

Police Aviation News

©Police Aviation Research

Special Issue

November 2019

A LOT OF SPILL

An eye on some recent events



Bristow operated Leonardo AW189 of the UK Coast Guard departs from Farnborough © Ian Turner

Traditionally Police Aviation News produces certain Special Editions throughout the year and for most of its existence PAN has undertaken to include a special report on Helitech and a few paragraphs in the standard edition on the Commercial UAV Show in London.

Helitech has had a history of good shows and bad but generally there has been enough visual and technical content to fill in the gaps between the adverts with images if not copious press releases and words. More importantly it has been worthwhile going to the event even when it has been run in Amsterdam.

Unfortunately this year we have not only lost the name of Helitech but we appear to have lost the content also. Apparently taking the opportunity of the rebranding of the event to plan their escape route the main manufacturers turned their back on the event. Others, fearing the negative effect it would have, followed. The result was very damaging—catastrophic even.

Last year marked the split with the European [EHA] - a sort of mini-Brexit without the will of the people being involved—and the birth of 'Vertical Flight' an event clearly intended to enhance the range of interest by incorporating unmanned craft alongside helicopters. The audience was promised lots of helicopters. Fifty was a number bandied about.

Reality failed to meet the clean sheet of paper event promise. No malice was intended and no doubt someone believed in the hype but it simply was not the event marketed.

After a falling out with their "European colleagues" the successful, enduring, product that was Helitech cannot refer to the show when held in the UK so we now have a new entity called 'Vertical Lift formerly Helitech' [thereby suggesting they could use the name after a fashion] and it is at a new location. Time and again exhibitors and attendees hissed the words Duxford, time and again they were told that ExCel was best. The move when it finally came was not north to Duxford but west to the massive airfield at Farnborough. An important detail was that they left behind the co-location of the successful event MRO Europe. That event organised by a different group had on two occasions worked very well in increasing footfall for both events and numerically Helitech had been the main beneficiary. This year MRO was in ExCel London in mid-October, 'Vertical Flight' flew away into the chill winds of November.

Bryn Elliott

COVER: The drone market it still obsessed with the delivery of goods by air and the Commercial UAV Show illustrated several variations on the theme. This was a DLR Germany vision writ large but even it was dwarfed by an oversize quadcopter that looked like it wanted to deliver a fridge. All that might be deduced from that is that we had better stay inside our houses in the future as statistics will prove that quite a few of the millions of deliveries the industry envisage are bound to go wrong at some time!

Perhaps that is supposed to represent spilled dried milk powder?

Police Aviation News is published monthly by **POLICE AVIATION RESEARCH**,
7 Windmill Close, Honey Lane, Waltham Abbey, Essex EN9 3BQ UK.
Contacts: **Cell:** +44 7778 296650 **Skype:** BrynElliott or +44 20 8144 1914
E-mail: editor@policeaviationnews.com and policeaviation@hotmail.com



25 years *Police Aviation Research Airborne Public Safety Association Member since 1994—Corporate Member since 2014*

SPONSORS

Airborne Technologies

Avalex

BMS

CarteNav

Enterprise Control Systems

FLIR Systems

L3 Harris/Wescam

Trakka Searchlights

Airborne Public Safety Association

www.airbornetechnologies.at

www.avalex.com

www.cartenav.com

www.enterprisecontrol.co.uk

www.flir.com

www.wescam.com

www.trakkasystems.com

www.publicsafetyaviation.org#

VERTICAL FLIGHT EXPO & CONFERENCE

5-7 November 2019 Farnborough, Hampshire

Early in November, Vertical Flight Expo & Conference brought together over 75 manufacturers, suppliers and operators to exhibit the latest products and services on the show floor. Marketing for the event naturally relied heavily upon video footage and stills from prior events and inevitably that suggested all was well and that the show had not decayed in any way.

Unfortunately so much of the marketing footage employed was of yesteryear and suggested that the MROs were present and many aircraft were too. What had happened was that the major manufacturers in declining to attend made those numerous images of airframes at prior events very misleading.

With them several major suppliers also decided not to attend. In emergency services terms this meant that such as Avalex, FLIR Systems, Hensoldt and Trakka were absent from the exhibitors although representatives from some of them attended to walk the displays and comfort themselves that they had not got their stay-away decision wrong.

