

## LAW ENFORCEMENT

### ZAMBIA

It is reported that twenty officers from the Zambia Police Services (ZPS) will travel to the United States where they will undergo training in specialised aviation and aerial policing methods at the Albuquerque Police Department in New Mexico.

The Zambian government recently approved plans to set up a specialized police air wing, which is expected to improve the operational capabilities of the force by adding aerial policing to its operations.

In a statement issue after a meeting in which he discussed the training project with Albuquerque Police Department, Inspector General Kakoma Kanganja said the government had allocated funds for the acquisition of all necessary equipment to ensure the successful establishment of the police air wing.

An aircraft hangar is under construction and helicopter acquisition under way but under a degree of secrecy. In January 2015, former deputy Home Affairs Minister Stephen Kampyongo announced the acquisition of three helicopters to improve police operations. No timeline was given for delivery. [Lusaka Voice] *Ed: Zambia Police have been talking up police air support for twenty years or more. In 2005 the Times of Zambia announced a plan to buy a police helicopter whilst making some use of military machines. The training aspect is a new development as is hangar construction.* 

#### **NEW ZEALAND**

**POLICE:** New funding has been found to allow the small air support unit to offer a service 24/7. The New Zealand Prime Minister, Bill English has allocated \$503M towards the bolstering Auckland Police and part of that will be used to enable the extended service by the Airbus Helicopters AS355 "Eagle" helicopter operation.

Eagle currently offers a restricted service that leaves a gap from 3am onwards that criminal elements are aware of and use to their own advantage. The existing 1,800 annual flying hours is to increase to 3,300 enabling the 24 hour availability. [NZ Herald].

### UNITED KINGDOM

The headline story is of course the recent attack on London. It was violent and short [just 82 seconds] so on this occasion air support was not involved in the immediate resolution of the problem. It is cited as a Terror Attack but many sources are now wondering whether this was simply the actions of a deluded loner and Isis simply took ownership of its apparent success.

Regardless of its credentials it was just the type of attack that was long expected and, we are expected to believe, several times thwarted. The March 22 attack was nonetheless significant in aviation terms.

The air resources committed to the post attack Aerial Command Post phase in the aftermath of this one man attack appear to have been adequate but it was noticeable that, on the day, the top cover was not London based. As always intended by NPAS the nearest available resource was committed and the EC135, rather than the Lippitts Hill based EC145, was prominent.

NPAS stated that 3 aircraft from 3 bases were assigned to supporting Westminster and that level of flexibility of resources might be taken as underscoring the basic principle of the national grouping. Air support resources focussed where they are needed. London has long needed more aircraft -three was never enough for any extended operation and the national set up provides the option of additional aircraft without any argument over local availability issues.

On this occasion two of the four EC145s in the NPAS fleet were undergoing maintenance and the one serviceable airframe stationed at Lippitts Hill was stripped of its surveillance role equipment to undertake counter terror training [fast roping/winching etc] and unavailable for other missions. Using the three EC135s was therefore part of the overall contingency planning.

**FRONT COVER: It has taken a long time but a**fter numerous instances where hopes were high the **Pilatus PC-12** has finally been approved for full commercial operations at night and bad weather in Europe following a decision by the European Aviation Safety Agency (EASA). [PAR]

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This emergency services air support activity was all faithfully recorded from on high by the camera of a media helicopter. No air exclusion zone was called. Any visitor to the NPAS control room in Wakefield will be aware that a live television news feed is a significant 24/7 feature so it often acts as an additional resource of situational awareness.

Ed: Although overall numbers are over 10% higher today than they were 40 years ago it has long been stated that police resources on the ground were strained and cash strapped but when the situation arose a short-term answer was arrived at using extended days and cancelled rest days. Again additional resources were available and drawn in from surrounding areas.

**NPAS:** During last month three helicopter units operated by NPAS closed down. The units were in the North West, at Warton, near Preston in Lancashire, in the North East, at Teesside Airport and Wattisham in the East. All three of these units were operating helicopters part of the day and each of the EC135 helicopters will be deployed to other bases or used as spares. Nominally the service to the areas affected was to be covered by the fixed wing service to be set up at Doncaster airport. The original timing for this was around now but the actuality of the delivery and work up time places the fixed wing delivery of service into early 2018.

As previously stated in PAN the Vulcanair P68R that was announced as the new aeroplane for NPAS in January 2014 has yet to be delivered. It is not expected to be in full operational service until 2018, some 4 years later.

The P68 first flew in 1970 as the Partenavia P68 and it and a number of similar craft were trialled by a



The all too regular visits to Doncaster to set up the 2017 PAvCon event again provided an opportunity to photograph the latest stage of the fixed wing base build at Doncaster. The roof of the Rubb building was in place when this image was taken on March 22. ©PAR

number of UK police forces in the 1980s and later but none of these led to long term operations. The aircraft of choice was always the Britten-Norman BN-2, a significantly larger type offering the choice of piston and turbine engines.

The light twin was developed into the P68R with retractable undercarriage and has now been further modified to become "true all weather machines and can guarantee we truly operate any time of the day, on all days." NPAS are paying for this certification via EASA this summer. Currently the type is not approved for flight in known icing conditions. The first aircraft due in late June will not be certified but the second, due in August, should be. The first aircraft will be upgraded to the eventual certified standard. [NPAS]



Even now, with the supposed overall cost savings in the service, some police forces declare themselves unable to afford air support. One of the areas likely to be most affected by the cutting of the Lancashire helicopter, Cumbria, has struggled with air support from the start. Martin Plummer, chairman of the Police Federation Cumbria, said Cumbria Constabulary operates without the back up of a police helicopter because the cost is too high. [Evening Mail]

Another self-declared loser last month managed to get the price it has to pay for air support significantly adjusted. Tim Passmore, Suffolk's Police and Crime Commissioner, has revealed that a long, drawn out negotiation over payment to the National Police Air Service (NPAS) has resulted in a significantly better settlement for the county. Last year, Suffolk had to pay more than £800,000 for use of the police helicopter across the county, despite the fact that the force had only used half of the hours billed, which resulted in the constabulary paying for £400,000 of unused flying time. The negotiation process resulted in a reduced bill of £403,352 for air support in 2017/18, a cut of almost half.

The annual report for NPAS 2015-16 has been published. It was clearly written some time ago and the delay was no doubt to tweak the tweaks to make certain that it was a report that would be readily acceptable rather than criticised. At 20 pages it is shorter and smaller than its predecessors. Whether they achieved their aim will be the opinion of the individual reader. The report can be downloaded at: <a href="http://www.npas.police.uk/sites/npas.police.uk/files/files/npas\_annual\_report\_2015\_2016.pdf">http://www.npas.police.uk/sites/npas.police.uk/files/files/npas\_annual\_report\_2015\_2016.pdf</a>

**NATIONAL:** Having had their full-size aircraft air support taken from them many of the UK police forces are resorting to unmanned aircraft to economically fill at least part of their needs and retain them under their control. Some twenty-one forces in England and Wales are experimenting with the technology and its ability to undertake many duties previously undertaken by helicopters owned by individual police forces. Now the first 24-hour police drone unit is to be launched.

