Police Aviation News

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NEW ISRAELI H145 DELIVERED CIVIL FIREHAWK ORDERS PILATUS PC-24 and AW109 TREKKER CERTIFIED LI-EXPO WINNERS

LAW ENFORCEMENT

AUSTRALIA

QUEENSLAND: Last month included a story about Insitu offering the police in remote parts of Australia access to a commercial fixed wing drone. Within days more information arrived on the level of drone use by other police in Queensland on a day-to-day basis.

The report states that police operated drones fly over parts of Queensland each week undertaking day-to-day operations in support of policing. Figures reveal drones were launched 52 times by the Queensland Police Service photographic section, hovering for more than 60 hours of flight time during the past year.

Inspector Phil Stevens said the QPS was the first agency to use a drone operationally in Australia, when the Special Emergency Response Team used it during a siege. Now the ten machines operated provide footage for investigations from homicides and police shootings to drug dealing and traffic accidents, they are also being used to map terrain.

They are not seen as direct replacements for the helicopters but with the limited rotary fleet on some occasions they could perhaps be used to briefly stand in for a helicopter while it refuelled.

Demand is growing, and a drones' unit is to be set up in the Polair police helicopter unit, with a chief pilot directing QPS traffic. The chief pilot would act like an air traffic controller and work closely with the Civil Aviation Safety Authority (CASA).



Like the helicopter the drone service is limited to only tiny parts of the vast state and cannot be operated anywhere. It is very tightly controlled requiring an accredited pilot able to submit risk management and flight plans. [Courier Mail]

COLOMBIA

NATIONAL POLICE: The US based company PAE, has received a potential \$423M task order to support rotary- and fixed-wing aircraft platforms of the Colombian national police's aviation unit.

The company will provide administrative, technical, maintenance, training, safety, logistics and procurement services for 59 aircraft units that include Bell-206 helicopters, Cessna 208 Caravans, Bell UH-1H, Sikorsky UH-60L and UH-60A.

The US State Department 's Bureau for International Narcotics and Law Enforcement Affairs awarded the task order through the One Acquisition Solution for Integrated Services contract vehicle. The company has supported the Colombian national police's aviation operations since 2012.

The task order contains a one-year base performance period, seven option years and an additional sixmonth extension at three fixed bases and several mobile bases across Colombia.

PAE [Pacific Architects & Engineers] set up in 1955 supports a range of US Government operations in health care and logistic support across the world and recent contracts have included work in Afghanistan and Curacao. In November PAE flew its low cost Resolute Eagle drone that offers an 18+ hours endurance craft that might suit civilian needs and currently is not tainted by being from a wholly military background.

HUNGARY

NEW ORDER: As 2017 closed the new – or not so new – additional MD902 fleet destined for Hungary remains at Staverton in Gloucestershire with Specialist Aviation Service [SAS].

FRONT COVER: Late last year the Pilatus PC-24 was certified. It is easy to dismiss this as being just another executive jet being declared as ready for its high-powered executive transportation role but Pilatus claim that this will be the replacement for the PC-12 and able to undertake all the police and air ambulance roles that types is already accepted in.

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SAS remain tight lipped on what is going on, but the spotters report the various alterations in paint schemes and the various test flights. The former G-YPOL has now been painted and tested still wearing its original UK marks. Meanwhile the former Yorkshire Air Ambulance MD902s have been re-registered from G-SASH and G-CEMS to G-HDBV and HDMD respectively. They remain registered to elusive Heli-Delta BV but something of a clue to who they really are was presented by the address now given.... Staverton, Gloucestershire. Neither machine has been seen in months. It all adds nicely to the sense of mystery.