Helitech was born in Aberdeen a lifetime ago [1986] and travelled via Redhill, Duxford and ExCel to 2019 when it appeared for the first time in an isolated building in a vast airfield called Farnborough – famous for hosting a giant bi-annual air show. The new venue promised to allow heli-aviators to again visit the event by flying in after the three years in London had halted the flying. It also sought to offer an opportunity for demonstration flights.



Nostalgia drives much of the event we still prefer to call Helitech even though some of those early events were also 'challenged' by the elements. "Wellytech" is now part of the English language. © PAR



Circumstances resulted in there being no aircraft to demonstrate. Much worse, many exhibitors decided not to bring examples their equipment so the information level of visitor attraction on some booths was way lower than it might normally be.

In a way the struggling organisers, Reed Exhibitions, were let down by the howling social media crowd that swore they would never again visit a 'Helitech' unless they, the organisers, bowed to pressure and moved to an airfield. In part it was the wrong airfield. The sleek business jets that are the bread and butter users of Farnborough these days do not in any way pass muster for getting the pulse racing—an 80 years old Spitfire does.

The insurance requirements for potential fly in aircraft were more than some wished to accede to. The problems simply escalated and the number of aerial visitors slumped to a handful as a result.

Getting to the bi-annual Farnborough Air Show is always considered a nightmare made worse by large crowds and numerous vehicles. In theory the expected smaller numbers attending Vertical Flight lulled many into a sense of ease that was misplaced. Attending by road was particularly easy if you lived or stayed in the area, a horrific experience if you did not. I say that as someone who recently drove to both Bonn, Germany and Omaha NB and yet dreaded that journey to Farnborough. Challenging travel conditions on the roads are not the fault of the organisers but they cloud the perception of the event.

After arriving in town, even assuming you followed the correct postal code, the event signage was obscure right up to the door. The event was some sort of secret gathering and only the promotional signs of the hosting building, the Farnborough International Exhibition and Conference Centre, appear to have been allowed to see the light of day right up to the door. Either that or Reed could not afford the signs.

It was a three-day event and I was there on Day 2 and it was quiet, very quiet. Day 1, normally the busiest day, was reported as even quieter but it had been blighted by bad weather. Footfall in the hall was low but it was clear that but for a few well known souls the people there were profes-



There were few visitor aircraft and the internal static was confined to helicopters from the Robinson range © Ian Turner



BMS

VIDEO | DATA SOLUTIONS

REAL-TIME MISSION CONTROL

ULTRA LONG RANGE DATA LINKS

bms-inc.com

2020 HAI HELI-EXPO
BY HELICOPTER ASSOCIATION INTERNATIONAL

HELICOPTERS • EDUCATION • TECHNOLOGY • NETWORKING • EXHIBITS

START STRONG

Jan. 27-30 • Anaheim, CA • Exhibits Open Jan. 28-30

SEE MORE. DELIVER MORE.

AIMS MISSION SYSTEM SOFTWARE

- ITAR-FREE
- MULTI-SENSOR INTEGRATION
- DEPLOYED WORLDWIDE

CarteNav SOLUTIONS



CRITICAL VISION TECHNOLOGY

To see, to save and protect

COMPLETE SOLUTIONS, SEAMLESS INTEGRATION



TrakkaCam® TC-300

High performance cost-effective surveillance system, 4-axis gystabilised (6-axis passive stabilisation), 6-sensor channel payload, Lightweight/compact single LRU design, ITAR-free



TrakkaMaps® TM-100

Mapping & Recording Video Management System, Multi map views with augmented reality, Integration with open and proprietary user databases, Intuitive control and innovative post-processing



TrakkaBeam® TLX

High performance searchlight with superior beam quality, Lower power draw, Internal multispectral filters, optional new dual EO/IR sensors for full situational awareness

trakkasystems.com



ROTOR TECH 2020

16 - 18 JUNE

ROYAL INTERNATIONAL CONVENTION CENTRE
BRISBANE SHOWGROUNDS
QUEENSLAND, AUSTRALIA

www.rotortech.com.au



Our new High Dynamic Range capability allows objects to be shown with new levels of clarity, resolving detail on subjects in low light or back-light situations across all lighting conditions.

E: sales@vislink.com | W: www.vislink.com



sionals doing business. Often an apparently busy event can be made up of too many people simply sightseeing.

Quiet shows can do business even though in this instance quite clearly not all the exhibitors were happy with their lot after enduring Day 1.