Assistant Chief Constable Steve Barry, National Police Chiefs' Council [NPCC] lead on drones, predicted forces across Britain would soon be using them as they are cheaper than helicopters and can effectively undertake at least some of the aerial tasking.

Devon and Cornwall Police, the largest force area in England, has advertised for a drone manager to lead its new dedicated unit, which will be launched in the summer and shared with Dorset. Sussex and Surrey are considering whether to set up full-time units, currently officers in other roles operate drones part-time. Drones are predicted to slash bills for forces. While a helicopter flight is charged at an average of £1,266, a drone can be bought for as little as £1,000, after which the only operating cost is recharging the battery and the often easy to overlook staffing of the operating unit.



Typical tasks include day to day still photography and video of crime scenes and incident sites, monitoring protests, sieges and sports events. They have been tested for use in terror attacks and to track anti-social behaviour.

The NPCC is preparing a report on the results of drone trials, and NPAS is due to submit a £70,000 funding application for drone 'centres of excellence'. [Daily Mail]

Ed: While many elements of the media appear to have embraced the supposed cheapness of the technology they have often glossed over the real costs associated with acquiring sufficient equipment and transporting it the the scene. Others have been more sceptical in actually pointing out the not so hidden staff and technology costs and availability. In larger areas it can take hours to get the equipment to the scene.

The UK police have more manpower today than they used to but they have disappeared off the streets into a whole tranche of specialist roles that are at best reactive. The staff of control rooms, firearms and even air support are all sitting around waiting for something to happen—rather than plodding around the streets, highly visible but still effectively indoors waiting for frantic activities that can take up just 82 seconds of a given day. Ditto UAV staff.

Also of interest is that among the images regularly used in the storylines were those of Merseyside police operating a UAV with an officer wearing a first person view (FPV) pair of goggles - 100% illegal in the UK as the CAA stipulate visual line of sight. Also Merseyside are famous for no longer using UAVs. In November 2009 Merseyside police acquired a quadcopter, and in February 2010 announced that they had made a first arrest in the UK based on drone technology. Unfortunately it transpired that the police did not have the required Civil Aviation Authority (CAA) permission to fly the quadcopter and they were grounded while they filled in the correct paperwork.







After resuming operations the drone crashed into the River Mersey in October 2011 after losing battery power and that was the end of that type of aviation in the area.

It had been and interesting experience and it brought to the fore some of the technical and operational issues that seem to be being set aside even now as inconveniences. They have their place but few actually assess that place from a critical viewpoint.

NPAS has been explaining its view on the use of drones. In a new video, Captain Paul Watts, NPAS chief pilot, said that, whilst using drones may be useful, manned aerial vehicles still have the advantage in SAR and policing. "Most drones are limited by their battery life to 20 or 30 mins," Watts explained. "You cannot guarantee that a police incident will only go on for 20 to 30 mins."

UAVs' limited range and small field of view are also cited as reasons that helicopters are superior. Watts describes helicopters as 'airborne command and control platforms', and their ability to control an incident from the sky is unmatched by drones.

Although the technology used by the military abroad may one day come to the UK, said Watts, the UK's busy airspace may limit the use of drones. To allow a large drone to operate in a densely-populated area, it would have to be able to observe other airspace users. Watts says that current technology does not allow this to happen. There are some situations where drones can be useful to NPAS, including perimeter surveillance, said Watts.

He does however predict that advances in future technology will mean less helicopters having to be operated, which could result in reduced cost. <a href="https://www.youtube.com/watch?v=6i6WYvvdQTI">https://www.youtube.com/watch?v=6i6WYvvdQTI</a> [Air Med & Rescue]



POLICE AVIATION CONFERENCE 5-7 JUNE 2017 DONCASTER, SOUTH YORKSHIRE



**VOLUNTARY SECTOR:** Coming next month is the rerun of a thirty year old UK Home Office experiment that has been the measure by which the efficiency of air-support was judged.

'Exercise Northumberland - O'Donnell Revisited', will take to the northern skies of Britain on 6-7 May 2017. The O'Donnell Report was a fairly crude exercise where the Home Office brought together the aircraft of some now defunct police air units to see how easily they could search for and find 'bodies' laid out on the ground.

Dr. S O'Donnell attached to the Home Office Scientific Research & Development Branch in London penned a concise thirteen-page report bearing the less than inspiring title 'The Comparative Rate of Searching by Police Aircraft and Men on Foot'. For all its drawbacks this report — The O'Donnell Theory' - represents one of the few scientific assessments of the value of aircraft in the rural search mode.

Late in 1987 the Home Office set in train a study to assess the cost-effectiveness of using aircraft for searching moorland. It appeared to them that the trial was a world first. In retrospect it is clear that it was, and remains, unique. A series of trial searches for simple targets was arranged over heathland in Staffordshire and Hampshire. The aircraft employed were a Bolkow BO105, a Britten-Norman BN-2 Islander and a Brooklands Optica. None of the aircraft or ground searchers used electronic sensors; all searching was restricted to the vision of the searcher – although the Islander crews had the use of stabilised binoculars. Using the crude system they were able to provide a measure that stands today. A helicopter could search a square mile in twelve minutes, a fixed wing aircraft 20 minutes but it would take 450 man-hours to search on the ground.

BROCTON CP

Order in which the search objects were found is indicated by the arrowed line.

O'Donnell always intended to revisit the trial with a more sophisticated format but it simply never happened. In 2008 the Home Office Centre for Applied Science & Technology (CAST) conducted a further search exercise in Cannock Chase. On this occasion there were five targets. The ground search party; fifteen members of the Staffordshire Lowland Rescue Team found all the targets within two hours. The police helicopter, an EC135 with a EO/IR camera left the search area after 50 minutes, to refuel, after finding four of the five targets. The upcoming trial with a range of aircraft that were not available in 1987 and in 2008 will add a new set of data to the study of man, and dog, versus aircraft when searching for missing persons in a rural setting.

The new experiment by the Northumberland based Centre for Search Research and Newcastle University Business School, will see trained searchers from the Northumberland National Park Mountain Rescue Team cover an area on the ground while a similar area will be searched by an air scenting search dog and three small unmanned aircraft (SUA), two rotorcraft and one fixed-wing.

The manned aircraft, total five and offer a number of configurations, high wing, low wing, a light helicopter (Robinson R22), an autogyro and a flex -wing. In the main this will be a search which compares a visual, and a air scenting dog search on the ground with a photographic survey and a visual search with a range of manned and unmanned aircraft. Each will

The Comparative Rate and Men on Foot

Or S O'Donnell

SCIENTIFIC

DEVELOPMENT

take turns to search the whole area and it is hoped that more scientific detail can be added to the previous O'Donnell inspired tests.

Both NPAS and HM Coastguard have been invited to send observers to the search exercise in Northumberland in May, but at this point their attendance has to be confirmed. All of the five manned aircraft, together with one of the small unmanned aircraft will be flown by members of the Sky Watch Civil Air Patrol which, together with the Northumberland National Park MRT, are members of the UK's voluntary sector. Each of the aircraft and crews involved will have trained for the mission prior to the event.

A precis of the original report can be read on the *Police Aviation News* websites.



