

# Police Aviation News

©Police Aviation Research

Issue 269

September 2018



# EDITORIAL

*From time to time those in the industry remark on the capabilities of the US Law Enforcement agencies. They are amazed at how some enthusiastic units can serve small town America with 2-3 aircraft even if those aircraft are ancient military throw-away craft acquired for a nominal Dollar and the pilots and TFOs are volunteers.*

*Often though the capabilities and safety in these units are at best marginal. Many of these operations band together under APSA [the former ALEA] to greatly improve their operational and safety knowledge and, frankly their chances of survival. That is why APSA is so successful over in the USA and less so in the rest of the world where regulation of the operations and crew is stricter.*

*Currently APSA boasts a member ship of around 3,500 and figures they give for the size of the industry are based on that number. There is though a significant unrecorded element to ALE that are not members of anything and only come to light in the wake of accidents and incidents.*

*We have yet to see whether the certification authorities get a chance to adjudicate on last month's accident in Little Rock that was blamed on "straight line winds" whatever they are. Local media were initially quoting the police line that claimed the Bell did not get airborne in flipping onto its side. As is often the case in this surveillance age, unfortunately the police found their own CCTV footage showed very different tale of how the aircraft flipped onto its side!*

*And why would Little Rock PD not want their injury mishap to be investigated by the FAA?*

*It is with such difficult scenarios in the background that APSA seeks to educate for the greater good.*

*Bryn Elliott*

## LAW ENFORCEMENT AUSTRALIA

QUEENSLAND: In the vast states of Australia police personnel are a rarity, police dogs [K9] even rarer and police helicopters rarer still. While we talk of the Queensland Police helicopter [two BO105s] in fact they are restricted to tiny areas of the busier parts of the coastal plain and are unknown elsewhere.

Other areas fall back on cooperation with other air resources and cooperate with them. It is with that in mind that recently the police promoted the training between their dog section and a local helicopter in Cairns. Although the squad is based in Cairns, they police the whole state and need to be ready for all environments and to consider all means of rapid transportation across the state.

The police dogs Axel, Thor, Bally and Ziggy and their human handlers teamed up with the crew of Queensland Government Fire and Rescue Services QGAir Rescue 510, an AW139 to undertake transport and drop training by air. It is a relatively rare experience but one which new dogs need to undertake as soon as possible. Dogs undergo similar training at the academy when young, but the flying experience is an important refresher for the dogs as they mature.

The Dog Squad handlers undertook ground training prior to take-off along with some practise runs where the dogs were har-



©QPS

**Cover image:** In late July Alan Norris travelled 'behind lines' to the Helicopter Championships in Minsk and sent this image of a Belarus Ministry of Emergency Services Mil Mi-8 at the event. Thirty seven pilots from different countries and regions took part in the 16th World Helicopter Championships which was held at the Lipki airfield of the Minsk aeroclub. [Norpress]

PAN—Police Aviation News is published monthly by  
 POLICE AVIATION RESEARCH, 7 Windmill Close, Honey Lane, Waltham Abbey, Essex EN9 3BQ UK.  
 Contacts: **Main:** +44 1992 714162 **Cell:** +44 7778 296650 **Skype:** BrynElliott or +44 20 8144 1914  
**E-mail:** [editor@policeaviationnews.com](mailto:editor@policeaviationnews.com) and [admin@pavcon.org](mailto:admin@pavcon.org) and [policeaviation@hotmail.com](mailto:policeaviation@hotmail.com)

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

#### SPONSORS

Airborne Technologies  
 Avalex  
 Babcock International  
 Broadcast Microwave  
 CarteNav  
 Enterprise Control Systems  
 FLIR Systems  
 L3 Wescam  
 Powervamp  
 Trakka Searchlights

Airborne Public Safety Association

[www.airbornetechnologies.at](http://www.airbornetechnologies.at)  
[www.avalex.com](http://www.avalex.com)  
[www.babcockinternational.com](http://www.babcockinternational.com)  
[www.bms-inc.com](http://www.bms-inc.com)  
[www.cartenav.com](http://www.cartenav.com)  
[www.enterprisecontrol.co.uk](http://www.enterprisecontrol.co.uk)  
[www.flir.com](http://www.flir.com)  
[www.wescam.com](http://www.wescam.com)  
[www.powervamp.com](http://www.powervamp.com)  
[www.trakkacorp.com](http://www.trakkacorp.com)

[www.publicsafetyaviation.org#](http://www.publicsafetyaviation.org#)



nessed to their handlers and lowered out onto the ground.

Although the downdraft from the helicopter rotors initially causes slight hesitation in some dogs, they were reassured by their handlers. [QPS]

**VICTORIA:** The future form of the Victoria Police Air Wing is due to be announced and changed are expected across the board. The latest rumours suggest that the future aircraft, displacing the AS365N2 Dauphin's is to be the Leonardo AW139 provided by Star Flight with the fixed wing element being operated by Skytraders operating Beech King Air 200s.

## CROATIA

**FRONTEX:** A surveillance aircraft is operating under a Frontex contract to provide up 100 hours of surveillance to monitor the EU's external borders in the Western Balkans area as part of Frontex Multipurpose Aerial Surveillance (MAS). This is in response to a request made by Croatian authorities to monitor the migration flows and help Croatia, as well as the neighbouring Western Balkan countries, address the challenges on the ground.

MAS uses aircraft that stream video and other data directly to the Frontex Situation Centre (FSC) at the agency's headquarters in Warsaw where experts analyse the data to provide information to national authorities. It is an example of a new service that Frontex can offer with its autonomous technical equipment. Experts from Croatian authorities are present on board of the airplane, ensuring compliance with national procedures.

Overall, the number of illegal border-crossings on the Western Balkan route in the first half of 2018 amounted to 2100, which is about 60% lower than last year. [Frontex]

## DENMARK

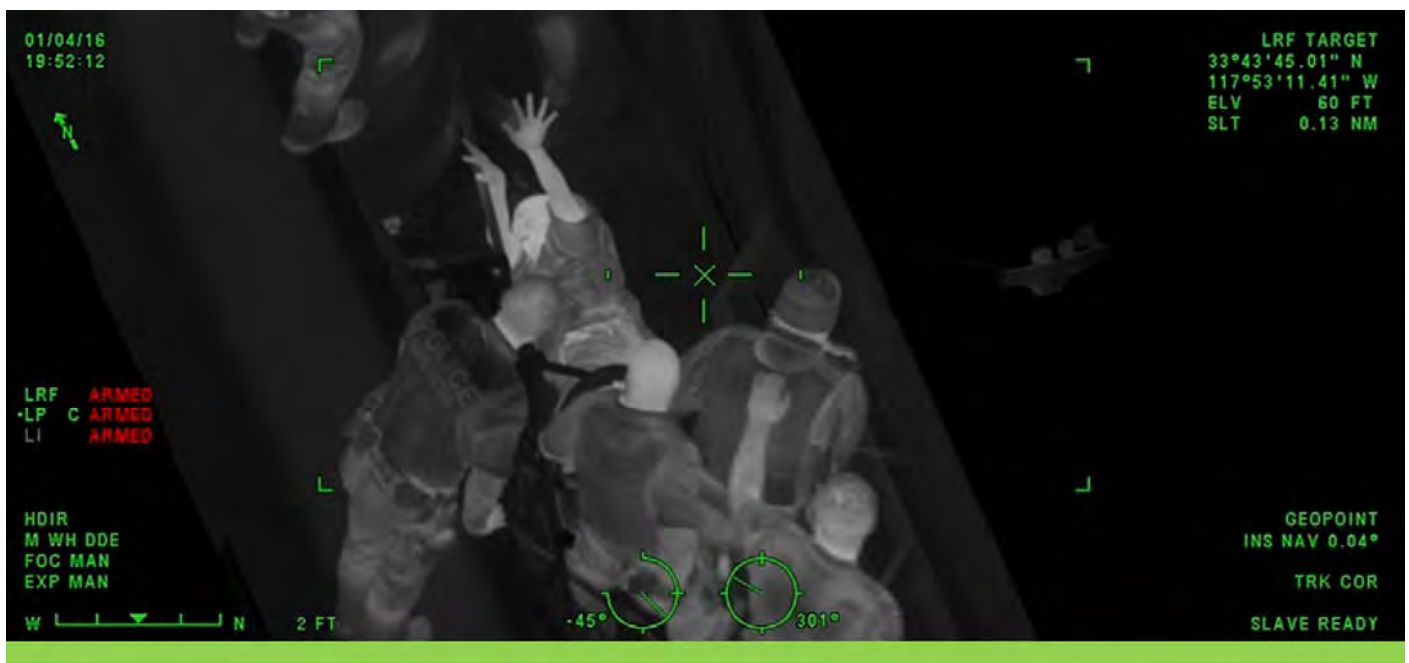
**POLICE:** For decades now, the State Police in Denmark have relied upon the military for their air support. Air operations trained police officers have provided the crew for two military light helicopters – initially the type employed was the Hughes 500 but more recently the AS350 Ecureuil has undertaken the task.

PAN understands that things are about to change in a big way with the ordering of three new Leonardo AW169s. It is unlikely that the announcement will be made officially until Helitech in Amsterdam next month so whether this is a new stand-alone police operation or an extension of the military set-up and reflecting the operational style of the police owned/military operated Irish Garda operation will await then.

## HUNGARY

**POLICE:** It is only a detail but recent images on the flickr photo sharing platform reveal that the MD902 Explorer helicopters delivered via PAS Staverton included TLC Helilift aircraft movers. As virtually all the modern UK police aircraft delivered to the individual units came with the TLC as a sweetener for the deal there were a significant number available to add additional value to the Hungarian contract.