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ISRAEL

POLICE: Politics is everywhere and quite clearly it is playing a big part in the replacement of the Israeli police helicopter fleet. The new airframes are the H125 and H145 from Airbus which is clearly a European based organisation. The politics of what is acceptable means that these European airframes must be built in America. On December 20 the Israel Police completed the process of fortifying its operational air space with the implementation of the second phase of the helicopter upgrade project and the acquisition of two H145 helicopters to add to the previously delivered H125s. This will assist in the fight against crime, terror, and road accidents, as well as enhance the police's command and control capabilities. An official ceremony was held in Dallas, Texas, in the presence of Deputy Police Commissioner Zohar Dvir and Commander of the Air Police Division, Nir Rosenthal, in which the Israel Police received the new twin-engine Airbus H-145 helicopters, which will make their way to Israel in the coming weeks. The helicopters will form part of the national firefighting capability and will be able to carry water and help extinguish fires and deploy special forces during an emergency.

The new helicopters have advanced operational capabilities, they upgrade the technological capabilities and on arrival in Israel will complete the process of aerial build-up by replacing the entire fleet of old helicopters with four H125 helicopters and the two H-145 helicopters equipped with the Controp iSky-20HD and iSky-50HD sensor turrets.

The project, led by the Internal Security Ministry, is estimated to cost about a half-billion shekels [\$115M] over a 20-year period, including ongoing purchase and maintenance of the helicopters. The helicopters were purchased through Elbit Systems, which won the Internal Security Ministry's tender, and will be distributed by Airbus Helicopters, which was selected by Elbit in the tender, and who will also handle training and certification of the police air force pilots to fly the new helicopters.





The Israeli Police has now upgraded its dated Bell air assets with products from Airbus Helicopters. Top image is of Deputy Police Commissioner Zohar Dvir and Commander of the Air Police Division, Nir Rosenthal. The H125 and 145 helicopters are equipped with Controp EO/IR sensors.

Images of the hand-over taking place at the Airbus facility in the USA drawn from a Israeli Police video and social media.



UNITED KINGDOM

NPAS: Over the past few years the problem with lasers being directed at aircraft have vied for headline space with an apparently equal threat from drones in airspace. To date neither is known to have resulted in an accident but the fear remains and various 'remedies' are being proposed by industry.



As 2017 closed the UK government announced several measures they were going to bring into law – although exactly when was less clear. One of these was that people who shine lasers at air, ground and sea vehicles could be jailed for up to five years. Offenders will also face unlimited fines as part of the Department for Transport (DfT) measures to boost aviation safety.

Technology has moved on quickly in this area, and the latest eyewear is described as being 'incredibly effective' against laser attacks of the type and intensity that is regularly encountered.

NPAS conducted extensive testing in partnership with Department of Health [DoH] laser experts and others. This included simulation testing conducted using NPAS helicopters and lasers supplied by and administered by the DoH.

Captain Ollie Dismore, Director of Operations for the National Police Air Service added to the DfT message with a statement that underlined and put numbers on the threat to both police aircraft and airliners. The frequency of these attacks is at a worrying level with

1,532 laser strikes on UK aircraft last year officially reported to the Civil Aviation Authority. Some 5% of all UK laser attacks are made on the police crews – who represent 1% of UK pilots.

The National Police Air Service is working with others from across the UK aviation sector in order to manage this risk and to reduce the number of flight crews that become victims of these attacks. NPAS, he said, are in the process of deploying laser protective eyewear for their crews which will allow continued, limited, operations in a laser environment. Having discounted many pairs of goggles, NPAS ultimately arrived at the best available solution for its needs.

After testing eyewear products from numerous manufacturers NPAS has now selected single source protective over specs that it believes provide a good compromise in wearer comfort and deflecting the light threat. They looked at individual issue prescription glasses, but the cost was prohibitive and the technology difficult so at £175 each pair the over spectacles are the answer. In the future there are hopes that the pilots may get a flip down visor but bringing together good optics and a complex curved visor will probably defeat progress for quite a while. Tactics will be 'clunky' with the protective wear being donned only after the threat presents itself but they are happy that they offer good protection. The glasses will allow safe proactive operations where there is a clear need.