**NEVADA:** The first American Airbus Helicopters H145 [also known as the BK117D2] completion in law enforcement configuration in the United States is to serve in the Las Vegas Police Department. The aircraft displayed at the recent HAI Heli-Expo in Dallas Texas was understandably displayed as a 'first' without reference to the airframes already flying in the LE role in Europe.

Nonetheless the aircraft offers a number of interesting Internationally sourced features including the use of an ECMS EAD03 rappel system [from Germany], steps produced by Meeker [Canada] and an L3 Wescam MX-10 EO/IR sensor turret also from Canada. Las Vegas has long been loyal to the US brands of Bell and MD and this appears to be the first instance of them operating a European airframe.

**TEXAS:** The DPS Aircraft Operations Division is currently in the process of meeting the requirements of ALEA Accreditation. The unit is composed of 48 pilots, 16 tactical flight officers. The Division currently runs a fleet of fourteen American Eurocopter AS350 helicopters, one American Eurocopter EC145 twin engine helicopter, seven single engine Cessna airplanes and a twin engine Aero Commander airplane primarily used as an executive transport. Recent arrivals in the aircraft line-up are the Pilatus PC-12 Spectre and the Cessna 208 Caravan. All of the DPS pilots hold commercial pilot licenses with instrument ratings, and receive recurrent pilot training annually. All pilots are certified in night vision goggle (NVG) flight operations.

Although nominally restricted to four basic types there are a number of operational configurations within the basic facts. There are different configurations within the AS350 fleet, early AS350B2sand later B3s, and the Cessna's are a mix of the model 206 not equipped with sensors and recently acquired 208 Caravan's that are EO/IR equipped. Current expectation is that the 206s will eventually make way for 208s as the new Trump Presidency has already brought the promise of increased funding to the unit. A second PC -12 was delivered in late February.

Headquartered in Austin the DPS has units spread evenly across the state in Alpine, Amarillo, Corpus Christi, Dallas, Del Rio, El Paso, Houston, Laredo, Longview, Lubbock, McAllen, Midland, San Antonio and Waco. The role is primarily law enforcement with several additional roles – not all of them fully funded – including SAR for which some rotary airframes carry hoists. As with most operations compromise is the rule.



Not something that has become a regular feature in Europe is the airborne emergency services air show. From time to time there are such gatherings but there is no structured programme or organisation involved—the aircraft might just turn up at a local fete simply for some ad-hoc meet the people publicity but it is rare for more than one organisation to make the effort.

There is more structure to the events in the USA and they are sold under a common banner of 'American Heroes' but organised locally by a local group of airborne emergency services personnel from a local air ambulance, police or fire operation. Nonetheless they appear across the USA under a similar banner and ethos.

At the recent event [Saturday March 25] in mid-Florida one of the prime movers was ALEA pilot and safety officer Bryan Smith of the Sanford Airport based Seminole County Sheriff's Office. Naturally the venue was just down the road from his unit at the Oviedo Mall.

It was American, not a little brash in its marketing and played up the hero worship stuff but that is what the US public expect so that is what must prevail. The event drew a good number of emergency services helicopters and organisations and attracted a good size audience. [images by Bryan Smith]









## **AIR AMBULANCE**

### **UNITED KINGDOM**

**THAMES VALLEY & HIOW:** Two UK air ambulance charities have recently collaborated to create a new post – under the title of Head of Operations, the candidate will be responsible to the CEOs of both organisations.

Thames Valley Air Ambulance and Hampshire & Isle of Wight Air Ambulance retained Greys Search and Selection to find a candidate to cover the new role. The two are geographically adjacent, and already have ties with each other – it was no coincidence that each upgraded to new EC135T3s (ahead of the type being renamed H135) around the same time, and both contract with Babcock MCS Onshore for the provision of pilots, maintenance spare aircraft.

**ISLE OF MAN:** The Isle of Man's air ambulance service will be run by a new provider from 1 April. Woodgate Aviation, based in Northern Ireland and having past experience in operating in the island will take over the multimillion-pound contract from the existing provider Capital Air Charter to serve a need that usually sees about 350 patients transport each year from the Isle of Man to the UK for specialist treatment.



The company will have one fully-equipped aircraft dedicated to the Isle of Man service with additional back -up when required in the contract which is scheduled to operate until April 2020. The company, which has bases at Belfast International and Ronaldsway airports, currently provides Northern Ireland's air ambulance service.



**KENT, SURREY, SUSSEX:** After a period of future planning confusion it appears that the charity now wants to move operations back to where it started at Rochester Airport near the River Medway in Kent.

After seventeen years at its donated base on the edge of an industrial estate at Pattenden Lane, Marden the charity is again talking of moving. They are now saying that the confined space Marden property is no longer a viable site and have applied for permission to build a new base at Rochester Airport, 15 miles away.

This is a reversal of the original plan – one of a number in recent years – to make the Pattenden Lane base fit for purpose. Far reaching plans to set up a new base at Paddock Wood fell through and they were followed by a plan to team up with Specialist Air Services [SAS] and move into empty hangars at Redhill Airport in the west and develop Marden.

All this activity relates to the two new Leonardo AW169 aircraft on order from SAS. They are significantly bigger and heavier than the Explorer's currently operated and the wish to operate at night significantly increases the need for sophisticated base facilities. The site at Pattenden Lane has a good clear area of open fields in front of it but it has its issues when considering the operation of night flights.

The helicopters are to be based at the second site in Redhill, but would use Rochester as a forwarding base to allow them to cover the whole of the South East and get to patients faster. The latest on the long delayed first airframe is that the charity expect delivery this month.

The operation was using basic facilities at Rochester for its AS355 operations back in the 1990s, they progressed to the Explorer by 2000 and then were offered the new build site by developer Alan Firmin. The building brought all the elements of the charity and air operations together for the first time and the hangar was perfectly suited for the Explorer but clearly did not allow for the growth factors involved in the latest aircraft and operational aspirations.



In recent years fog prone Rochester has continued to operate as a forward base, in bad weather or to carry out maintenance and was used by the charity around 150 times last year. The 2015 plan was to centre all operations under one roof and close the sites in Marden [below] and Redhill Airport but the £7.5M plan was unpopular and rejected at the planning stage. In June last year the trust announced it would be expanding Redhill instead, after a hanger became available there. Recent stories about new house building at Redhill do not seem to have any bearing on the new plans. [KOL]



NORTH WEST: Work has started on a £1M helipad at Aintree University Hospital funded by the HELP Appeal, which will give seriously injured patients arriving by air ambulances immediate access to the Emergency Department and specialist treatment. This new helipad will serve patients from across Cheshire and Merseyside, and will reduce transfer time for patients in critical care; at present air ambulances must land on local playing fields, which can increase transfer times by 30 minutes.

The HELP Appeal has been providing significant grants to fund lifesaving helipads around England and Scotland since 2009. The helipad at Aintree, which is being built by BAM Construction, is expected to be fully operational in summer.



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**SCOTLAND:** An air ambulance flight sent from Aberdeen to Orkney to pick up a sick baby flew instead to Sumburgh Airport. The incident occurred after the plane, with an incubator onboard, was intended to head for Kirkwall. After a delay the patient was eventually transferred safely to hospital in Aberdeen by air but an enquiry into the error has been started.