*Ed: In the late 1990s the competition between Police Aviation Services [promoting the MD902] and McAlpine Helicopters [EC135] was at its fiercest and on occasion the 'free' Helilift was the deal breaker. In a short time, all EC135s were being delivered with the accessory and that in turn obliged PAS to include the same incentive for their sales.*



UltraForce 275-HD

**RELENTLESS.  
JUST LIKE YOU.**

FLIR Systems continues to redefine what's possible with compact, multi-spectral surveillance systems such as the **Star SAFIRE® 380-HDc** and the **ITAR free UltraForce 275-HD**. Unmatched HD imaging in light, compact, low profile systems that don't compromise on range to ensure your airborne law enforcement mission is accomplished.



Star SAFIRE® 380-HDc



©Bell

## JAMAICA

**DEFENCE FORCE:** Bell, has delivered two Bell 429 helicopters of a three-airframe order to the Jamaica Defence Force (JDF). The third Bell 429 is scheduled for delivery to the JDF next year. The three aircraft will be used to complete a range of missions including, search and rescue, medical evacuations, natural disaster relief, national security and military training.

The JDF began its helicopter operations in 1963 with two Bell 47Gs. Its active fleet includes four Bell 407s, two Bell 412s and two Bell 206s. [Bell].

## UNITED KINGDOM

**NPAS:** All aircraft in the helicopter fleet carry an @iPADdefib defibrillator. All crew members are trained to use them. They are very straightforward piece of equipment.

Because of a recent multi-question Freedom of Information (FOI) request to NPAS several aspects of the operation have been highlighted.

NPAS have stated that the aircraft acceptance process has commenced for fixed wing delivery. The four fixed wing aircraft are due to be fully operational in January 2020 'subject to a lengthy acceptance process.'

That same FOI request for information on the costs and benefits expected from operating fixed wing was also not answered claiming performance indicators had now been agreed to assess the fixed wing operation once it is live.

As part of this request details were sought on what it cost to train an officer to work on a helicopter. NPAS were unable to answer that question as there is no requirement to assess such a cost within the organisation.

A further request for information on the status of the [helicopter] fleet replacement programme elicited the information that NPAS are currently developing the programme. This is currently at developing an outline business case.

In answer to a request for information on reducing the number of calls for service that are resolved prior to helicopter attendance it was quoted that the national borderless service has only been in existence since 1/11/2017 and therefore if the enquirer wished to have such historical information they would need to enquire elsewhere. The reply stated that information held at Wakefield was incomplete and not directly comparable. The figures offered only covered November 2017 to May 2018. The unidentified requester was referred to each of the 43 individual police forces for information prior to each of them joining. This leaves many in an impractical 'not really NPAS' information gap between 2014 and 2017.

#



Although still Austrian registered two of the NPAS fixed wing airframes are becoming regular visitors to East Anglia. This aircraft OE-FAH was at Doncaster when captured. This aircraft and OE-FAD are now based there. ©Finningley Gallery.

The reply to the FOI request included access to two redacted letters that are now a year old and appear to suggest that the West Yorkshire hierarchy were on their knees trying to get an audience with Amber Rudd, the then Home Secretary [or her successor] to plead for cash for newer helicopters. Of any meeting achieved we have no details. [West Yorkshire Police 2465/18/Pprune Rotorheads]

*Editor: A sorry tale, as ever. Although the first NPAS annual report sought to detail performance achievements, later editions have failed to continue the flow of information. This new move to create an information black hole by back referring the FOI request to police forces who will certainly not have easily accessible information on air operations for the past three years is just an apparent attempt at blind-siding. Next, I guess there will be a declaration that all data created before the national borderless service was on-stream in November 2017 can be ignored. That may mean that the HMIC report sits in a period where the NPAS was not yet 'complete' so can be discredited?*

*As to the future fleet and those letters to Amber Rudd. Why would they seek a meeting with the Home Secretary to plead for cash for newer helicopters if they had not already developed an outline business case. That was a year ago and the FOI excuse in May said they were still developing a business case. In January this year a wider request that included a request for details on the business case elicited a reply that West Yorkshire are unable to provide information as it is exempt by Commercial Sensitivity. Someone clearly did not read the script properly, of such evidential errors are convictions made.*

*So, we return to the fixed wing issue. A 2014 request to tweak a 40-year established fixed wing design to be capable of operating in the police role should not take 6 years to achieve. It was either capable of undertaking the role - or not. Throughout the project period so far exceeding four years a Chief Pilot and a TFO have been 'set aside' to focus on the requirement, a project officer was embedded at Airborne Technologies in Austria and a fixed wing lead and additional pilot brought in. The fixed wing lead moved across to be the NPAS Head of Aviation Safety to give him a useful job but the others are still there. We can only guess at how they filled their time, but until now it was not flying a fixed wing patrol aircraft. Add up the salary of each of those posts, the cost of the new build, rent, rates and running costs for the Doncaster facility and then multiply them year on year. There is little wonder NPAS is strapped for cash.*

*The project may stem from a meeting in 2014 where industry was invited to put in bids for a fixed wing. Let us not forget that what would evolve into NPAS was looking at the options in 2010 and had trialed both the Tecnam and the P68 before issuing its thinly veiled preferred tender specification for the P68 [and no other]. On that basis alone the P68 was apparently tried and tested. But we now know – four years later –*

**BEST OF ROTORCRAFT  
IN ONE GREAT LIFT OFF**

**ROTORCRAFT  
ASIA 2019**

16-18 April 2019 / Changi Exhibition Centre • Singapore > [LEARN MORE](#)

that the chances of the P68 ever achieving the required performance are an illusion.

In the past day NPAS stated that there are two P68R based at Doncaster [OE-FAD/G-POLZ and OE-FAH/G-POLX] for continued trials and equipment fitting by Airborne Technologies. NPAS state that this will result in 'periods of flight and periods of ground checking equipment' so they are a way off from undertaking an operational role. They remain Austrian aircraft owned by Airborne Technologies. [NPAS statement]

## UNITED STATES

**ARKANSAS:** On August 16 the military surplus Bell TH-67 N54331 helicopter operated by Little Rock Police Department in Arkansas crashed with significant injuries being reported to one person involved - William "Bill" Denio. Sadly, not unusual but in this case an incident surrounded in mystery.

The story deepened when the media reported that the FAA were unlikely to investigate the accident because the helicopter did not fly. It was allegedly being run after a new battery had been installed and was destined for flight but it 'did not leave the ground.' Perhaps unfortunately, CCTV footage of the crash appears a few days later which quite clearly shows the Bell in the air. Still the incident was not listed by the FAA as an accident two weeks later.

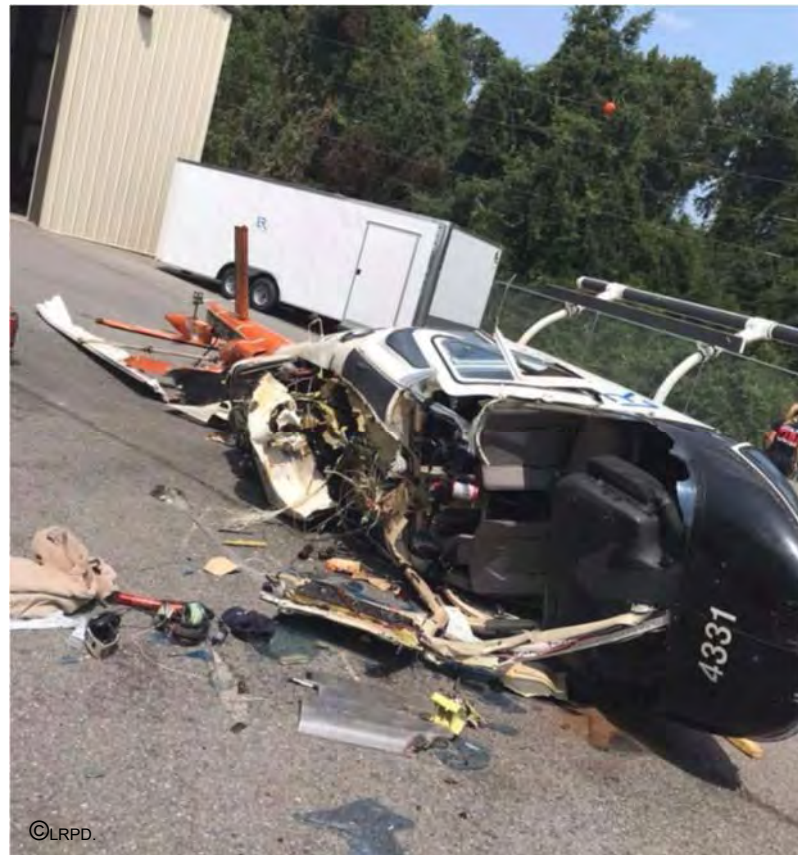
The Little Rock Police Department have been in police aviation for around 18 years now and have suffered two accidents that I am aware of. They operate a single military surplus aircraft – in the past the OH-58 version of the Bell 206 JetRanger but more recently the 'better and younger' TH-67 they acquired in 2015.

The first helicopter arrived in 1995 and from 1999 and 2000, assisted in 426 arrests, joined in 96 vehicle pursuit arrests, 59 narcotic arrests, and recovered 1,001 vehicles. The helicopter spent over 200 hours assisting other law enforcement agencies around central Arkansas. For a while they had two role equipped helicopters. Late in 2002 the unit was threatened with closure; the city had a budget shortfall to chase. A \$946,000 police budget reduction wiped out the air operation and the cadets. At the time the unit was operating out of a hangar in Remount Road, part of the local airport.

Despite several attempts to trim capability and costs it was 2012 before Little Rock achieved the re-introduction of its helicopters on a limited scale to deter crime. Two officer involved shootings in one weekend appear to have led to the air support rethink. Although the report does not mention the helicopter type the Police Department operated two Bell OH-58s – registered N900PD and N901PD – in the past. Only the 40 years old N901PD was then registered.