Providing four pairs of the *laservision* goggles to each aircraft across the fleet cost a figure approaching £15,000

MINUTES

The latest set of Strategic Board minutes [September] have been published on the NPAS website. There is not a great deal of interesting information in them on this occasion, but it does note that the fixed wing delivery has now slipped to January 2018 for the first airframe and that all the current order will be in the hands of NPAS by April. Unfortunately, subsequent information received from NPAS in the last few days has already moved those expectations to June. They are happy that the technical certification is proven but the mounds of paperwork will slow progress.

The initial task is the confirm EASA certification of the aircraft in Austria and that will take up the first quarter and delay the arrival of the P68R into the UK until maybe early May. Even when in country there are numerous paperwork tasks to be performed to complete the writing and acceptance of the Police Air Operations Certificate (PAOC) even though the staff at Doncaster are working on the paperwork now. So, if this interminable slippage can be halted, we are now looking at next summer for initial fixed wing operations.

I asked the question about how the three pilots maintain currency on their flying hours and it seems that from time to time they have use a privately owned Tecnam twin brought in for their use.

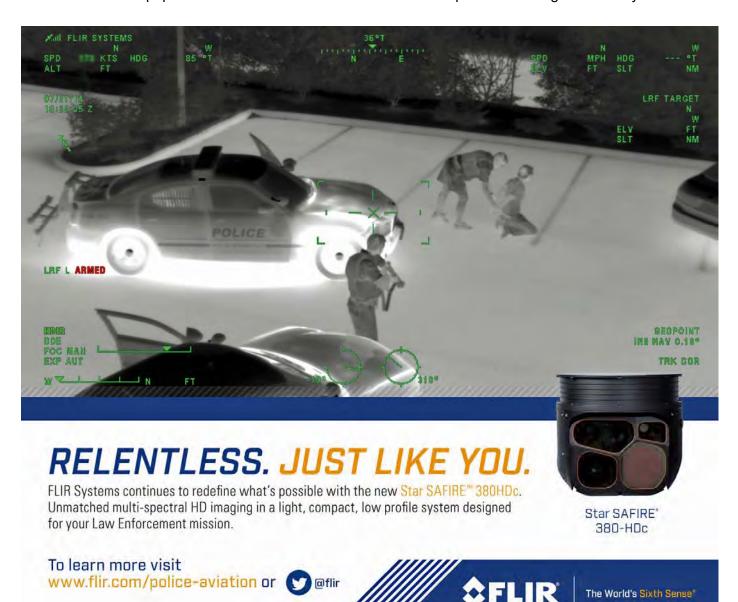
As ever the minutes have areas heavily redacted. The redaction is undertaken at the office of the Police & Crime Commissioner [with little or no reference to NPAS] so the items hidden do not therefore make technical sense from time to time. One such is the hiding of the name of the manufacturer of the *Vulcanair* P68R on page 5. Perhaps they too are after a sense of mystery in hiding the apparently rather obvious!

At the time of the meeting there was a clear flavour of disenchantment with the results of the report by HMICFRS from the members and a clear rejection of the criticism. The full text can be read at http://www.npas.police.uk

REPURCUSSIONS

The fall-out from the HMICFRS report released on December 1 continues as communities who consider they have been lied to take stock of the situation.

The recently enacted decision to close Lancashire's police helicopter base at BAE Warton was back in the media as the local population made the connection between the report and the arguments they had been



fed. Lancashire's police and crime commissioner Clive Grunshaw said the report 'raises serious questions' about the level of service the county gets from NPAS. "There are clear inconsistencies in service and cost which means that Lancashire is not getting value for money from this national service," he added. "I will be working with other areas to ensure a fairer national picture for our police forces but here in Lancashire we continue to explore the use of drones alongside partners in the Fire and Rescue Service."