Also in Scotland the independent charity funded air ambulance based in Perth is the increase its hours of availability with the longer hours of daylight now available to it.

### UNITED STATES

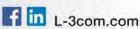
AIR MED INTERNATIONAL: As part of its continuing growth strategy, AirMed International has acquired San Antonio-based Air Medical, the largest fixed wing air medical transport company in Texas. Air Medical's fleet of three jets and two King Air turboprops, equipped for critical care transports, is located at San Antonio International Airport. Those aircraft will join AirMed's fleet, including Beechjet, Cessna Citation, Hawker and Learjet aircraft along with more than 20 King Airs, located at nearly 30 bases.



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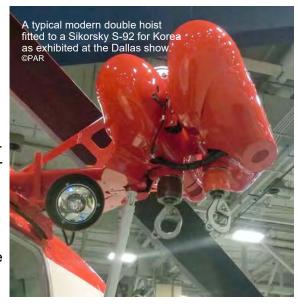




## SEARCH & RESCUE INTERNATIONAL

**DALLAS:** A recent hoist conference in Dallas highlighted the differences in the effect of downward forces between the Sikorsky 61 Sea King era and the modern S-92. Crews are now obliged to double the height at which they undertake SAR hoists. They are now in the region of 180-200 feet because of the airframe weight and strength of the displaced air. This doubling of the height adds additional stresses to extended length of hoist cable exposed to the elements and puts the person on the end of the cable at greater risk. Cable twists, body and basket spin are all greatly magnified.

The experience found with the increased downwash of the newer types has led some to assume that the potential for greater forces produced by such as the projected AW609 SAR will actually negate the capability of that type ever being employed on rescue or will require the hoist manufacturer to solve many additional problems.





**NEW SOUTH WALES:** Hunter Region S.L.S.A. Helicopter Rescue Service (SLSA is Surf Life Saving Assoc.) retired their last of two Bell 412's on March 7 at it's Broadmeadow, N.S.W. base, and was ready for operations with AW139's from the new operational base at Belmont airfield, NSW, a few miles South of Broadmeadow on the same day.

The service had operated the last B412, VH-HRS (33118), a 412SP, for over 23 years, having acquired the aircraft from the Toyota Motor Co. in Japan, in September 1993. VH-HRS was named "Mildred" by the service, after a generous bequeath left to them by a grateful supporter many years ago.

The first Operational flight by the new AW139's was by VH-ZXB (31733) from the Belmont base on March 8. The remaining aircraft in the fleet of four AW139's are VH-ZXA (31727), VH-ZXC (31737) and VH-ZXD (31738), and these will be phased into operational use over the coming weeks. Bell 412EP VH-WSR (36233) was withdrawn from use in October 2016 and is now stored with Eagle Copters, Coffs Harbour, N.S.W. pending sale. The other aircraft in the fleet, Kawasaki BK117B-2's VH-HRR (1050) & VH-HRT (1034), were sold to Airwork N.Z. in May 2014, and leased back, and have been operating from a base at Tamworth pending being replaced by an AW139 and returned to Airwork NZ next month.

There will be a merger with the Northern Rivers Helicopter Rescue Service, in Lismore, N.S.W., and their Dauphin fleet will be replaced by an AW139 this month. This will lead to the Northern Region S.L.S.A. Helicopter Rescue Service having three operational bases, Belmont, Lismore and Tamworth, and a headquarters base at Broadmeadow looking after Administration, Engineering, Training and Marketing





## **INDUSTRY**

After numerous false dawns and after being a mighty long time coming to pass the **Pilatus PC-12** has finally been approved for commercial operations in Europe following a decision by the European Aviation Safety Agency (EASA). The PC-12 NG, the world's best-selling single-engine turboprop aircraft, is now approved for commercial operations. The PC-12 has been in successful commercial use for years in other parts of the world, be it for business, medical transport or cargo flights.

Single-engine turbine aircraft were approved for commercial operations in Europe on March 1, 2017. This important decision by EASA means that the PC-12 can now be operated commercially at night, and under instrument flight rules, across all 32 EASA member states (Commercial Air Transport Single-Engine Turbine in Instrument Metrological Conditions CAT SET-IMC).



The PC-12 first flew in 1991 and received certification in 1994 but despite a constant campaign to be accepted as a fully IFR certified airliner Europe has simply refused the certification for the best part of 20-years. The spacious, comfortable cabin, high loading capacity and large cargo door make the PC-12 an extremely versatile aircraft and one that has been operating for decades across arid deserts, packed snow and open water across the world—but not Europe. This new move will open up interesting new perspectives for commercial operators in Europe. The worldwide fleet of nearly 1,500 PC-12s has now completed over 6 million hours in the air.

**Donaldson Aerospace & Defense**, has developed the first Inlet Barrier Filter (IBF) for the Robinson R66 Turbine helicopter. Certified by the Federal Aviation Administration (FAA) in February as an addition to Robinson's R66 Type Certificate, the IBF will be available as a factory option from Robinson Helicopter Company, authorised Robinson Service Centers, or direct from Donaldson.

Robinson asked Donaldson to help modify and improve the R66's filter system after receiving customer requests for improved engine protection. The R66 IBF is approved for year-round operations, and designed to reduce operating costs and enable longer engine life – all without experiencing performance

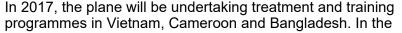


penalties. It features high-performance oiled media and a flexible filter design that stores flat but flexes during installation to provide 320 degrees of coverage, including exceptional drive shaft protection. Donaldson introduced IBFs to the helicopter market 14 years ago. Since then company IBFs have been installed with regulatory approval on AgustaWestland AW109E/S/SPs, AW119 Koalas, AW119Kes and AW139s; Bell 205A1s, 206Bs, 206L-3/4s, 206L-1(C30)s, 230s, 429s and 430s; Eurocopter/Airbus EC130s, AS350B/BA/B1/B2/B3/B3es and MD Helicopters MD 369Hs, MD 500s and MD 900/902s.

**Airbus Helicopters** has delivered the 700<sup>th</sup> helicopter into the Canadian market, an H125 to the Nova Scotia Department of Natural Resources. The Department's mandate includes; development, management, conservation, and protection of forest, mineral, parks and wildlife resources as well as, administration of the province's Crown land.

The aircraft delivery is part of a fleet renewal for the province following a competitive process and will be the first delivery of four H125's that has been awarded to Airbus. The aircraft will be flown in the province of Nova Scotia, supporting a variety of missions including; Firefighting, Forestry program support, Wildlife Surveys, Search and Rescue and Geological Surveys.

**Orbis**, one of the world's leading eye charities has reached a major milestone in patient care, delivering over ten million treatments in a single year, its highest figure in five years. Orbis's new 'third generation' flying hospital, a unique aircraft that plays a vital role in the fight against avoidable blindness, was in the UK for the first time last month to launch Operation Sight an extensive new campaign for 2017.





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past, the plane has flown to: India, Bangladesh, Nepal, China, Vietnam, Ethiopia, South Africa, Ghana, Zambia, Cameroon, Peru, Mongolia and Indonesia among others.