I was busy for quite a few hours but would normally do at least two full days there when it was at ExCel/Duxford/Redhill and a fuller day when the event was in Amsterdam. After the negative experiences of travel via the M25 and M3 Motorways there was no possibility I was returning for Day 3. Clearly the complete absence of other journalists I am aware were present on Day 1 when I arrived suggested others had formed a similar opinion the day before.

Once in the hall it was clear the event was designed to be light and airy to make best use of the available space but it was also clear that the designers simply could not fully use the hall—there was plenty of room left for additional airframes if only they could have been sourced. A space user ploy was to provide seating areas. Most busy shows find the average visitor with aching feet looking for somewhere to sit for a while. Vertical Flight offered numerous ‘lounges’ and one or two unmanned or abandoned stands. I have rarely come across the range of seating options in terms of the numbers there, The Operators Lounge, The Vertical Connect Lounge, The Media Centre [all mine!] and the Exhibitors Lounge along with two open conference theatres.

There were bright spots, mainly the people I have known over many years, but the overall exhibitor situation pretty much damned everything else.

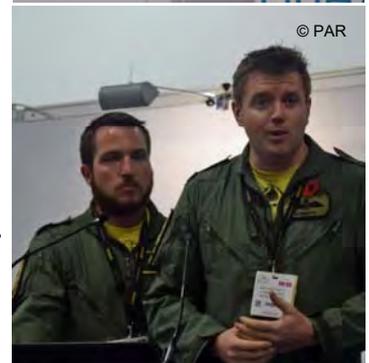
The scheduled conference presentations on Day 2 were attractive to PAN thanks to a planned 90 minutes long “Blue Light” session inserted into the varied conference programme. The Chairman of the session was Ollie Dismore, until recently the Director of Operations, National Police Air Services. It was advertised as a session with three scheduled speakers but unfortunately none of the web advertised people turned up although one in the printed programme, Canadian, Fred Jones, was there with an item on SAR in Canada

Fortunately there was a really brilliant repair job at hand. In place of the advertised Bobby Ouyang the co-founder and CEO of SkyeBrowse, Jim Winkel the President of ASU NVG and Harald Brink of the Dutch National Police Air Support Unit, came two RAF crewmen who were a part of the RAF response to a recent UK dam breach.

I can imagine these two unfortunate individuals sitting having a quiet coffee at the show they were visiting and idly mentioning that they had a ready to go presentation in their pocket, only to be snatched from their refreshment and into action on the podium.

Whatever the truth of their origins, they did their job well. The RAF presentation was a particular crowd pleaser and the relatively spartan numbers in the seating were soon joined by a small throng of interested walkers brought to a standstill to take in the previously unseen footage of Chinook’s precisely deploying bags of gravel at Whaley Bridge. We had seen it all before from the cameras of the BBC but this footage was from within. Gripping stuff and congratulations to the team, however it came about.

As for those mainly present to marvel at airframes rather than airframe forgings, TT Straps and instruments, they were certainly disappointed - but as we know at a business level these events



Parapex Media

Marketing, Social Media Management, Website Design, Press and PR
dedicated to the Aviation Industry

www.ParapexMedia.com

are not about how many airframes there are on the ground [one R22, one R66 and two R44 inside plus 2 quadcopter drones inside and one coastguard aircraft outside]. This was no mix of manned and unmanned.

From my point of view, the sparse options on view did severely restrict the photo opportunities. Interesting images might lead to an interesting write up that might entice more exhibitors to attend in the future. Little chance of that.

After all the furore put up by people who found themselves not being able to attend Helitech because it was off airfield [ExCel] the organisers take it out into aviation territory and no-one flies in! The reasons for this were said to relate to a complex administration regime and unusually steep insurance requirements. The fact remains that those that flew in were very few.

There were mixed opinions among exhibitors about the worth of the event- many ended up talking amongst themselves - but that does not necessarily signify the death knell of the event.

The UK arm of the former Helitech was supposed to operate every two years, and then only the odd years. We have heard nothing from the European arm of Helitech for next year but Reed are bucking normality in stating that they are having an event in 2020. Rumour suggests that the event will take place back in the place of its birth ... "Aberdeen in September" ... The specifics of that rumour was not researched simply because if enough of the exhibitors this year were unhappy there will be no Vertical Flight anywhere in 2020. I detected no exhibitor enthusiasm for an event in 2020, let alone one in eastern Scotland.

Get Comprehensive Mission Solutions. Get Avalex.