All appeared to be on an upward trajectory in 2015 when the unit acquired the 2001 Bell TH-67 Jet Ranger. Dubbed "Air Three," it was upgraded to "top flying shape" in preparation for being put into service in 2016. It replaced "Air One," a 1972 Bell OH-58 the department purchased in the 1990s. Air One was sold but there was said to be another OH-58A [apparently N911A] that remains in operation alongside the new aircraft.

According to the media reports quoting local records, in the last 3 years LRPD has flown 165.5 hours of which only 66 have been for operational purposes the rest mainly training. The unit now has a new base in a hangar south of Little Rock at 11400 Ironton Cut-Off Road, a location not tied to aviation.



The images of the TH-67 on delivery in 2015 and after the accident clearly show the airframe to be marked in its military colours only – 31D and 4331 - with no sign of any N number. It turns out that the FAA identity is derived from the retained military marks.

*Ed: Not reporting public use incidents and accidents is sadly not new, their absence skews statistics and the safety learning curve. There may be many that never see the light of day but I have noted even nearly new AS350s getting wrapped up in yards of cable – a wire strike with style – that never made it into the accident data simply because no-one was physically injured [though their feelings may have been hurt I guess] and the repair bill would have been eye-watering. This one remains 'unknown' to the FAA but has at least been reported widely within the flight safety community.*

CALIFORNIA: In San Jose, under 50 miles south of San Francisco, they have started to upgrade their Police Department helicopter fleet. On July 27 they unveiled "Air3," a new Airbus H125 helicopter N408PD to replace the current Air2 helicopter, an EC120.



Meanwhile 55 miles north of San Francisco in Santa Rosa the Sonoma County Sheriff has now taken delivery of its latest patrol helicopter a Bell 407GXP N108SD. There are not many visual changes from the airframe it replaces – the registration and call sign are the same - but inside the airframe is the latest GXP standard with a glass cockpit and outside the lines are cleaner and the familiar SX-16 searchlight has given way to the Luminator product.



After three years of planning, last year Sonoma County Sheriff's Office secured authorisation to proceed with its purchase of a new helicopter to replace its 21-year-old aircraft in a programme that was projected to cost \$5.1M, including \$1.5M in LE and SAR role equipment.

Sonoma were very happy with their 1996 Bell 407, so the project was very much like for like. The earlier Henry 1 was a great helicopter for them but like any piece of equipment, it starts to age, and with age comes maintenance and reliability issues. In addition, the technology on the helicopter they acquired from Los Angeles in 2009 is now 21-years awry. The old airframe was approaching 10,000 hours of service, a point that triggers many operations to go for replacement. Sonoma was facing a bill of up to \$500,000 of repair and maintenance.

The helicopter responds to calls throughout the North Coast, from rescues on the Sonoma Coast and fire-fighting assistance to suspect location and apprehension. Henry 1 logged 942 calls for service in the fiscal year 2016-17.

The bulk of the funding for the new purchase, \$2.9M, came from asset forfeitures — money seized from drug and other criminal investigations. The Sheriff's Office also secured a \$100,000 grant from the Department of Homeland Security for the purchase. The old – now 22-years old – machine was not expected to realise much more than \$500,000 because of the amount of age related remedial work expected.



The long standing and very public 'rescue protocol' dispute between Orange County Sheriff's Department and Orange County Fire Authority may be over. Last month the agencies announced that they have resolved an ongoing feud over responses to emergencies via helicopter. The dispute had been brewing since last year and came to a head following a critical Orange County grand jury report in June about the conflict.

# CIRRUS PERCEPTION®

THE BEST-SELLING PISTON AIRPLANE HAS A NEW MISSION

Introducing Cirrus Perception™, an all-new cost-effective, multi-mission platform. Now FAA certified, learn more about Cirrus Perception at [cirrusaircraft.com/fleet](http://cirrusaircraft.com/fleet) or email [govsales@cirrusaircraft.com](mailto:govsales@cirrusaircraft.com).







The replacement fuel tank for the later models of the AS350 series is now certified across most of the world. The problem now is the obtain the tanks and to find someone with the capability to fit them ©PAN.



## 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

The agencies have put in writing a protocol that will put the sheriff in charge on search-and-rescue and crime calls, and the fire authority as the lead on medical rescues. But, and that may be a weakness, the agreement is flexible to allow who gets there first to take the lead and then *they sort it out later*. There are written understandings serving as protocols, but it is not inflexible. It has been described as “an acknowledgement that enough is enough, this nonsense is jeopardising public safety, and this cannot continue to go on.” Whilst it has been hailed as a great day for public safety in Orange County it remains to be seen whether it works on the day.

MARYLAND: The general helicopter pilot shortage is biting the operations of the police air operation. It takes 70 civilian pilots to keep 10 Maryland State Police (MSP) helicopters in the air and there are currently 14 pilot vacancies that reflect the pilot shortage across the United States.

MSP is losing out when competing against many other organisations in law enforcement and the private sector. MSP requires at least 2,000 hours of flight time for a pilot, and 1,200 for a co-pilot. The current AW139 helicopters contain the newest technology and require a two-pilot crew.

Including the Medivac station in the rear, and search and rescue equipment for those missions. There is also a strong safety record and routine state of the art maintenance.

When Maryland turned their backs on the long serving AS365N Dauphin fleet and moved up market to the Leonardo AW139 it greatly increased the workload. The earlier fleet was single pilot but, driven by safety concerns, the new fleet was dual pilot.

## VENEZUELA

CARACUS: The attempt on the life of the President Maduro by exploding two armed drones on August 4 has a greater impact on the world at large than just Caracas. Whilst some quarters have raised doubts as to the actuality of the attempt on the President others are treating the matter as a serious attempt. Days later two military officers were arrested for their alleged part in the attempt.

Venezuela's attorney general said that two high-ranking military officers have been detained in the investigation into an alleged drone attack against President Nicolas Maduro.

Attorney General Tarek William Saab said National Guard Maj. Gen. Alejandro Perez and National Guard Col. Pedro Javier Zambrano have appeared in court. Opposition lawmaker Juan Requesens is accused of taking part in the plot, several other individuals have been arrested.



Image purporting to show an explosion of an attacking drone.

# Creating the difference in live video communications

Providing flexible, efficient and cost-effective microwave downlinks to law enforcement agencies globally.




www.vislink.com | sales@vislink.com



# AIR AMBULANCE

## UNITED KINGDOM

### NATIONAL:

For many years the UK HEMS fraternity has operated under suggestions that the service they offered was inefficient and unnecessary. Air ambulances were not saving lives and were a costly resource regardless of them being charity funded and not therefore a drain on the health services.

Now a report in the medical publication Lancet has stated that NHS England's 27 major trauma centres (MTCs), operational since April 2012, have been vital in saving the lives of victims of knife, gun and acid attacks as well as those caught up in the most serious traffic crashes. Report in the Lancet concluded 1,600 extra lives had been saved following the creation of specialist trauma centres.

Where the initial criticism of the HEMS system may have had a good basis, recent developments have reversed that. The old system was very much using the craft as a flying ambulance where crews would attend the scene, administer first aid and take the patient to the nearest hospital with a landing pad nearby. The first aircraft available – typically the BO105 – were small and precluded advanced on-scene medical care. The medical care evolved as the crews gained more expertise, started to include volunteer doctors part-time and more hospitals with pads at the specialist trauma hospitals came on line.

Most UK HEMS operations now employ the whole crew, pilot, paramedic and doctor, they take the doctor or surgeon to the patient and treat them on site before sending them to the most appropriate care facility by the best transport available. The larger air ambulances offer a greater medical capability and they now have access to a growing number of MTCs and the ability to deliver the patient directly to them. The availability of the service is stretching to a potential 24/7 capability thanks to increased charity funding and the use of cars to cover out of flight hours periods.

**DEVON:** Last month a signing ceremony was held at Sidmouth Rugby Football Club to formally order a new helicopter for 2020 delivery.

The contract signing ceremony to buy a new state of the art Airbus H145 for Devon Air Ambulance Trust (DAAT) involved Dr Gary Clark, Head of Civil Business, Airbus Helicopters UK, DAAT Trustee Mark Williams (CEO of East Devon Council) and DAAT CEO Helena Holt.

The existing helicopter fleet consists of two Airbus EC135s, both of which are owned and operated in support of the £6.4M annual cost operation. One of the pair is already 'night flight ready' and operates up until midnight every day. The upgraded airframe will replace the older aircraft, currently flying from the service's North Devon airbase near Umberleigh. The existing Exeter aircraft will move to work out of the North Devon airbase, thereby meaning that for the first time both aircraft operated will be capable of flying into the hours of darkness. DAAT look to progressively extending this part of the air ambulance service, initially to 2am.

The new aircraft purchase will cost in the region of €8.5M, but this will be offset by the onward sale of the older helicopter, G-DVAA.

*left to right, Dr Gary Clark (Head of Civil Business, Airbus Helicopters UK Ltd), William Long (Head of Operational Marketing, Airbus Helicopters UK Ltd), Helena Holt (CEO, Devon Air Ambulance) and Mark Williams (Trustee, Devon Air Ambulance)*



ESSEX & HERTS: Two converted Volvo XC90 SUVs have been chosen to provide the ground response for Essex and Herts Air Ambulance Service (EHAAS).

The EHAAS delivers pre-hospital emergency medical service to the people of Essex, Hertfordshire and surrounding areas, and settled on the Volvo as its ground response car of choice after an intensive procurement process. Increasingly the service uses cars as well as helicopters to provide emergency care, particularly in poor weather when it's impossible to fly.

After extensive testing, it was found the Volvo XC90 was most suited for the needs of the operation both now and allowing for future changes. Government figures revealed that this model of vehicle has a particularly positive safety record. There have been no occupant deaths in UK car-to-car crashes for the XC90 since the model was launched in 2002. The statistics, provided by the police from personal injury accidents on public roads, show that no XC90 driver or passenger fatalities have been reported since records began.

