Doncaster is nearly finished but that still does not dispel my thoughts that a far better event could have taken place nearer to my home at say North Weald. There at least there would have been a viable static for both fixed and rotary aircraft without the problems that emerged from trying to hold an event on an International Airport in Britain. No problems were faced in Belgium simply because we were on the military side of Brussels International. A lesson learned the hard way! North Weald has Spitfires and Mustangs too! Shades of old Helitech at Duxford, chances missed!



A handful of exhibitors came from the unmanned sector and one of these was locally based company COPTRZ who were spreading the word about both their product offerings and, via Facebook, PAvCon.

According to COPTRZ the surveying and emergency services sectors are set to be revolutionized by drone technology. Based on information gathered from a database of over 45,000 commercial drone users and enthusiasts, the majority of whom are expecting significant business growth, the report finds that photographers are the earliest adopters of drone technology but 38% of people believed that the Surveying sector stands to benefit the most from using UAVs in a commercial capacity. Emergency Services were also highlighted as a sector which stands to be revolutionised by the application of drones, where the technology can be used for search and rescue missions and crime scene investigations.

The report comes at a time when the UK Government is compiling the results of its own consultation of individuals and businesses to ensure that drone technology can be safely leveraged for the benefit of public and commercial activities, which support UK innovation targets.



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COPTRZ was formed last year and provides specialist services to the commercial UAV market to help businesses to access the benefits of drone technology.

Enterprise Control Systems brought a dummy version of their anti-UAV system to the event. Steeped in mystery the operational versions of this ergonomic collection of tubes and boxes is technically waiting for a customer but all to regularly the real ones are whisked off to some secret location to protect events and public figures from the threat we know is there but cannot quite quantify. Perhaps there is a real danger that we do not want to quantify it?















PAvCon is as ever thankful to our loyal speakers from around the world and to our sponsors including Bell Helicopter who teamed up with the hotel to produce some excellent English fare on the Tuesday. I remain unsure whether the menu choice was everyone's favourite but everyone tried their best! The daily tea, coffee, soft drinks and sandwiches sponsored by Airborne Technologies was a favourite with everyone and the hotel staff were constantly on the ball with fresh supplies.

PAvCon remains very heavily committed to air support in European and given the current and recent spate of terror attacks the strength of desire shown by the Europeans for their own version of ALEA will be further pursued. Meanwhile the ALEA continue to support PAvCon as they have for some considerable time. They too agree that PAvCon should remain under a European umbrella as they offer information, advice and support — gladly given. PAvCon remains an active part in the ALEA world and are slotted to have a stand at the annual convention in Reno, Nevada at the end of July.