In early February Napoli Shkolnik PLLC, on behalf of its clients, filed suit against **AgustaWestland** Philadelphia Corp. in the United States District Court for the Southern District of California. AgustaWestland is the North American distributor of Agusta A1091A and A109A MK II helicopters. These helicopters were identified last year by the FAA as being defective. As the Complaint notes, "[b]ecause of the tiny interior cracks that may develop with the aircraft's blades, the FAA requires owners to engage in a four-hour inspection process prior to using the aircraft. This effectively renders the aircraft unusable. Nor is the defect remedied by blade replacement because all available replacement blades would suffer from a similar defect and re-



quire the same onerous inspection process after 500 hours of use."

According to the Complaint, AgustaWestland deceived purchasers by knowingly failing to disclose this defect when the helicopters were first sold and, even after the FAA's warning, failed to do anything to compensate owners in any way. The complaint alleges claims under California consumer fraud and warranty laws, as well as common law fraud claims. Napoli Shkolnik will be filing additional lawsuits on behalf of owners in other states. [HAI]

**Goodyear** is giving up on its well known fleet of helium filled fleet of blimps, but is to continue flight operations with a new design of semi-rigid dirigibles that will externally look the same.

The frame in the aircraft means they maintain their shape when the helium is drained where the blimps fully deflate. The new airships are faster, quieter, larger, easier to fly and more manoevrable than the blimps it introduced more than 90 years ago. The company plans to keep calling the new models blimps simply because Semi-rigid Dirigible doesn't roll off the tongue too well.

The new craft is similar-looking but is 246 feet long, 50 feet longer than the old blimps, has three engines instead of two, and will reach over 70 miles per hour



**LOGIMAP**, the creators of the MISSIONMAP Airborne Mission Management System have partnered with Panasonic Toughbook Australia in donating a hardware/software package to Rhino Air a U.S. charity dedicated to using helicopters with advanced thermal and night vision technologies to prevent the needless slaughter and poaching of Africa's Rhinos and Elephants.

MISSIONMAP performs the key functions of navigation, mission management and optional EO/IR sensor control for specialised airborne operations.

Panasonic Toughbook Australia recently donated a CF-19 convertible tablet PC and a flagship CF-31 rugged laptop to Rhino Air. The MIL-STD devices are water and dust resistant, rugged and drop resistant and are sunlight readable with touchscreen functionality.

The CF-19 is best suited for use within the aircraft converted into its tablet mode, while the bigger CF-31 complements the operation by being set up at the base of operations

The Toughbooks were presented to Rhino Air CEO Eric Rudinski by LOGIMAP Director and software architect Angus Oliver at Heli-Expo 2017 in Dallas and will be introduced to Rhino Air operators in South Africa in May. <a href="https://www.rhinoair.org">www.rhinoair.org</a>



**RUAG Aviation** integrated a pilot assistance and helicopter safety solution on the Airbus Helicopter EC635, on behalf of the Swiss Air Force, for use in recent North Atlantic Treaty Organization (NATO)-sponsored trials. The goal of the international trials cited technology- testing for enhancing safety during helicopter operations in limited visibility environments. Held at Alggialp, Switzerland, the NATO trials focused on Degraded Visual Environments (DVE) caused specifically by snow, or whiteout conditions. The Swiss DVE whiteout trials operated out of the Swiss Air Force helicopter base in Alpnach, Switzerland, where RUAG Aviation also maintains an independent Center of Excellence for helicopter maintenance, repair and overhaul (MRO). The DVE trials ran from 20 to 23 February 2017. Most Swiss police air operations are undertaken using examples of the EC635 simply marked with added police transfers.



Hong Kong business aviation consulting firm **Asian Sky Group** (ASG) has released its highly-anticipated Year End 2016 Asia Pacific Civil Helicopter Fleet Report.

This is the fourth consecutive year ASG has produced the report and it again features a detailed breakdown of the Asia-Pacific helicopter fleet (excluding pistons) by fleet size, replacement cost, mission segments, size categories and OEM.

Highlights of the report include:

The Asia-Pacific civil helicopter fleet (excluding pistons) numbered 3,924 at the end of 2016, an increase of 4% over year end 2015. This increase is notably smaller than in past years, with only half of the 34 countries experiencing y-o-y growth. China remained the region's growth driver – as it has for the past few years – adding 85 helicopters in 2016, an increase of 21% y-o-y.

The Asia-Pacific region's fleet continues to be largely positioned in four countries. In unit terms, 61% of the helicopter fleet is based in Australia, Japan, China and New Zealand. Australia represents the largest



market overall and is the largest market for Bell, followed by Japan, the largest market for Airbus and Leonardo, and China, the largest market for Sikorsky. New Zealand follows these three, with the largest market for MD.

In terms of Replacement Cost, the "big four" OEMs (Airbus, Bell, Sikorsky and Leonardo) collectively make up nearly 90% of the market, with Airbus at 43% and the other three making up 47%. Today, the Asia-Pacific fleet includes a wider variety of helicopter mission profiles than ever before, with 54% of the fleet in multi-mission use, followed by 12% for corporate and private, 9% for offshore operations, 7% for SAR and 5% for EMS. In replacement cost terms, offshore has become the largest segment, with 21% of the fleet, followed by SAR at 11%.

**Spidertracks** the New Zealand Aircraft management specialists are celebrating their 10<sup>th</sup> birthday this year and reflecting on the challenges and opportunities of starting a global technology company in New Zealand.

In 2017 Spidertracks is a thriving global tech company, providing industry leading asset and safety management capabilities to thousands of aviation operators across the globe. An incredible milestone for what began as a good idea between a few mates in the back-blocks of the Manawatu some decade ago now. The Spidertracks story began when a helicopter went missing on a flight from one end of New Zealand to the other. It took 31 helicopters almost 1,000 hours of flying time over 15 days to find the wreckage. Watching this unfold was a local helicopter pilot and a young engineer who thought that nothing like this should ever happen again. After two years of building and testing in a garage, the first 'Spider' was born. Since then, Spidertracks have tracked almost six million flight hours of aircraft around the world. With Spiders operating in 101 countries, around 700 flights are taken every day



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## **ACCIDENTS & INCIDENTS**