The £49,000 XC90 is the best vehicle to fit Volvo Car UK's 'Authorities' specification, that is modified in the factory to handle the demands of emergency response at higher speeds. Volvo Car UK has supplied vehicles to all branches of the emergency services in the UK and has done since the 1960s.

LONDON: London's Air Ambulance, the charity that delivers an advanced trauma team to critically injured patients in London, using two MD902 Explorer helicopters, has acquired a new fleet of Škoda rapid response cars.

The charity's cars operate at night or in adverse weather conditions, bringing the same doctor-paramedic team, equipment and drugs to a patient's side as the charity's aircraft.

The new fleet will continue to use three Škoda Octavia Estate vRS cars, now updated to new models to ensure service delivery. In addition to being fast, robust and fitted with additional safety features for blue light driving, the cars now have an extra 15BHP, an electronically controlled limited slip differential and 19in wheels. The fleet also sees the arrival of two new Škoda Kodiaq Estates, which have increased space to accommodate more medical kit.

Although the earlier colour scheme has not been in service very long the Kent Surrey Sussex AA have changed to this striking design. ©James Lloyds



London’s Air Ambulance was able to update its fleet thanks to a donation from ICAP’s Charity Day. The Charity Day is an annual event in which the leading markets operator gives away all their revenues and commissions for one day. The charity was selected as a beneficiary in 2016. The donation will continue to fund the lease and operation of the cars for the next three years.

WILTSHIRE: The air ambulance charity suffered more blows in late July and early August – thanks again to the Novichok nerve agent poison enquiry.

Police investigating the nerve agent poisonings in Wiltshire grounded the air ambulance and effectively closed the brand-new air ambulance base in their enquiries into the poisonings from August 1. The helicopter only resumed flying operations on July 20 after being grounded for 35 days due to mechanical problems.

The grounding of the Bell 429 was accompanied by a shutdown of the new £5M airbase at Semington while specialist teams scoured all equipment and vehicles for traces of the deadly nerve agent. As all emergency kit, clothing and vehicles, including the Bell 429 were tested for contamination the service again resorted to its response cars to provide a service.

Elsewhere in the county police removed two waste bins from behind the Cloisters Public House in Salisbury city centre after one of the survivors, Charlie Rowley, revealed he may have taken a bottle that contained novichok from them. They were taken to a government laboratory at Porton Down to be analysed. It is believed that Rowley, whose partner Dawn Sturgess died after being exposed to novichok, was a habitual “bin diver” who searched for items of interest and value in commercial waste disposal systems.

The operation returned to normal on August 15<sup>th</sup> after the tests confirmed that the precautionary pause of the Wiltshire Air Ambulance helicopter and airbase confirmed no contamination has been identified.

Chief Executive of Wiltshire Air Ambulance David Philpott said: “We are of course delighted with this news and I would like to take this opportunity to thank colleagues at Wiltshire Council, Wiltshire Police, South Western Ambulance Service NHS Foundation Trust and DSTL for the swift and professional way they have all worked with us during this challenging period.

“It is too early to say if these events have had a detrimental impact on our fundraising but know how much the people of Wiltshire value our life saving service so know we can count on them to keep us flying.”



CHOOSE THE **CORRECT** GROUND POWER SOLUTION  
WITH THE

## Powervamp Ground Power Selector Guide

ENTER your aircraft manufacturer and model

> VIEW the **most suitable turbine start unit** and **power supply** for your needs from Powervamp's extensive, internationally renowned range

**IT'S QUICK • IT'S CLEAR • IT'S INFORMED**

Decision-making made easy. Go to: [www.powervamp.com/product-selector](http://www.powervamp.com/product-selector)



+44 (0)1934 643000

info@powervamp.com



# UNITED STATES

**NORTH EAST:** Early this year the University of Vermont Medical Center in Burlington announced an intention to set up an air ambulance service to be operated by the UVM Transport System.

Vermont's largest hospital teamed up with Dartmouth-Hitchcock Medical Center to provide air transport for critically ill patients in Vermont and northern New York and signed a contract with the Dartmouth-Hitchcock Advanced Response Team (DHART) to supplement the existing ground ambulance service. The UVM Health Network encompasses 40,000 square miles and 11 network and non-network hospitals in Vermont and upstate New York.



A new air ambulance began flying patients late last month between hospitals in the northern part of Vermont and New Hampshire. The UVM helicopter will also be flying to hospitals in northern New York, dramatically reducing the time it takes to move critically ill or injured patients from remote hospitals to medical facilities where more sophisticated care is available. The launch of the service was undertaken using an EC135 registered N200UP. Initially, the UVM helicopter will only fly patients between hospitals, but in the future, it could carry patients from accident scenes. [media]

## SEARCH AND RESCUE UNITED KINGDOM

**CIVIL AIR PATROL:** With all the troubles currently being faced by the future emergency services communications system the UK version of the volunteer CAP is working on integrating with the current radio system.

There is an ongoing project in the North East to improve air to ground communications with the emergency services, including HM Coastguard, and other voluntary sector organisations, including mountain rescue.

CAP continue to practice air to ground photography with a variety of aircraft types they operate. The venerable Victa Airtourer T5 is a handy camera platform even though it has a low wing. The wingspan is quite short so, with a bit of bank, you can roll the wing out of view! The seating position is quite high and the bubble canopy, together with the view ahead of the wing are all plus points.

At one point the unusual good weather was causing concern about water supplies and CAP in the North East flew missions on behalf Northumbria Water, to check the water levels in the reservoirs in County Durham. On the first occasion, July 18, they checked the 7 big reservoirs in one hour and then, a week later July 26 added 4 smaller reservoirs, total 11, which took 1 hr 20 mins.



Northumbria Water does, of course, measure water levels, but, as Sir Michael Pitt, the author of the '*Pitt Report*', which followed the disastrous floods of 2007 (13 people lost their lives), pointed out, 'visualisation', or air to ground photography, provides incident commanders with immediate information that isn't readily available with pages of paper reports, together with columns of figures and a few graphs. Unfortunately, 'visualisation' was missing in 2007, apart from one run by an RAF Tornado on its way back to RAF Marham. All the helicopters, RN, RAF and HMCG, were too busy rescuing people! [UK CAP]

**[www.PoliceAviationNews.com](http://www.PoliceAviationNews.com)**  
***A wealth of on-line resources***





# INDUSTRY

©Gulfstream

**Gulfstream Aerospace Corp.** has designed and delivered a state-of-the-art Gulfstream G550 medevac aircraft that will revolutionize in-flight medical care.

The modified G550 was delivered to the Beijing Red Cross Emergency Medical Center during a delivery ceremony at Gulfstream’s headquarters in Savannah. Gulfstream President Mark Burns and Beijing Red Cross Emergency Medical Center Director Li Libing revealed the new aircraft, as well as the centre’s interest in adding a Gulfstream G650ER to its fleet for the same mission.

“This aircraft showcases the art of the possible,” said Burns. “When you combine innovation, talent, commitment and expertise, you can transform an industry. With this aircraft – and our collaboration with the Beijing Red Cross Emergency Medical Center – we have done exactly that. This modified G550 will change – and save – lives, forever altering the expectations for medevac support.”

**Your Mission – Our Business**

**AIRBORNE**  
TECHNOLOGIES

**Tailor-made police ISR solutions**

[www.airbornetechnologies.at](http://www.airbornetechnologies.at)

Designed for Precision



In July Cal Meeker commenced flight testing a robust new camera mount specifically for applications on the Airbus Helicopters H130 ©Meeker

MEET YOUR NEW MISSION PARTNER.  
**OUR SMALLEST EO/IR SYSTEM YET - THE MX™-8.**



**Introducing the Latest Addition to L3's MX™-Series**

The L3 WESCAM MX™-8 is a high-performing HD EO/IR surveillance system with a low 10-inch clearance level and an install weight of only 15 lb./6.5 kg. Engineered to capture critical ISR intelligence from light, manned rotorcraft and small tactical UAVs, the MX-8 is configured with a fully stabilized 4-axis gimbal design, 4-sensor payload suite and advanced processing capabilities. Compatible with L3's Kinetic™ situational awareness and target detection capabilities, as well as our MX™-GEO suite of target location technologies and third-party mission equipment, the fully digital MX-8 is compact, powerful and lives up to its legendary "MX" name. **WESCAM.com**



To be used for disaster relief and air rescue services, the G550 aircraft features technological innovation that draws on Gulfstream's more than 50-year heritage of providing special missions aircraft worldwide. The G550 features a dedicated medical bay outfitted with advanced equipment to sustain and stabilise critically ill patients, including:

360-degree in-flight patient access, a medevac first

Advanced life-support capabilities (extracorporeal membrane oxygenation)

A bed designed to accommodate an infant incubator

A powered gurney loading system on aircraft stairs

X-ray viewing equipment

Refrigerated medical storage cabinets

The G550 can fly nonstop from Beijing to New York or London. More than 560 G550 aircraft are in service worldwide.

**Gulfstream Aerospace Corp.** will expand its maintenance, repair and overhaul (MRO) operation in the London area with a new, larger, purpose-built facility at TAG Farnborough Airport. The Farnborough service centre is expected to be operational by the third quarter of 2020.

Gulfstream's new MRO is projected to be approximately 180,000 to 220,000 square feet/16,723 to 20,439 square meters. This includes office space, customer areas, shop space and a hangar that can accommodate up to 13 large-cabin aircraft. Significant ramp space will also be included, along with an automobile parking area.

Gulfstream's existing MRO at London Luton Airport, which comprises more than 85,000 sq. ft/ 7,897 sq. m of hangar, office and parts warehouse space, has seen a significant increase in on-site traffic and road trips for several years. The site has grown to more than 250 employees.