- RUGGED TABLETS
- DIGITAL VIDEO RECORDING
- COCKPIT MANAGEMENT
- VIDEO & DATA ROUTING
- MISSION PROCESSING
- MISSION MANAGEMENT
- WEAPONS MANAGEMENT

SINCE 1992 Avalex Technologies has provided the world's military, commercial, law enforcement and search and rescue operators with rugged avionics and electronics that help improve communication, facilitate exploration and save lives. Find out how our full range of proven products, along with our integration and customization options, can meet your unique mission needs. Contact us today.

AVALEX
TECHNOLOGIES
INNOVATION ON DISPLAY.

www.avalex.com
UK +44 (0) 7502 220679
dfindley@avalex.com

The 2019 event exhibitors will only have an opinion on any future events after the completion of the three days. There is no such thing as a bad show unless shows no return in the business negotiated sense. It may be difficult to get to and much too expensive but it is the results that matter—the feel good factor.

Ultimately, money is the decider. The minimum cost of around £5,000 for the basic booth space is only the start. Add stand equipping, travel, hotels, expenses and salary and the investment becomes significant.

Another rumour to chew over is that Reed the organisers allegedly prefer not to use temporary buildings and that is why they rejected continuation at Duxford and will not take up with several other venues. Odd that because this year Vertical Flight was held in one of the few 'proper' buildings at Farnborough and right alongside the bases for dozens of the temporary buildings that the Air Show is famous for using so successfully.

It is a great pity that the former Helitech has come to this—and of course it may survive this further bump in the road—but it faces exhibitor customers who have repeatedly stated that there are too many events in the annual calendar. This year they were true to their mantra and many simply pulled the plug.

Like many Vertical Lift attendees I was bombarded by e-mail by the organisers [Reed] with how successful each day of the event had been and how successful it had been overall. Reed were then asking me for feedback by way of my opinion. I know my immediate feedback and that of others of my acquaintance reflected views expressed in this report but ultimately there may well be others who were more than satisfied with their experience.



YOUR MISSION DEMANDS
EXCEPTIONAL VISION



The Star SAFIRE® 380-HDC delivers unparalleled stabilized HD multi-spectral imaging in a compact, low-profile package and provides 2x-4x greater magnification than other lightweight systems in its class.

LEARN MORE AT FLIR.COM/SURVEILLANCE

COMMERCIAL UAV SHOW

The jury is out on the UK primary helicopter event, meanwhile over in the east of London in a venue known as ExCel—the same inner city venue abandoned by Vertical Flight formerly Helitech—another event was attracting a slightly different class of show visitor.

Two turkeys in one week is not what the industry needs. Unfortunately that is what came along. The first day of the 12-13 November Commercial UAV Show at ExCel in London went well enough but day two was on the quiet side. With the confined show space it looked busy enough but compared with even last year it was woefully short of substance. This was ‘the largest drone show in Europe’ but it appears to have suffered from shrinkage.

Again not all the space in the hall was used and there was plenty for storage that belied that the event has not grown significantly over the last few years that I have been attending. UAV takes up a part of just one of the halls in ExCel, sitting alongside other events extolling the varied delights of lighting and medical surgery.

Many of the well known names seem simply not to return to run a booth year on year, a similar effect happens to PAvCon Europe it must be said but that is not strictly a commercial event.

Over the past two years Elistair, the tethered drone people have been evident but it seems that those around them have not been so resolved to stay.



CRIMINALS BEWARE. YOU HAVE MET YOUR MATCH.

Airborne law enforcement missions have evolved.
So has our technology.

Threats are evolving. Missions are longer, more complex and need to be executed faster. More is expected of you and your crew each and every time you fly. L3Harris' technology is evolving to meet these threats. Delivering robust performance and ease-of-use, these newly launched mission-critical technologies within WESCAM MX™ airborne systems enables operators to see more, operate easier and analyze with confidence. Evolving threats around the world have met their match.



L3HARRIS.COM

Part of the problem is that the production of drones remains a young industry with numerous manufacturers and fliers of unmanned craft. The numbers failing to remain viable year on year is large. Poor financing takes its toll to whittle down the large numbers of Drone MROs each year.

That is not to say there have not been exhibitors that have been there year on year—staff from the Civil Aviation Authority and a number of universities have been consistent attendees but they have not been industry.

The larger company's attending in the past have included Textron/Bell but they did not return this year or last.

This year the big names from Europe were Babcock and Indra with added input from Centum Research. The trio shared one of the larger booth spaces.