- **5 March 2017 Bell 412EP JA97NA.** Nagano Air Rescue. A rescue helicopter carrying nine people has crashed snow-covered forest on the side of Mount Hachibuse, about 150 miles northwest of Tokyo, central Japan during a training flight. The occupants were seven firefighters, as well as a pilot and an engineer. The Bell left Matsumoto Airport and was en-route to a training site at Takabocchi when the crash occurred. Three men were pulled from the wreck and were airlifted to nearby hospitals but pronounced dead, and two others found later were unconscious. Police said they believe the remaining four are still trapped underneath debris of the helicopter. The wreck ended upside down but there was no fire. [ASN]
- **5 March 2017 AgustaWestland AW139 I-TNCC.** Vigili di Fuoco, Trento. Aircraft with six person aboard on a mission to rescue two hikers from a mountain, Nambino mount, near Pinzolo, Italy at 2,650 metres rolled over. The doctor was injured. Mechanic was severely injured. Other occupants were slightly injured. Bad weather conditions during the mission have been cited as a factor. [ASN]
- **6 March 2017 Bell 407 N922TG.** Air ambulance of Aeromed, Tampa General Hospital, Florida. Operated by Metro Aviation. The Bell departed the base for a scene call. While on climb out at 600 feet and 80 kts a large bird came down through the rotor system and struck the co-pilot side windscreen. The bird broke the windscreen and entered the cabin. Being a single engine aircraft, the co-pilot station was occupied by the foot end of an empty stretcher. No one was hurt, but the crew did come in contact with the turkey buzzard. Returned to base and landed safely. [Concern]
- 6 March 2017 Pilatus PC-12 VT-AVG Air ambulance operated Air Charter Services for by the Medanta Company a multi-specialty medical institute in Gurgaon, Delhi, India crashed en-route in Thailand. The air ambulance was flying from Delhi to Bangkok to collect a critically-ill patient. The aircraft with two pilots and three Medanta doctors was about 20 minutes away from Bangkok when it developed a snag. The Royal Thai AF airfield at Nakhon Pathom was the closest when the problem occurred. The aircraft crashed in a field outside the boundary wall of this airport. And then caught fire. The pilot, Arunaksha Nandy, died after suffering 80% burns and Dr.Shailendra and Dr.Komal are in the ICU. One doctor has suffered 45% burn injuries. The three others aboard have got less than 24% burns. The single-engine aircraft had taken off from Delhi at 8.42am on Sunday. It took a refuelling stop in Kolkata and took off from there at 2.25pm for Bangkok. A few hours later when the aircraft was over 700km from Bangkok, it developed a snag and crash-land in a field near the nearest airport, Nakhon Pathom in central Thailand soon after 7pm (all times local). It is reported the aircraft did not have a cockpit voice recorder (CVR) and flight data recorder (FDR) [Times of India]
- 8 March 2017 Airbus Helicopters AS365 Dauphin N520CF Air ambulance of CareFlight Air and Mobile Service, Dayton, Ohio, USA operated by Air Methods. Crew walk around confirmed that the helicopter was in flight worthy status with all doors secure. Upon departure, crew confirmation of all doors secure with latches in appropriate flight position. No door warning light was illuminated. During flight, nurse noted that there was more light coming through top of the door on patient litter side. Upon closer look, the nurse noticed that the latch and pin was in the locked position, however the pin was not seated in the pin hole. Notified pilot immediately. Landed at Wilmington airport (closest and most appropriate airport) and nurse opened and re-secured door confirming that it was locked and pin was in place. Flight continued without further events. [Concern]
- **13 March 2017 MD530 XC-PEP** Mexican Police Policía Estatal Preventiva (PEP)helicopter in search pattern at low level loses tail rotor from an apparent wire strike with a light earth wire. The machine then passes through the heavy electric cables in attempt at autorotation destroying the main rotor and tailboom leading to the cabin freefalling to earth where it burst into flames at Mexicali, Baja, California. Four crew fatalities.
- **14 March 2017 Sikorsky S-92 EI-ICR.** Irish Coastguard operated by CHC. Dublin based aircraft crashed into the Atlantic 10km west off Black Sod, County Mayo, the NW coast of Ireland in unknown circumstances. Believed to be letting down to land and refuel when the aircraft disappeared from radar. Rescue 116 was providing top cover for rescue 115 on a medevac off the coast of Erris when contact was lost. One of

www.PoliceAviationNews.com A wealth of on-line resources



the pilots, Captain Fitzpatrick, was found severely injured in the water but she died later. Pilot Mark Duffy, winchmen Ciaran Smith and Paul Ormsby were also on board the Sikorsky helicopter involved. Such was the suddenness of the disaster, the crew didn't even have time to issue a distress call. The main wreckage was not traced for a week allowing another of the crew [the other pilot] to be recovered. Recovery operations continue as this edition goes to press. [Media]



**16 March 2017 Helicopter.** Ugandan Police. The downdraft of an unidentified police helicopter damaged a house in Biina, Butabika Parish in Nakawa Division, Uganda. A woman and her two children escaped from the wreckage after the low flying helicopter flipped over their house and blew off the roof. No-one was hurt. mechanical condition. Col Ham Kaija, commandant Police Air wing and Capt Aziz Sentamu, who was flying the chopper, attributed the crash to bad weather. [Monitor]

17 March 2017 Eurocopter AS355 New Zealand Police. The police Eagle helicopter made an emergency landing in a suburban Auckland park after crew felt "unusual vibrations." Crew landed in Riversdale Reserve, Avondale. [Media]

**23 March 2017 helicopter**. Police Uganda. A Ugandan police officer died after he was hit by a police helicopter during flight rehearsal at Entebbe Airport, Uganda. Officer Richard Kaweesa, who works with the Counter-terrorism tactical unit, was hit by a helicopter that was landing at the airport after jumping from another that was in the air during rehearsals. [Monitor]



## UNMANNED

Testimony given by Earl Lawrence, the director of the FAA's unmanned aircraft systems (UAS) integration office, before the U.S. Senate Committee on Commerce, Science and Transportation on Wednesday noted pilots of manned aircraft made 1,800 reports of sightings of UAS in 2016. Although there have been no actual reported collisions, the agency has expressed concern over that number, which increased from 1,200 in 2015.

670,000 drones have been registered since the end of 2015, when the FAA opened its UAS registration system, and the agency forecasts another 4.8 million will be sold in 2017. The Part 107 small UAS rule established by the FAA in June 2016 restricts the operation of small UAS to 400 feet above ground level (AGL) within line of sight of the remote pilot.

In the UAE Drones, autogiros and gyroscopes are banned from flying five kilometres from airports and helipads, and some other restricted zones including residential, commercial and sports areas. It is also not permitted to install cameras on such drones or unmanned aircraft.

The Light Sports Aircraft Systems Committee announced the ban, along with ways to regulate drone operations, the terms and conditions of issuing drone import and commercial sale licences last month. It aims to implement mechanisms on issuing such type of licences or for required preliminary approvals. Inspection and controls on drone retail outlets are in place to ensure its adherence to the terms and conditions and registration of drone sale, types, and customisation.

Article 69 of Federal Law No. 20 of 1991 organising and regulating civil aviation activities, stipulates a penalty of minimum one-year imprisonment or Dh50,000 fine or either penalty for illegally flying aircraft without attaining required certificates or licences. Article 70 of the same law stipulates a penalty of minimum three years in prison and a fine not more than Dh100,000 or either penalty for landing or taking off from undesignated areas or outside airports, unless they hold a special permit from the designated entity.

## **PEOPLE**

**YORKSHIRE:** In the wake of the resignation of Bruce Burns the Yorkshire Air Ambulance has been working under temporary measures, these have now been resolved.

Captain Andy Lister the Chief Pilot at the YAA for the last five years had temporarily stood in as the Accountable Aviation Manager or Director of Aviation ensuring safe and efficient management of aviation operations but has now taken over the role full time and the Chief Pilot role has been taken over by Captain Andy Hall [bottom right].

A former Royal Navy pilot Lister left the service in 2001 and spent the next eight years as an emergency services touring Pilot flying for Police forces and other Air Ambulance organisations across the UK. He was appointed Chief Pilot in 2011, with a specific brief to help the Charity gain its own Air Operator's Certificate (AOC) which it achieved in November 2012.