All of Gulfstream's current capabilities at Luton, which include maintenance authorizations from the U.S. Federal Aviation Administration, European Aviation Safety Agency and more than 20 other civil aviation authorities, will be replicated at Farnborough.

Long ago, proven as the most reliable way to protect turbine engine inlets and internal components from ingestion damage, IBF technology has now entered a new realm with the use of high technology flow modelling applications. Because of this capability, the total filter area has been reduced through airflow optimization during the engineering and design phases. The new Airbus H130 IBF is the latest addition to the long line of high technology turbine engine air filtration systems available at **Aerometals**.

[www.aerometals.aero](http://www.aerometals.aero).

Early last month Helihub.com revealed that **Sikorsky** is developing a new model to be known S-100. Sikorsky have registered the first S-100 (msn 0001) with the FAA, who have allocated the registration N100FV. FAA data shows it as having two engines and 14 seats, which Helihub believes fits perfectly with the joint venture Sikorsky-Boeing SB1 Defiant, which the two companies are putting forward for the Future Vertical Lift (FVL) military project.

Sikorsky have revealed at various events that the initial prototype is due to fly in 2018 and will be powered by two trusty Honeywell T55 engines, thus confirming the two-engine designation given by the FAA. While the company has acknowledged that this engine may make it a challenge to achieve the FVL requirement of 229 to 450 nm range with payload, the partners are looking at other future engine options which are more efficient. Taking the first two letters of the "FVL" program name provides the confirmation that N100FV is indeed the Defiant. The model features a co-axial rotor system and a pusher prop, a format Sikorsky developed with their X2 Demonstrator, and they carried on through the S-97 Raider which first flew on 22 May 2015.

The Bell 525 programme recently completed hot weather testing in Yuma, Arizona at temperatures up to 120 degrees Fahrenheit as well as high altitude operations to density altitudes of 14,000 feet.

Earlier this year, the Bell 525 completed cold weather testing at temperatures down to minus 37 degrees Fahrenheit in North Manitoba, Canada.

Not so positive down in Louisiana though where a state-financed plant constructed at the Lafayette Regional Airport two miles southeast of **Lafayette**, Louisiana, United States was originally expected to produce the Bell Jet Ranger X helicopter. Plans and agreements changed over the years and now even the building of the 525 is in question. Now the company and state are embroiled in a legal battle over who is to blame for the broken agreement and whether more than \$16M is owed to the state.

In 2015 the Fort Worth, Texas-based Bell Helicopter as it then was completed the 82,300 square foot assembly plant in Lafayette.

The plan was to begin commercial production of its new five-seat, single-engine turbine Bell 505 Jet Ranger X aircraft in 2016 but production never arrived.

#

**Van Horn Aviation (VHA)** based in Tempe, Arizona, has received a Supplemental Type Certificate (STC) from the Federal Aviation Administration (FAA) for composite main rotor blades installed on the Bell 206L LongRanger helicopter. Loosely based on VHA's composite 206B JetRanger main rotor blades, which were certificated in 2016, the new VHA LongRanger main rotor blades have been approved with a 16,000-hour service life, which is four times the life of the current OEM metal blades.

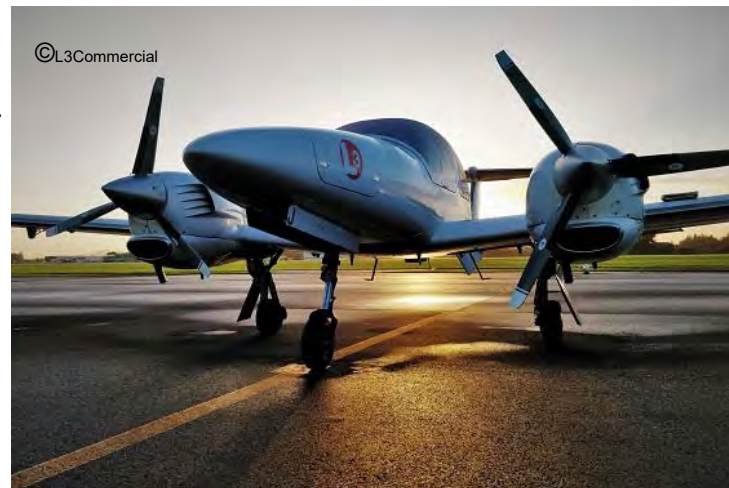
The VHA 206L LongRanger MRB use the same carbon fibre materials and construction methods as the company's 206B JetRanger main rotor blades. Both blades feature carbon fibre skin and spars, titanium root grips, NASA-designed laminar-flow airfoils, and tapered tips. Stainless steel and nickel abrasion strips cover the entire length of the blade for erosion and lightning strike protection. The VHA blades use the identical installation configuration as the OEM blades, allowing direct replacement without hub modification. Until the end of this year the direct sale introductory price is \$55,000 per blade.

[www.vanhornaviation.com](http://www.vanhornaviation.com).

**L3 Commercial Aviation** has announced that it has been selected by the Royal Air Force (RAF) to support the training of future RAF multi-engine pilots. The three-year contract represents the first time that L3 has provided such training for the RAF.

Following a competitive tender process, L3 was selected to provide a bespoke solution for approximately 100 trainee pilots in total. Trainees will undertake a course like a Commercial Pilot License (CPL) with Instrument Rating (IR) as well as the Multi-Crew Cooperation (MCC) course to supplement the RAF's distinguished training program. The course with L3, a leading international commercial pilot training provider, will ensure that the pilots have the highest standard of skills before returning to the RAF to complete their operational flying training. The training will take place at L3's U.K. Airline Academy training locations, lasting approximately 17 weeks in total. The first class of students began training with L3 last month.

*Ed: Although it has been around for some four years now you may be permitted not to know much about this element of L3. Over the last few years the group has been buying up and rebranding existing flying schools.*



In **Armenia** the health minister Arsen Torosyan said that his ministry is negotiating acquisition of an ambulance helicopter. He said he was determined to ensure that the country has at least one ambulance helicopter to evacuate patients not only from remote and hard-to-reach regions, but also patients needing urgent surgery. [Arka.am]

#

**Aireon** and the Irish Aviation Authority (IAA) have announced, that Air Navigation Service Providers (ANSPs), Aircraft Operators, Regulators and Search and Rescue Organizations can now pre-register for their free, global Aircraft Locating and Emergency Response Tracking (ALERT) service. The Aireon ALERT service will provide the last known position of an Automatic Dependent Surveillance-Broadcast

## SITUATIONAL AWARENESS FOR AIRBORNE LAW ENFORCEMENT



**AIMS** MISSION SYSTEM  
SOFTWARE

MULTI-SENSOR INTEGRATION | ITAR-FREE | DEPLOYED WORLDWIDE

To learn more, join us at Africa Aerospace and Defence (September 19–23),  
Helitech International (October 16–18), or visit [cartenav.com](http://cartenav.com).

**CarteNav**  
SOLUTIONS

(ADS-B)-equipped aircraft that is in an apparent distress state or experiencing a loss in communication. The service is only available to aviation stakeholders and offers precise position reports, free of charge. The Aireon ALERT system is expected to be operational in the first quarter of 2019 and will be operated out of the IAA North Atlantic Communications Centre in Ballygirreen, County Clare, Ireland. Enabled by Aireon's unique space-based ADS-B service, Aireon ALERT will fill a critical need within the aviation industry. For the first time, ANSPs, Aircraft Operators, Regulators and Search and Rescue organisations will have access, on request, to exact position data for an aircraft in distress over the oceans, remote areas and anywhere else they may need aircraft position information in an emergency. Users of the service do not need to be customers of either Aireon or the IAA to use the service; they simply need to be registered. Once a stakeholder has registered and been approved for Aireon ALERT, should an emergency arise, it can contact the 24/7/365 operations facility to obtain the last known position of its aircraft. This will include a map of the last 15 minutes of flight, with one plot per minute and a 4-dimensional report including altitude, latitude, longitude and time information. Based on the situation, additional tracking information may also be provided. Aireon ALERT will be provided as a public service, free of charge to registered stakeholders. To pre-register for Aireon ALERT, ANSPs, Aircraft Operators, Regulators and Search and Rescue Organizations should visit [www.aireonalert.com](http://www.aireonalert.com)

**Lord Corporation** has received the Federal Aviation Administration's (FAA) Part Manufacturer Approval (PMA) for its enhanced Main Driveshaft Transmission Boot for Bell 412HP and 412EP helicopter platforms. Customers using PMA parts can reduce their aircraft-on-ground time and save 35% on maintenance costs over a new purchase from the original manufacturer.

LORD uses an elastomeric material that provides exceptional coupling lubricant resistance resulting in extended part-life and ultimately more time in the air. The elastomer is integrated into the main driveshaft transmission boot and protects the drive shaft couplings from dirt, water, oil and other contaminants. The specially formulated elastomer maintains mechanical properties with little to no degradation at elevated temperatures, as well as superior metal surface coatings for increased corrosion protection. This PMA program meets or exceeds the Bell Component Repair and Overhaul Maintenance Program's suggested removal period of 1,200 hours. LORD's program also includes a recycling option, allowing users to participate in a swift and more environmentally-preferred option for disposal.