The report confirmed campaigners' claims that models used to justify the decision to close the Warton air base earlier this year were inadequate. It said: "The modelling gave an unrealistic picture of likely real-world response times." Prior to the closure, NPAS response times in Lancashire were 28 minutes. [Lancashire Evening Post]

Elsewhere, there were complaints of similar tardy information and failure to attend. Typical were the grumbles from Dyfed-Powys in southern Wales.

Ed: With the newspaper text now appearing in Lancashire including little gems like "The decision to close the Lancashire's police helicopter base was made based on flawed information" and "The report also confirmed campaigners' claims that models used justify the decision to close the Warton air base earlier this year were inadequate."

NPAS is now faced with a perception that it deliberately misinformed to close Warton and therefore it stands to reason that it also lied to close such as Wattisham [before the fixed wing aircraft were ready to replace them].

Probably less of a case with Teesside as it is in a crowded area as far as bases are concerned but that yawning capability gap between Husbands Bosworth and the East Coast, London and Newcastle is all but indefensible.

At the heart of many of these problems is youth. Because NPAS pretty much swept all that there was before away it is still learning some of its own new rules.

Some, but not all, of the original forces had an open book policy on what they were up to and used Twitter and website information to say where they were and why. Some have pretty much abandoned Twitter and there is nothing else in place to fill the void. Not exactly an open door policy.



DEFENDING THE LINE

A police and crime commissioner (PCC) who sits on the NPAS National Strategic Board (NSB) has defended the tasking arrangements of the National Police Air Service (NPAS) after a critical inspection report revealed forces are charged "inequitably".

Thames Valley PCC Anthony Stansfeld, who uniquely among Strategic Board members attended last year's PAvCon in Doncaster, insists the NSB considered "every possible way of tasking" and the current model, which charges forces every time they request a helicopter, is the most "logical and fair".



"Whatever formula you go to, some police forces are going to say it's unfair or it's not as good as it was. You're not going to please everybody all the time."

Mr Stansfeld, who ran the British Helicopters support operation on the Falkland Islands and was previously managing director of Veritair the company that supplied helicopters to the South & East Wales police operation, questioned the inspectorate's knowledge of aircraft.

Mr Stansfeld claimed the helicopters are far from obsolete, noting that the Royal Air Force still operated Pumas bought more than four decades ago.

He went on to praise West Yorkshire Police for the set -up of the air service, and note that the organisation will soon roll out fixed wing airplanes, which are less expensive to purchase and run, and stay in the air for longer than helicopters. [extracted from Police Professional]

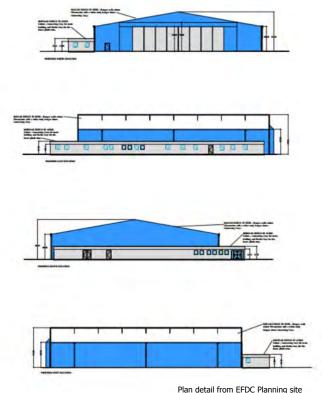


NORTH WEALD

An NPAS media release states that full planning permission from Epping Forest District Council is now in place and that the National Police Air Service (NPAS) will soon start building works.

While there is hangar space for at least four helicopters it is proposed that two helicopters and a fixed wing will regularly fly out of the new airbase, which will operate 24/7 and primarily serve London and the South East along with support from additional NPAS airbases at nearby Boreham Airfield, Redhill Aerodrome in Surrey and (RAF) Benson in Oxfordshire.

Work will begin on the base this month and is expected to be complete by November 2018. Plans posted on the Epping Forest District Council site show that the new structure will be similar in design to that at Doncaster. A prime difference is that the helipad area will be fenced off where the Doncaster doors open onto airside of the airport. A moving gate allows the fixed wing to pick up the taxiway.



The structure is a hangar with tensile fabric covering and ancillary office, training, welfare facilities, plant, store and workshop facilities in modular units on two sides. The layout is almost a mirror image of Doncaster – a steel framed, fabric clad structure measuring 40.1m wide x 46.25m long and featuring a similar sliding door measuring 30m wide by 5m high. Externally the site includes a secure car park enclosure, 50,000 litre fuel tanks for Jet A1 aircraft fuel, a 2,000 litre LPG tank for heating and three landing spots.