Captain Andy Hall joined Yorkshire Air Ambulance as Senior Pilot based at their Nostell Air Support Unit near Wakefield three years ago with a background of a 23-year career with the Army Air Corps. After a period flying with a supplier of pilots for police and air ambulance services, and working for himself providing training services and pilots for police helicopter fleets he joined YAA.

Two new pilots will be joining in May and double shifts are to be introduced in the summer at Nostell when the NVIS operations start.

Yorkshire operate two H145 helicopters, G-YAAC and G-YOAA from Nostell Priory near Wakefield and RAF Topcliffe, near Thirsk, flying over 1,300 missions a year, an average of three incidents every day.





Thirty years after their deaths in an in-flight collision two California police officers have been honoured. On March 10, 1987 two police helicopters collided. An MD500E operated by the Costa Mesa Police Dept hit a Hughes 300 of Newport Beach PD. The pair were flying in reaction to a vehicle pursuit, in the hills at night. The crews were handing it off, one to the other. The Costa Mesa crew, Officer Libolt and Officer David Ketchum were in the 500E with Jeffrey A. Pollard was a civilian flight instructor in the back seat. All three perished, as the rotor system of the 500E was lost when it contacted the landing gear of the NBPD aircraft. The pilot flying the Hughes 300C, Bob Oakley, survived. The observer bailed out from about 50 feet, and the Oakley made an autorotative landing with no landing gear and no lights into a field besides McArthur Blvd and Bonita Canyon Drive in Newport Beach.

The pair of Costa Mesa officers were remembered by CMPD retirees and the fallen officers' family. The event included remarks by Police Chief Rob Sharpnack and CMPD Chaplain Dave Brooks, who retired as a captain and was a close friend to both officers. The invocation by Chaplain Brooks was followed by a helicopter flying over the crowd. A plaque was unveiled in honor of the two fallen officers. The photo shows Ketchum's grandson looking at the wall. [Orange County Register]

### **MOVE ALONG THERE**

It is being decried as new, but it is not, bound to end in failure, but it may not. Officialdom, the politicians in the main, do not like what they see in the current crop of senior police officers represented by the National Police Chiefs Council [NPCC] the newish name for what used to be ACPO. Indeed it might be said that the name change occurred because they were not much liked either and seemed to be forever linked with making money and odd business and professional practices. If recent reports are to be believed the name change has not actually shaken off the basic problem of distrust.

What is being suggested is that rather than have police chiefs selected from the ranks of the NPCC they should be former chiefs of industry or the military with no direct connection with experience of the police service. Police chiefs from similar backgrounds were common up until the 1940s and some might say that policing was in a better place then.

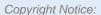
Such people, including the former Marshall of the Royal Air Force Trenchard, top, and Captain Lynch Blosse, right, who were at the forefront of air operations in London and Leicesterbrought much new thinking to air policing but their like has not been the style since.

We might remember that the architects of the current situation [love it or hate it] are or were ACPO/NPCC members. They are often accused of self serving. In a police career that for most lasts 30 years these people tend to be the ones that actually spent a mini-

mal number of years dealing directly with the general public and have little real street awareness. Whatever the truth with the individuals [and they are all different] it just seems that a lot of people in high places seem to think they have actually rumbled them.



An opening date planned for this year for Berlin's troubled Brandenburg Airport project has been put back again after it was found extra work on technical building facilities and alterations to the sprinkler system could not be completed in time.



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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





### **EVENTS**

### **PAVCON POLICE AVIATION CONFERENCE**

"Interesting times up in Yorkshire" is probably as far as I want to take this. For the first time in some years circumstances beyond my control have placed the event in a [very accommodating and friendly] hotel. Nothing much will change as far as the content is concerned, the only loss is effectively the aeronautical background of Vulcan bombers [no longer in the hangar] and airports. Still I guess we can play with paper darts in the 100 acres of grounds and the site has a helipad so perhaps the vendors will bring in their rotary aircraft after all.

It might be a strange event for the host country attendees but even after the Brexitt takes hold I can promise you this event will be part of the glue that holds the police aviators of Europe to the UK. The latter just need to embrace the concept and reap the benefits before they go off into the wide world outside the EU. Already there are elements of future operations under the continuing rules of EASA that have been facilitated by this event.

So the show goes on and we have a great line up of world class trainers and experts that know their craft and can pass it on to a willing audience. Full details are on the web sites [ www.pavcon.org and www.pavcon.info ] but highlights will include presentations by the hosts NPAS on how to handle CTAC (Combined Tactical Air Cell) where air assets assigned to a major incident come under the operational direction of a single command cell sitting alongside strategic command, NPAS is leading on the implementation across emergency service air support. This concept was put into practice for the first time during extreme weather in the north west during widespread flooding. It is an ongoing learning curve. It is a multi-agency concept and typically brings together an MoD Chinook, an air ambulance, two SAR helicopters and an NPAS aircraft in support of Tactical and Gold commanders.



Another UK centric idea is to encourage local police forces to send officers from all sections of the police to interact with the aviators and sit in on presentations that will improve their knowledge on how to get best value from air support, when to make the choice between NPAS resources and when to consider alternatives such as drones. It might also improve their appreciation of how to assist in night landing an air ambulance etc.

To that end operators and intended operators of drones will be interested in the specialists brought in from the USA FAA and the RCMP in Canada for their feedback on operating dozens of drones not just one or





11 — "Call 'em off!" whined the crook, as General Jumbo came up to him, followed by nearly every boy and girl in the neighbourhood. Word had spread quickly about Jumbo's miniature Army going into action against a thief, and scores of children had come to see the fun. Jumbo looked stern. "You are my prisoner!" he said in the gruffest voice he could muster. "On your feet!" The lout shakily obeyed, and gave an extra big shudder as the Professor

came up with the tanks and soldiers. Jumbo arranged them on either side of the captive as an escort. "Prisoner and escort — atten-shun!" rapped Jumbo. "To the police-station — quick, MARCH!" Off went the marching column, and soon the rascal was behind bars, while Jumbo and his Army were back in the Park. And the children held their picnic — with General Jumbo as the guest of honour!

two. This may be new technology today but it is perhaps just the realisation of technology catching up with the boyhood dreams of comic characters.

This is a return to the UK after 8 years so the number of people familiar with the concept is low—the Europeans have a far greater grasp that the intended audience. Now that should make it exciting. This is not about those that set up the event, it is about those present. The attendees talk to each other.

PAvCon prides itself on its ability to call upon field experienced experts to convey to others the knowledge gained by:

- Having the Number two of the NYPD ASU during the 9/11 attacks.
- The Then there is the Award winning Safety and safety management officer and pilot Bryan Smith who has been flown around the world to speak to the police air unit in Botswana, Africa as a direct result of PAvCon. Officers from Botswana are again attending the event in Doncaster.
- Another award winner is Jack Schonely. Awarded citations last year by the ALEA and this year by the Helicopter Association International and the writer of 'Apprehending Fleeing Suspects: Suspect Tactics and Perimeter Containment' he has been a regular visitor the mainland Europe—brought in by both the Dutch and Belgian air units.
- Award Winning Dave Morton the recipient of the 2016 ALEA Award for Meritorious Contributions in the field of UAV certification spent years formulating the basics of how the USA set up their laws.
- He is backed up by an RMCP officer, who was responsible for more UAV's than the total current UK
  police possesses, and able to provide the options based on many years of operation of a variety of
  craft.