## ACCIDENTS & INCIDENTS

**12 August 2018 Bell 412EP JA200G** – All nine people aboard a Japanese search and rescue helicopter that crashed into the central mountains were confirmed dead. The Bell 412EP helicopter carrying seven local rescue workers from the Gunma prefecture and two from a flight service company lost contact about an hour after take-off and crashed. The helicopter was on a two-hour flight to monitor the opening of a mountain trail. Witnesses are saying the helicopter was flying extremely low in foggy weather and turned before crashing into trees. Those on-board were identified as the pilot, Noriyuki Amagai, 57, mechanic Susumu Sawaguchi, 60. Both were employees of Toho Air Service, which maintains the aircraft. They were part of a prefectural disaster management unit together with two others — Satoshi Ozawa, 44, and Akihiro Oka, 38. The other five were firefighters Ken Tamura, 47, Yosuke Mizuide, 42, Hidetoshi Shiobara, 42, Hiroshi Kuroiwa, 42, and Masaya Hachisuka, 43. [Media]

**14 August 2018 Air Tractor AT-802F Fire Boss N397AS.** The fire fighting aircraft fighting the Horns Mountain fire in NE Washington force landed on logging road terrain during an aerial fire suppression flight in Stevens County north of Northport, Washington. The floatplane sustained unreported damage and injuries to the sole pilot onboard have appear to be minor. [KHG]

**16 August 2018 Bell TH-67 N54331** "31D" Little Rock Police Department in Arkansas. One serious injury reported when the helicopter was being run-up on a mobile helicopter pad. A CCTV image shows that the helicopter and pad moved, and the helicopter became airborne, slewed around became briefly fully airborne before catching a skid on the pad and rolling completely over destroying the rotors and then falling back onto one side. The second person who was on board is reported as not injured. Police say the injured man, the pilot, is a retired officer who acts as the Chief Pilot, he has a head injury and was trapped in the wreckage. Incident at 11400 Ironton Cut-Off Road, Little Rock. [Media LRPD]

**17 August 2018 MBB BK117 VH-JWB** operating as a water bomber in New South Wales using a Bambi bucket at Woodstock, near Ulladulla, NSW, Australia, crashed into a tree. The NSW Police confirmed the sole occupant, the male pilot Alan Tull was killed in the crash. [Sydney Morning Herald/Pprune/ASN]

**18 August 2018 Bell 206BIII N8052G.** Nevada Department of Wildlife Contracted helicopter operating with "four persons" aboard undertaking a survey came down about 15 miles north of Battle Mountain,

Lander County, Nevada. A wildfire started nearby but it is unclear if the two are linked. Two Department of Wildlife biologists and a pilot were on the helicopter that crashed. One biologist had neck and back injuries, and the pilot and other biologist had minor injuries and were treated on the scene.

25 August 2018 Bell 212 N512TA Firefighting under US Forest Service contract near Dardanelle, California using a bucket when it crashed and rolled over. [FAA]

25 August 2018 Bell 206 N16726 Firefighting. Undertook a successful autorotation under unknown circumstances near Elk Creek, California. [FAA]

## UNMANNED

The inventor of Facebook’s Aquila drone, Nigel Gifford, will be joining this year’s November 14-15 Commercial UAV Show at ExCel in London Docklands. In his session, Nigel will be showcasing his brand-new ground-breaking invention: the edible Pouncer drone. This humanitarian UAV is designed to deliver food aid in disaster zones by being edible itself. With a 50kg payload that can feed up to 100 people a day, a pre-formed shell that can be reused to provide shelter, it’s frame that can be burnt safely to cook food, this drone is a true inspiration in UAV mechanics. Nigel hopes this invention will truly push the boundaries of air aid delivery and save countless lives. Want to find out more about how innovations in materials and mechanical engineering will create the next wave of UAVs for air delivery? Join us at the Commercial UAV Show this November

iRed an industry-leading thermal imaging company in Hampshire is supplying emergency services across the country with drones fitted with specialist cameras.

iRed launched its ‘search and rescue’ packages after a decade of research into aerial thermography and the company has supplied six police forces to date. The company, based in Emsworth, also provides the training in using the drones and interpreting the data supplied by the cameras. Fire and rescue services and the coastguard have also shown an interest and have attended demonstrations of the technology. The kit enables immediate searches to be made and for large areas to be swept from above for heat signatures. With cameras getting smaller and the advances in drone technology, iRed was able to create the advanced system.

Police Scotland have started training on their newly acquired drones.





### Marketing to the police? A new market area ?

Helimetrics Ltd’s unique experience with high value projects and with UK police forces and law enforcement agencies will deliver research, market appraisals and strategy proposals that make sense

Helimetrics Ltd clients already include a wide range of agencies and multi-national companies

Telephone: +44 1608 642231 and email: [josmond@helimetrics.com](mailto:josmond@helimetrics.com)

On New York's Long Island municipalities and police departments are flying drones — once used primarily by the military and hobbyists — for public safety, firefighting and town planning.

Officials are using drone footage to guide firefighters at perilous scenes, monitor municipal property and evaluate storm damage. Most recently, state park police flew drones to look for sharks last month after two children were reported bitten in the ocean off Fire Island.

Smithtown, one of Long Island's earliest and most aggressive adopters of drone technology, began using drones to conduct damage assessments after superstorm Sandy in 2012 and has since expanded to other planning and public safety applications. Flights in the town are increasingly routine: Cheaper than anything a helicopter could provide, more current and customizable than images from a satellite or airplane.

Nassau County has been flying its two drones for years, producing two- and three-dimensional maps for the Department of Public Works. The Suffolk County Police Department uses its drones to aid in automobile crashes and other emergencies.

South African anti-poaching units have been using UAVs provided by a New Zealand company Aeronavics based in Raglan as a new weapon against rhino poachers.

Recent studies estimate roughly 18,000 southern white rhino and 5500 black rhinos are left in Africa but the numbers are dropping.

Aeronavics was approached by Sarah Jones from the Tusk and Horn Wildlife Trust about creating and providing a drone that could help anti-poaching units. Sarah is from Raglan and she spoke with Aeronavics to see if they could help in conservation work by providing night-vision support to security teams on the ground.

Aeronavics spent the past 18 months developing several prototypes to help protect rhinos, deciding on a quad rotor model with night vision that can fly for around 45 minutes, withstand high levels of wind and comfortably fly several kilometres without losing contact with the radio and video controls. The craft required a week of training the anti-poaching unit of Amakhala at the Fowlds family game reserve. [New Zealand herald]

In Oregon the Scan Eagle has taken up a regular night flying spot over a wildfire at Taylors Creek west of Grants Pass for over two weeks. The five feet long, ten feet span craft weighs in at 44 pounds and has been found to be an invaluable tool,

For eight hours a night, the craft has been scanning the landscape, mapping, searching for hotspots and endearing itself to the firefighters below.

It flies in smoke, at night, with a range of over 50 miles with six gallons of fuel and can fly for more than 20 hours operated by a typical crew of just three.

The night flights offer greater value than those in daylight. It is a lot easier to see on the IR (infrared) camera. During the day, some areas of heat would be small and likely challenging.

Flight plans can simply be a click on the map with a mouse to tell the craft where to go.

Unmanned aircraft systems have become part of wildland firefighting only in the last few years. In 2017 federal firefighters used them on 340 wildfires in Oregon, the most missions among 12 states where they were used, according to the Department of Interior.


This year it's reached a new level. The unmanned systems are being treated more like helicopters and airplanes, with a \$17M, on-call contract awarded by the Department of the Interior to four companies.

One of them is Insitu, a Boeing subsidiary that developed the ScanEagle from its original use of spotting fish in the ocean some 24 years ago.

From flying for the US Marines in 2004, it has grown into a worldwide business, serving the military of over 20 countries. The company has logged more than 1 million flight hours with drones.

Recently two smaller drones have been used on the Taylor Creek to drop incendiary "pingpong balls" to light backfires. This is believed to be a first for the technique. [Registr]





THE FUTURE IS UNMANNED

UNMANNED  
SYSTEMS ASIA 2019

16-18 April 2019

Changi Exhibition Centre • Singapore

> LEARN MORE

# LETTER

Sir,  
**WHITHER THE VULCANAIR P68R?**  
Due to a delay in the entry into service of the Embraer Phenom 100 for multi-engine flying training for the next generation of Royal Air Force pilots, those destined for the larger reconnaissance and transport aircraft, they will now complete their training on the Diamond DA42 with UK based L3 Commercial Aviation. This endorsement of the Diamond DA42, by the RAF, as a modern all-weather aircraft with a 'glass cockpit' and single lever engine controls, together with its Jet-A1 fuel efficient Austro aero-diesel engines, begs the question as to why the UK's National Police Air Service (NPAS) never completed a proper evaluation of the DA42 MPP, or its stablemate, the larger DA62, before they placed their order for the diminutive Italian Vulcanair P68R? Moreover, why was there no extended evaluation of the current, improved version of the iconic British BN Islander with its exemplary track record as a general purpose utility aircraft, with roles that have included, military reconnaissance, police air support and air ambulance duties in the UK? The P68R, which was ordered by NPAS in January 2014 is, we are now informed, unlikely to enter operational service until 2020. By all accounts, the P68R is still struggling to meet the original NPAS specification for an all-weather aeroplane, with a crew of 3. The P68R was expected to be used for extended, nationwide air operations in support of the 43 police forces in England and Wales, together with photographic reconnaissance and evidence gathering missions using its fuselage mounted electro-optical (EO) camera turret. The very long delay between the aircraft being ordered, in 2014, and the anticipated entry into service, with NPAS, in 2020, is quite extraordinary. It's not as though the P68R is some novel, cutting edge, 5th generation stealth fighter! The P68, with a fixed landing gear, made its first flight almost 50 years ago, in 1970. Moreover, the P68R, with the addition, together with the extra weight, of retractable landing gear is described by the manufacturer, Vulcanair, as an aircraft, 'For private use and for flight training applications.' There's no mention of any additional, specialist roles. From the evidence that's available, and despite the warnings, the P68R, together with its small MX-10 EO camera, (both the DA42 MPP and the DA62 MPP carry the larger, more capable MX-15 EO camera) may never, ever meet the original NPAS specification in terms of crew capacity, range and payload! In conclusion, it may yet prove to be a very costly mistake on the part of NPAS, many would agree.  
Yours sincerely

James A Cowan MBE



One of the Irish Garda Airbus helicopters was recently at Staverton for maintenance ©James Lloyds

## MOVE ALONG THERE

Progress they call it.