The application was made in mid-October and granted with conditions on 11 December.

A long-established model flying club is looking for a new home after approval was given for the National Police Air Service to move to North Weald Airfield from High Beach.

The Epping and North Weald Model Flying Club has been at North Weald since the early 1980s and lists the late Brazilian Formula 1 driver Ayrton Senna among its membership.

But with the arrival of the police helicopters and a fixedwing aircraft, the club is having to look elsewhere.

Club spokesman Dr John Lewis told the district council area planning committee, which approved plans for a hangar and other facilities for the NPAS, that the club had been "universally dismayed" at the NPAS planning application.

The club has some 62 members and has been in existence some 43 years.

Given the situation the flying club now found itself, councillors suggested that the district council, which will be receiving rent from NPAS for use of the airfield, could support the club with any relocation costs. The latest news on that is that use of the former Golf range, also owned by the Epping Forest District Council, has been proposed.

UNITED STATES

GEORGIA: Nearly four months after one of its two helicopters was destroyed in a crash at Briscoe Field that left two officers severely injured, the Gwinnett County Police Department is looking for a replacement.

County commissioners approved a request from the police department Tuesday to buy a new MD 530F helicopter from MD Helicopters Inc. for \$2.8M and avionics installation from Rotor Resources LLC for just under \$1.1M. Insurance from the crashed helicopter will cover nearly \$2.25M while the remaining nearly \$1.7M will come from the Police Tax Contingency Fund.

The county has done work with MD Helicopters before. Two years ago, officials used the company to strip down and rebuild the police department's helicopters from the frame up with new equipment as an alternative to replacing them.



The crash on September 1 left Cpl Michael Duncan paralysed from the waist down. Officer George McLain was also severely injured in the crash. [GCPD]

MARYLAND: Maryland State Police say a civilian helicopter pilot in their aviation command downloaded child pornography at his workplace.

On December 19 David Eldredge, 36, of Preston was arrested at the Easton Section of the Maryland State Police Aviation Command. He faces ten counts of possession of child pornography. Eldredge, who has worked for state police since March 2014, is being held in detention and has been removed from flight status pending investigation.

State police say an investigator got information last week about child pornography being uploaded to a cloud storage account. The investigation led to an IP address tied to Eldredge's workplace. Police determined a non-police internet account had been established and was allegedly used by Eldredge to download images of child pornography onto a tablet. The investigation is ongoing.



AIR AMBULANCE

ANDORRA

HELIAND: Bell Helicopter has announced the delivery of a Bell 429 to Heliand. The delivery took place at the Bell Helicopter's Prague facility. The aircraft is configured to support Helicopter Emergency Medical Services (HEMS) and Search and Rescue (SAR) in Andorra. This marks the 20th HEMS configured aircraft delivered in 2017.

Designed with the future in mind, the Bell 429 meets or exceeds today's airworthiness requirements to enhance occupant safety, with the adaptability to remain at the forefront as mission requirements evolve. Innovation is at the heart of the Bell 429 light twin helicopter. The use of metallic and composite parts in its construction creates the perfect balance between rigidity and flexibility, safety and durability. An advanced avionics and systems monitoring suite ensures outstanding maintainability and aircraft readiness.

CANADA

ALBERTA: Last month Textron Aviation based in Wichita, Kansas announced that it has begun deliveries on an order of nine Beechcraft King Air turboprop aircraft and taken a new order for four more Beechcraft aircraft.

The King Air deliveries of eight Model 250s and one King Air 350, are being made to CanWest Air to provide air ambulance support in Alberta, Canada. They will replace the company's existing air ambulance fleet of King Air B200 aircraft.