These are just a few—PAvCon 2017 is full of award winning presentations and presenters. Whether a ground guy chasing the bad boys, a unit UEO, needing to re-educate crews on avoiding CFIT (Controlled Flight Into Terrain) or a senior officer/decision maker/strategic planner we consistently instil in the workforce and the hierarchy that THEY need to be at this year's PAvCon.

All these people are being flown to the UK to give their take on police aviation and furthermore they are available for networking during and after the day's activities but attendees may have to get in the queue.



4-6 April 2017 Milipol 2017 Singapore Global Security Asia

Asia Pacific's Premier Exhibition & Conference on Counter Terrorism and Security. Global Security Asia (GSA) has achieved an enviable reputation and established itself as the premier "must-attend" International Exhibition and Conference focusing exclusively on Counter Terrorism, Internal State Security, Law Enforcement and Civil Defence in the Asia Pacific Region.

We are delighted to announce that GSA 2015 is now organised in partnership with MILIPOL, the Largest Security Show in the World. GSA 2015, with its sister Shows MILIPOL PARIS and MILIPOL QATAR, will now deliver and showcase Homeland Security and Counter Terrorism Systems and Technologies from around the World.

With the new partnership, GSA 2015 will continue to serve the ASEAN Region and retain its 3- day format showcasing the latest technology solutions in the Defence and Security environment. The Show will address the fundamental issues of global terrorism and internal state security which will present opportunities for specialists and engineers in the vitally important areas of internal state security and counter terrorism to share their experience and expertise regarding the sophisticated threats currently facing Governments in the region.

Besides the familiar National Pavilions, GSA 2015 will also be launching two new Pavilions focusing on CBRNE and a special Pavilion for First Time Exhibitors. Given the international marketing reach the combined GSA and MILIPOL partnership offers, all our Exhibitors and Visitors can now undoubtedly enjoy a significantly enhanced Event in all aspects of the Show.

5-8 April 2017 The 25<sup>th</sup> AERO Friedrichshafen. AERO Friedrichshafen first began as part of the motorsports exhibition. In 1978, the trade show included for the first time some exhibitors from the aviation sector who presented gliders and motor gliders. From 1982, the trade fair duo, which was now called RMF-AERO, made a name for itself until AERO separated from RMF in 1993 to become a full-blown, internationally recognized trade show for general aviation. The success of AERO has depended not only on Friedrichshafen's reputation as a cradle of aviation, which was initiated by Ferdinand Count Zeppelin in the year 1900, but also on a fast-growing ultralight aircraft sector. The Business Aviation segment was launched at AERO 1995 and strong expansion especially in



the fields of avionics, aircraft maintenance and services was implemented in recent years. In 2002, Messe Friedrichshafen moved to its new facilities, right next to the airport, giving a strong boost to AERO's continued growth and development into the world's leading trade show regarding innovations for general aviation.

8 April 2017 *Gazelle 50th Anniversary Commemorative Fly-in* at Middle Wallop, Stockbridge, Hampshire, SO20 8DY. Threshold.aero will be hosting a commemorative fly-in of Gazelle helicopters at AAC Middle Wallop, the Army's home of the Gazelle supported by the Museum of Army Flying and the Army Air Corps. The Aerospatiale Gazelle is a French five-seat helicopter, commonly used for light transport, scouting and light attack duties. It is powered by a single turbine engine and was the first helicopter to feature a Fenestron tail instead of a conventional tail rotor.

It was designed by Sud Aviation, later Aérospatiale, and manufactured in France and the United Kingdom through a joint production agreement with Westland Aircraft. Further manufacturing under license was performed by SOKO in Yugoslavia and the Arab British Helicopter Company (ABHCO) in Egypt. On 7 April 1967, Aerospatiale SA.340 F-WOFH made its first flight in the hands of famed test pilot Jean Boulet. Five decades later, the Aerospatiale Gazelle remains a valued asset to the armed forces of twenty nations worldwide.

o o

The event will open to the public from 10am, with free parking available in the field to the west of the A343 opposite the Museum of Army Flying from 0830 on the day.





# FOSTERING INNOVATION FOR FUTURE SECURITY CHALLENGES

Congress: 4-6 July 2017 | Exhibition: 5-7 July 2017 Singapore



18-20 April 2017 Rotorcraft Asia helicopter show operated by Experia Events the inaugural Rotorcraft Asia helicopter show to be held in Singapore at Changi Exhibition Centre. Dedicated to the thriving Asia Pacific market, Rotorcraft Asia will gather the global civil helicopter industry in Singapore, catering to the growing civil, medical, rescue and parapublic aviation demands in this flourishing region. <a href="https://www.rotorcraft-asia.com">www.rotorcraft-asia.com</a>

2-4 May 2017 ALEA Northeast Regional Safety Seminar Annapolis Maryland. An excellent education and social agenda planned. Take part in workshops and classes, as well as experience the latest aviation products and services displayed in ALEA's corporate member exhibit area. The Pilot/TFO, Unit Commander and Safety Officer Roundtables on Tuesday are open to all attendees, regardless of their assignment. Call Dave McVey ALEA Northeast Region Director <a href="mailto:dmcvey@alea.org">dmcvey@alea.org</a> +1 443-520-3690 <a href="mailto:www.alea.org">www.alea.org</a>

6-7 May 2017 'Exercise Northumberland - O'Donnell Revisited', During the morning of 6 May half of the total area will be searched by a team from the Northumberland National Park MRT whilst the other half will be searched by an air scenting search dog and 3x small unmanned aircraft (SUA), 2x rotorcraft and one fixed-wing. The manned aircraft, total 5, two aeroplanes, a light helicopter (R22), an autogyro and a flexwing will take turns to search the whole area.

11-13 May 2017 The Elite. London Biggin Hill Airport. The Elite Luxury Events Ltd. AvBuyer House, 34A High Street, Thames Ditton, Surrey KT7 0RY United www.theeliteevents.com

23-24 May 2017 MARITIME SEARCH AND RESCUE, Radisson Blue, Helsinki, Finland. Now in its 2<sup>nd</sup> year, supported by the Finnish Border Guard and chaired by Andrew Winbow, Former Assistant Secretary - General and Director of Maritime Safety Division, IMO. The event's key focus for this year is *Innovative Technology and Tactics for Maritime SAR*. www.tdnuk.com +44 (0)1245 407 944 The Development Network Ltd., Chelmsford, Essex CM2 0ND. *Increased vessel traffic and diverse and often volatile cargoes create a potentially lethal scenario for rescuers. Furthermore, Arctic rescue missions offer their own challenges due to harsh weather, reduced visibility and dangerous ice conditions disrupting everything from communications to navigation. Maritime Search and Rescue 2017 brings together communities who deliver an effective and streamlined response.* 

One of the solutions are National Maritime Incident Response Groups. Furthermore, equipment and procedures that aid combatting ship fires, undertaking Arctic operations and dealing with chemical spills are amongst the areas that will be analysed at this year's event. The conference will explore the biggest challenges currently facing search and rescue organisations whilst looking forward to future partnerships, research and technology, www.maritime-sar.com