Long term readers of Flight International a weekly magazine in print since the start of aviation are in for a major change.

I can recall as a schoolboy saving up for a regular weekly copy at 1/3d (about 6 pence) in the 1950s a must have read.

PAN has been free and digital for nigh on 20 years now and the modern Flight is still a print product with a digital option at a price way beyond that 1/3d.

Progress they call it, they have been dragged screaming into the Digi-age and I guess there may yet be a day when is history. But, blow me down they keep announcing gaps in coverage! On one hand they produce a digital only issue a few times a year to get the readership used to the day when they join PAN in the fully digital world, but more is to come!

It may be OK to take Christmas week off but now that has slipped to a couple of weeks.

Well blow me down they announced they were skipping a week in high summer! What is that about if you please?

## CONSEQUENCES

While in Singapore I took the opportunity to take in the Asia Pacific Airline Training Symposium (APATS), held in the Convention Centre of the Marina Bay Sands, Singapore. The organisers claim that APATS is the largest and most influential aviation training event in the Asia Pacific Region. This annual conference and tradeshow brings together senior training professionals and subject matter experts from around the world to share safety and best practice in pilot, cabin crew and maintenance training. There are similar events held in Europe [Madrid in November this year] and the USA.

Well, as I was in town, I dropped by. How could I turn down the venue – the striking Marina Bay Hotel – and an opportunity to take a break from the heat outside to chill in the aircon.

On the face of it there should be little interface between APATS and PAN and therefore PAVCon. As I have found before, you can never be sure.

True to form there was much to be learned even if the subject of training is familiar to those of the airborne emergency services.



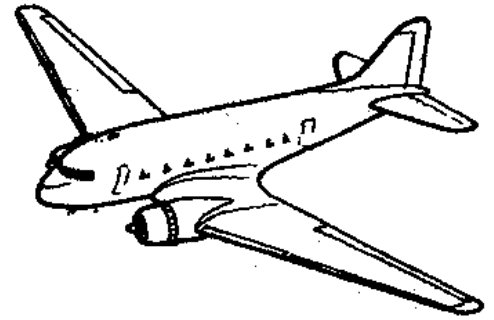
Some 650 delegates, mostly paying, were attracted to the event on the upper floors of the giant conference centre and the three Keynotes presentations pretty much set the tone of the whole event. Speakers from IATA, Singapore Airbus and Boeing Flight Services laid out the problem of pilot shortage across the world. OK perhaps the greatest need is in fast developing China but the problem is not confined to Asia by any means. This was mainly the stuff of fixed wing airliners but Leonardo did not miss the mark by being present and promoting the training of AW139 pilots. They are airliners too—albeit in a niche market sector. With so many new pilots now needed—let alone keeping up with the ongoing need for type ratings among those already trained up—the industry is being pushed towards ways in which it can reduce the complexity and length of time all of the activity currently takes. It looks difficult, can be seen as impossible but, I am assured, it will be done.

In simple terms the training organisations need to get their act together and connect with the digital generation. Currently the system is putting out around 30 new pilots a day but the experts are predicting a need for between 65-71 pilots a day. These of course are mainly 18 –20 year olds and a long way off being

Captains of airliners. They are the second seat jockeys who need to aspire work up to being PIC via yet more training, more type training and to develop an adult mindset to go with it. Most passengers would feel disquiet about getting on board an airliner with a flight crew aged under 20.

For a start the training needs to rethink its roots. Current programmes are based on outdated assumptions including taking on board the fact that in 1947 the airliners of the day—the Douglas DC-3 and DC-4—regularly suffered engine failures on take-off. The fact of the matter is today such things rarely happen so the emphasis can be steered away from such considerations to bring others to the fore.

The digital generation is used to distance training on a range of computers and hand-held devices so 'reading the manual' can be undertaken long before meeting the real thing at the flight school. That saves a great deal of time and expense and makes the ramp up in number attainable. The complex new cockpits at the training school will understandably overawe the unfamiliar newcomer but new trainees will have immersed themselves in a virtual reality version long beforehand.



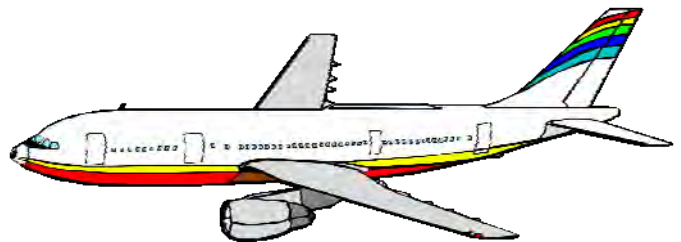
### How does this effect the airborne emergency services sector?

The number of fixed and rotary wing military pilots entering the civil sector for retraining continues to fall. Across the world emergency pilots have been traditionally ex-military. The numbers of pilots needed in just the UK air ambulance sector has doubled recently as SPIFR has given way to a dual pilot need in larger more capable airframes. In future the percentage of ex-military pilots will alter and the emergency services will increasingly be competing directly with the very airlines that are ramping up training today. Often these airlines sponsor the training and require the trainee to maintain company loyalty.

At the moment the emergency services are able to turn to large numbers of oil and gas rotary pilots displaced by the depressed oil prices and turn down in demand for their services. Heaven help them if the oil situation reverses. The earlier story on the current Maryland State Police shortfall in qualified commercial pilots should be a warning in itself.

### Head to head

Eventually the emergency services sector may find itself going head to head with attracting pilots against an airline industry that can, and will, outbid them for the best pilots.



### Go it alone

Like many in US law enforcement they may well seek to train their own pilots but that too is fraught with many dangers. At the moment those seeking commercial pilots require them to have around 2,000 hours experience to fly the SPIFR mission, how can that compare with a pilot with zero hours? You lose the economy option of SPIFR for a start! A point made at the conference is that each year some 4% of pilots, currently 2,000 people, retire. That alone is putting pressure on the supply of good trainers and potentially sounding warning bells on quality.

If you have the good pilot trained by a good trainer to an acceptable standard you then face the danger of losing the pilot you have trained—perhaps to an inflated airline salary.

### Good boss, bad boss

It goes beyond pilots and training though. Recently I noted that a non-pilot decided to quit his well paid job within an air unit because he could afford to, he already had a pension, and he had grown thoroughly disenchanted with his erstwhile employer. One APATS quote that was thus brought to mind was:

***If the employer is found to be wanting they will not keep the pilots they have let alone be able to afford them.***

There is an associated Twitter tweet by Sir Richard Branson that is similar in stating "What if I train them and they leave?" his counter to his own tweet was "Train people well enough so they can leave, treat them well enough so they don't want to!"

A sincere thank you to the Halldale Group for allowing the editor to attend the APATS Conference and exhibition. APATS 2018 was organised by Halldale Ltd. Sentinel House, Ancells Business Park, Fleet, Hampshire, GU51 2UZ, UK Phone: 01252 532000 Email: [info@halldale.com](mailto:info@halldale.com)





**3<sup>rd</sup> Civil Helicopter Southeast Asia Summit**

Kuala Lumpur, Malaysia | Sep.27th-28th, 2018

*Accelerating Growth and Cooperation for a Win-win Situation*

**Contact : Josephine Zhu**  
**T: +86 50589600 ext. 8026**  
**E : josephine\_z@opplandcorp.com**

**FUTURE EVENT**

I keep hearing associates stating that they are not going to Helitech in Amsterdam this year. Whether that is true or not it seems that Helitech is on the defensive. Just in is the latest appeal from the organisers to go to the Netherlands. It has little to do with helicopters or even aviation

Apparently Helitech International in Amsterdam doesn't have to be strictly about business; you might want to take a bit of time to see the sights that the city built on 11 million wooden poles, comprising 165 canals has to offer. Try a new craft beer, warm stroopwafel or pancake at one of the 1500+ bars and cafes. Go to a park or garden. Check out the largest moving flood control structure on Earth and even go to a museum. Somehow that might be difficult to put across in a business case to the boss.

**THE EMERGENCY SERVICES SHOW**

Wednesday 19 September - Thursday 20 September 2018 in Hall 5 of the NEC, Birmingham, B40 1NT.

This month we must embrace the Emergency Services Show. Many will not have considered it at all but that could be a mistake.

Here is an opportunity for all the emergency services to meet together without the potential interference from thoughtless senior police officers, gain some interesting information and network with the others in 'Public Safety.'

**Avionics-EXPO.com**

12/13 MAR 19, MOC, MUNICH, GERMANY

**AERO testing EXPO.com**

12/13 MAR 19, MOC, MUNICH, GERMANY

**2nd-4th October 2018**  
**The Hague, Netherlands**

**critical infrastructure PROTECTION AND RESILIENCE EUROPE**

**Working together for enhancing security**

*Copyright Notice: The content of this publication includes items that are the copyright of others. The source of words and images will usually be indicated together with the source of additional information that seeks to enhance the original information.*

*Police Aviation News includes materials produced for it by Ian J Commin of Insight Design of North Burnham, Slough SL1 6DS. This includes the banner titles and the PAVCon logo. In addition from time to times images specifically altered by Insight Design and others but originally produced for McAlpine Helicopters [now Eurocopter UK], Oxford, will appear with permission of the original owner. In some cases it may not be possible to indicate the source of this material directly associated with the images used.*

The police are there but they are not the groups most police officers might expect or want to interact with in a serious vein – these are the niche groups that most are still genuinely surprised exist. The number of police forces will be few, but the Police Dependents Trust put forward what it means to be police. Most mountain rescue, fire and ambulance member and employee associations will be there to interact with the people they should holding close to their hearts but do not expect the Police Federation, the Superintendents Association or others to be there to console you in your stressful work.

You will be able to choose your next pair of boots, gloves and fire extinguisher – if that is your inclination. How about playing with a turntable ladder or a fire engine, bet you have missed out on that so far in your career!