CanWest also operates 20 other Beechcraft and Cessna aircraft that support other services the business offers, including corporate charters and cargo flights. [Wichita Business Journal]

KENYA

AMREF: Sixty years ago, in 1957, a flying doctor service was set up for Africa as the brainchild of three surgeons who were also pilots. Originally known as African Medical and Research Foundation [AMREF] Flying Doctors the organisation is part of AMREF Health Africa humanitarian Health Organisation and, now as then, attempts to overcome the vastness of the continent by employing aircraft. The full name is no longer used, they are simply AMREF.

They took advice from the famous Royal Flying Doctor service in Australia and that close relationship continues. Each faces a similar role in bringing effective medicine the face of a vast territory. In 2011 the organisation set AMREF Flying Doctors aside as a separate profitable company with any profits generated feeding back into the humanitarian association to support the work of AMREF Health Africa.

From a base in Nairobi air ambulance services are provided across the whole of Africa, but also throughout the world if necessary. The mixed fleet of short and long-range aircraft allows flexibility. There are two Pilatus PC12 which are perfect for bush airstrips, of which there are many in Africa. Patient extracted from the bush may then be transferred to Nairobi, where there are excellent medical facilities, and where necessary insurance funded longer stages can be undertaken by the jet fleet that includes a



variety of Cessna Citation aircraft including examples of the Citation Bravo, Citation Excel and Citation Sovereign. AMREF has access to nine aircraft of which three are owned.

The air crew is made up of employed pilots, full-time flight nurses, who are all intensive care trained and part-time doctors who are mostly anaesthetist's or emergency physicians. They undertake around 1,000 patient transfers a year which include both international and national flights. In addition, AMREF offers medical escorts on commercial airlines. They are internationally accredited by EURAMI based in Germany.

They offer a membership scheme and have over 100,000 members typically paying a fee of at last \$25pa, annual members and tourists members covered by insurances but are also available to anyone subject to a fee. AMREF provide charity evacuation flights to those who cannot afford it. The latter tends to cost the organisation around \$100,000 annually. The wider organisation also focusses on providing health service and training to the population funded mainly by the profits.

For the future there are plans to expand membership base and increase the owned aircraft fleet so being less reliant upon the leased in airframes.

RUSSIA

MEDEVAC: Russia's State Transport Leasing Corporation (GTLK) signed an MoU with Russian Helicopters during the MAKS 2017 exhibition for 31 medevac helicopters. This number is said to be made up of 13 Mil Mi-8AMTs, 12 Kazan Helicopters and 6 Mi-8MTV-1s. No information on the operators expected to fly the helicopters has been released. [Russian Aviation Insider via Helihub].



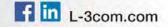


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SWEDEN

GOTHENBURG: Babcock Scandinavian Air Ambulance (SAA) has been selected to operate a patient transfer service for the people of Gothenburg, Sweden. The new 380 million SEK (£34M) contract will see Babcock operate a specially-configured AW169 helicopter from a new base in Gothenburg providing critical service for Västra Götaland County.

Flights will start in 2018 when the operation transfers to Babcock from the current in-house provider. The contract runs for four years, with options for two years' extensions.

The new helicopter is the fifth AW169 Babcock will operate in Sweden. Babcock has extensive experience of running HEMS across countries including Italy, France, Spain, Portugal, Sweden, Finland as well as Australia and the UK. The fleet operated by highly experienced crews and supported by skilled staff, executes around 63,000 missions each year, providing critical air ambulance, search and rescue, firefighting, police and civil protection services.

UNITED KINGDOM

GREAT NORTH: The shell of a helicopter is being transformed into a training resource for medics from around the world thanks to a group of students in County Durham.

The fuselage of a 1990 Aerospatiale AS365N2 Dauphin is being renovated at South West Durham Training (SWDT), based in Newton Aycliffe. It was part of a complete airframe acquired for parts retrieval in support of its fleet of three Dauphin's used in HEMS work by the Great North Air Ambulance Service (GNAAS). With all the useful parts removed the project to produce a training device utilising the shell was put in train. the charity had the idea of keeping the remaining fuselage for its training courses.