A multi-agency group signed an agreement with the Regional Government of Galicia (*Xunta de Galicia*) to launch the Aeronautics Business Factory, to attract entrepreneurs from around the world with connections in the unmanned vehicle sector

Over three years they financed 19 projects with International sales potential in a Civil UAVs Initiative to the value of 4.7M Euros. Indra contributed as technological partner along with its work on an optionally manned (OPV) light twin aircraft, the Tecnam based Targus OPV.



© Indra

Centum Research are the developers of the Lifeseeker, an airborne system capable of locating mobile phones accurately even in areas without network coverage and under adverse weather conditions.

The system takes advantage of the enormous social impact that mobile communication technologies have had in recent years in order to turn a mobile phone into an emergency beacon capable of leading rescue teams to its exact location.

Lifeseeker also acts as a relay and can provide a communication channel between the missing person and the rescue team. The system enables the detection of hidden or buried people, for instance under snow, foliage or rubble and the carrier vehicle can be a drone.

The major player at the event was Chinese company AVIC, they brought several drones and a workstation that appeared out of place in a drone environment. It resembled the interior of a full size helicopter in form. Any expectation that the most popular drone types from DJI would be directly represent themselves was not met but they were represented by others in the hall.

A regular attendee at this event has been proposals for using drones to drop aid contained in cardboard boxes. The design of the boxes has clearly been taxing the proponents of this system. Its last iteration had boxes slung under cheap parachutes but this year's version used free-falling cardboard containers shaped like bombs.

Another element of this programme put forward by WINGS FOR AID is the specialist conversion of a new build light aircraft with plastic boxes designed to drop several of these 'bombs' to those in need below. I can see several issues with the cost of new anything in the third world and having to source specialist carrier assemblies when faced with the urgency of a major famine or the like.

It may be pretty and thought provoking in the right coffee houses of London but probably far more efficient to stick 200 cardboard boxes in the back of a clapped out and barely airworthy manned Dakota and simply push them out of the back door.

Apparently Women Who Drone is an online platform and community that inspires, educates and empowers women and girls with drone technology. They provide drone education including creative one on one lessons, workshops, online courses, prospective career opportunities and a community of women and mentors who fly drones around the world.

Less than 6% of Certified Drone Pilots in the U.S. are women. Today, drone technology is being used as a tool not only in the creative industry, but also in the commercial, agricultural and architectural spaces. They welcome and appreciate the support from all genders in accomplishing their mission.

#



© PAR

© Wings for Aid

© PAR

The pay conference plan appears to have been abandoned this year, the hall featured multiple open theatres of various sizes. These modules were very popular and well attended and clearly there is a demand for them as long as the supporting event can remain viable for those in industry that pay the price for this free to enter event.

The exhibition space offered a large number of stands but it was clear that there were a number of 'no shows' or early departures by day two and the number of universities making up the others did raise questions about the ultimate viability of those assumed to have taken pay stands. Viability for a future in expensive ExCel must be a question.



PAVCon
POLICE AVIATION CONFERENCE EUROPE

D-HV80

BUNDESPOLIZEI

PAVCon 2020

Berlin, Germany, June 8-10

The Networking continues

www.pavconeurope.eu



To end on a far more up-tempo note I need to cross the Atlantic and head for the Pacific coast and report briefly on an event in the United States.

On November 9, 2019 there was another edition of the highly popular American Heroes Air Show, held near Los Angeles, California. These events are little more than free to enter public relations exercises for local emergency services personnel, just a step up from the local fire station open day with helicopters thrown into the mix. They are held across the USA and operated on a volunteer basis by local cops and fire fighters.

November's Saturday daytime event was run between 9:00am – 4:00pm at Hansen Dam Recreation Area, Lakeview Terrace, California. Helicopters from law enforcement, fire, EMS/ENG, military and homeland security organisations demonstrate the unique capabilities of rotary-wing aviation backed up by a mix of Career & Recruiting booths for law enforcement and criminal justice, careers in public safety, government service, homeland security and defence. Local Search & Rescue teams turned up with emergency vehicles, equipment displays and demonstrations.



One of the stars of the show was a restored Los Angeles City Fire Department Bell 47 that was dragged to the event site on a trailer to join numerous present day helicopters and crews in putting on this well received event.

This year a group of young people ages 6 to 26 and from 14 different countries took the Oath of Allegiance to the United States and received certificates at a ceremony held as part of the main event. The countries they hailed from included Armenia, Australia, Belize, Cambodia, Cyprus

The same weekend also marked the annual Remembrance and Veterans commemoration. info@heroes-airshow.com