Check out their website for the full list of options.



**helitech**<sup>®</sup>  
**international**  
 HELICOPTER EXPO & CONFERENCE

In association with



### Helitech notes

As noted above, not everyone is going to be there, I have heard several important companies state they were staying away. Among the big names stating they are going are Sikorsky, Lord and Rolls Royce further downstream are **Librestream Technologies** – who offer live video collaboration software to aid rapid response to MRO situations and aircraft manufacturing processes, **Merlin Simulation** - High fidelity simulators replicating any type of aircraft across the military and commercial sectors, **SCOTTY Group Austria GmbH**, a solutions provider and manufacturer of systems for beyond line-of-sight audio, video, and data connectivity for communications and surveillance purposes and **TracPlus Global Ltd**, a real-time tracking service provider using the latest satellite, web and mobile technology. Helitech is co-located with MRO Europe at RAI Amsterdam. 16-18 October 2018



Need to get out of the police but want to make the best of your security experience? It may be time to try out a specialist recruitment event run by PR the Police recruitment Expo.

23 October 2018 Security Cleared Expo – the world's largest recruitment Expo for Security Cleared Candidates and those interested in the Cyber Security industry. QEII Centre, Westminster, London 1000-1600hrs. Register at [www.securityclearedexpo.com](http://www.securityclearedexpo.com) or [www.cybersecurityexpo.co.uk](http://www.cybersecurityexpo.co.uk) or call 020 8166 0616 [expo@securityclearedjobs.com](mailto:expo@securityclearedjobs.com)

### NEWLY ANNOUNCED EVENTS

The Organisers of Milipol Asia-Pacific have launched an inaugural Homeland Security (HLS) Indonesia 2018 conference and exhibition for September this year. This gathering, like its French and Middle East versions will be a biennial event dedicated to bringing the latest expertise, products and solutions to address growing requirements in counter-terrorism, homeland security and law enforcement. A reported significant growth in expenditure is stimulated by initiatives to counter the growing threat of terrorism, and to control piracy and illegal fishing, illegal immigration, drug smuggling, and criminal activity.

There is an increased demand for maritime surveillance and security equipment, cameras, airport security, biometric systems, and video-surveillance systems to mitigate security threats from internal and external sources.

The event is to be held at the Jakarta Convention Centre, Indonesia on the 19-20 September 2018.

<https://www.hlsindonesia.com> [contact@info.milipolparis.com](mailto:contact@info.milipolparis.com)

Not a new event, but news of the annual security show at Olympia, London. It is big on 'anti-terror' but it is mainly a locks and steel gates event with some other subjects thrown in. It may be worth a visit on 28-29 November 2018 International Security Expo. Olympia London. Hear the latest security updates from world's leading industry experts, with over 350 exhibitors expected, over 1,000 product launches, inspiring features plus a series of FREE conferences. The Protecting Crowded Places Conference features Police Response to Crowded Place Incidents, presented by Mark Scoular, Head of Protect and Prepare, Home Office and -Resilience for Crowded Places, Beverly Griffiths, Director of Resilience, Cabinet Office Emergency Planning College. There is a small Drone Zone. Event run by Nineteen Events, Tuition House, 27-37 St. George's Road, Wimbledon, SW19 4EU. +44 (0) 20 8947 9177 [www.internationalsecurityexpo.com](http://www.internationalsecurityexpo.com)

5-7 September 2018 Emerald Expos' InterDrone 2018 event, Las Vegas – [www.interdrone.com](http://www.interdrone.com) We will be launching many initiatives over the next few weeks as the contours of the commercial drone trade show industry become apparent to all, with only one logical conclusion: InterDrone is the world's premier event for the commercial drone industry by every metric: attendance, educational breadth and depth, press attendance, number of exhibitors, impact, and buzz! We project more than 4,000 attendees from 60 nations will attend in 2018.

11-13 September 2018 APSA Safety Seminar. Newport Beach, California [www.publicsafetyaviation.org](http://www.publicsafetyaviation.org)

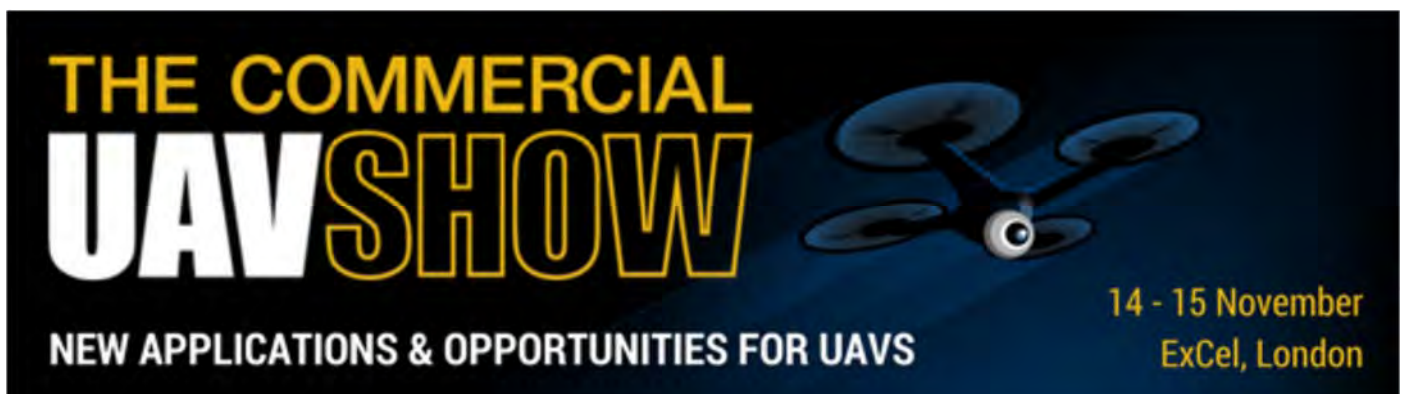
19-20 September 2018 DVD at Millbrook. DVD is a biennial Defence industry exhibition staged at Millbrook Proving Ground that enables focussed engagement between Defence industry, DE&S Delivery Teams, Army HQ staff and other Defence community users of Land Equipment. It is a well-established two-day event held at Millbrook Proving Ground jointly sponsored by Defence Equipment & Support (Land Equipment) organisation and Army Headquarters - the MOD teams responsible for equipping and supporting the UK's Armed Forces for current and future operations. DVD provides an effective and efficient forum for all those involved in the Land Equipment sector to develop ideas and generate a greater understanding of technologies, capabilities and requirements. DVD remains an important event enabling this coordinated engagement through informal discussion, briefings, demonstrations and displays. Other stakeholders from across the MOD are also welcome to attend to broaden perspectives and encourage innovation. <http://www.theevent.co.uk>

19-20 September 2018 The Emergency Services Show at the NEC Birmingham. The Emergency Services Show is the UK's leading annual showcase of the blue light sector, featuring over 450 exhibitors, live demonstrations, unique learning opportunities and unrivalled networking. Taking place in Hall 5 at the NEC in Birmingham, the two-day event brings together all disciplines from the emergency services sector to discover innovative technology and operational solutions, share their experiences and unite in their collaborative approach to public safety.

If the emergency services or their partnering agencies buy your products or services (or you feel they're missing out on their unique advantages by not buying them!) then The Emergency Services Show is for you. Exhibitors can choose from a range of options, from complete stand packages to floor space only and even outside space. Organised by Borden Media Ltd., Robert Denholm House, Bletchingley Road, Nutfield, Surrey, RH1 4HW <https://www.emergencyuk.com/>

19-20 September 2018 Homeland Security (HLS) Indonesia at the Jakarta Convention Center, Indonesia. The Organisers of Milipol Asia-Pacific have launched this inaugural biannual Homeland Security conference and exhibition. It is dedicated to bringing the latest expertise, products and solutions to address growing requirements in counter-terrorism, homeland security and law enforcement including piracy and illegal fishing, illegal immigration, drug smuggling, and criminal activity. <https://www.hlsindonesia.com>  
[contact@info.milipolparis.com](mailto:contact@info.milipolparis.com)

1-4 October 2018 Public Safety Drone Expo. Reno, NV



**THE COMMERCIAL  
UAV SHOW**

NEW APPLICATIONS & OPPORTUNITIES FOR UAVS

14 - 15 November  
ExCel, London



AUSTRALIAN INTERNATIONAL AIRSHOW  
**AVALON 2019**  
AND AEROSPACE & DEFENCE EXPOSITION

GEELONG AUSTRALIA

26 FEBRUARY - 3 MARCH 2019

[www.airshow.com.au](http://www.airshow.com.au)



**HL**

**HELICOPTER LINKS**  
The online yellow pages of the helicopter industry<sup>SM</sup>

London 23 October 2018...  
**Have you booked  
your stand yet?**

**PR**  
**POLICE**  
RESETTLEMENT  
EXPO

If you are leaving the police force or have left recently the Police Resettlement EXPO is the event for you...

- \_ Specialist recruitment agencies looking for law enforcement and policing experience
- \_ Regional transfer opportunities
- \_ Clients recruiting ex-police officers and staff with your skill set
- \_ CV writing and LinkedIn profiling
- \_ Financial / Pension advice

THE EXPO IS FREE TO ATTEND AND WILL PROVIDE YOU WITH SOME VALUABLE INFORMATION ON YOUR NEXT CAREER MOVE.

**If you are interested in attending or exhibiting, please contact us on 020 8166 0616 or email [expo@securityclearedjobs.com](mailto:expo@securityclearedjobs.com)**

**[www.policeresettlementexpo.com](http://www.policeresettlementexpo.com)**

**Our next EXPO is to be held at The QEII Centre, London on the 23 October 2018**

**Doors open  
10.00am**

**Last Entry  
14.30**

**Event Closes  
15.00**