The work will be undertaken over the coming months by around 60 people, including apprentices and full-time learners from Bishop Auckland College and SWDT.



It is a major project that will give students hands on experience. Work has started on the fabrication in which replica, non-certified, parts will be constructed to duplicate the interior of the operational GNAAS Dauphin's. They plan to use some welding, use a 3D printer to print out some parts, paint it and add graphics to make it look just like the GNAAS airframes. There will be replica lights, speakers, drawers, oxygen bottles, and other pieces such as a defibrillator and ventilator inside so it looks just like the real thing. There will be CCTV with screens outside the fuselage so medical students people can observe what is happening inside.

GNAAS offers pre-hospital healthcare training to medics from around the world. Recent participants from Costa Rica and the Netherlands visited to learn from the region's air ambulance and the new training device will enhance that service when it is complete by September 2018. [NE/GNAAS/Dave Thompson]

About the donor AS365N2 Dauphin G-BTEU [6392]. This image by Dave Thompson. The current registered owners are GNAAS but it was first delivered wearing the same marks to CHC Scoria in 1991 before passing to Multiflight in 2012 and then GNAAS in 2014, they permanently grounded it in 2015 after it had flown in excess of 19,000 flight hours. It was at Teesside in the spring of 2017, moving to Newton Aycliffe in September.



THAMES VALLEY: The operation is to introduce a new operating model for the provision of its advanced medical care in 2018. The charity will take responsibility for its clinical governance, expanding the provision of advanced critical care across the Thames Valley.

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Over the last few years, the specialism of Pre-Hospital Emergency Medicine (PHEM) has developed both regionally and nationally. The development of PHEM has changed the access all patients receive to healthcare, be it acute, chronic or immediate.

The charity has worked with South Central Ambulance Service (SCAS) to enhance the care provided to the most immediate and critically injured patients. Improvements include, the addition of doctors onboard, on-scene blood transfusions, rapid diagnosis, and the ability to perform emergency surgical procedures on the roadside.

Heightened financial pressures on the National Health Service have led to the charity seeking to identify a way in which they might take direct control of their future and expand and enhance the vital service across Berkshire, Buckinghamshire and Oxfordshire. [TVAA]

Ed: TVAA will continue to work closely with SCAS to deliver the highest level of care to patients but at the same time take the financial pressures off SCAS and the NHS in general using its charity funds.

WALES: The Wales Air Ambulance Charity has officially relocated its paediatric and neonatal operation to a new base in Cardiff. Before the permanent relocation to Cardiff Heliport, the H135 had been based at Wales Air Ambulance's headquarters in Dafen.

Wales set up its own child centric operation to fend off the nationwide fundraising activities of the Children's Air Ambulance based in Coventry, England. Initially the three H135 helicopters operated were branded as providing a child capability, as the mainstream operation moved to using the H145 the additional airframe was launched to focus on the sector. The emergency patient numbers were always seen to be low but scale able upward with the addition of interfacility transportation. In the past 12 months we have flown over 40 children between hospitals. They now claim to offer the most advanced air ambulance service for pediatric and neonatal transfers in the U.K.



The Cardiff base places the helicopter much closer to the Children's Hospital for Wales and makes use of the existing space and facilities at Foreshore Road. The heliport has had a chequered career and was closed for two years. Wales Air Ambulance also operates three H145 air ambulance helicopters across Wales from its bases in Caernarfon, Welshpool and Llanelli.



UNITED STATES

MONTANA: REACH Air Medical services in Helena has unveiled a newly delivered AStar helicopter to deliver service to Montana's major cities in the eastern and western parts of the state. The bright red 2017 Airbus H125 [AS350B3] helicopter is N64RX (8346)

REACH Air medical also operates a fixed-wing aircraft from its Helena base and has another helicopter at its Bozeman base. [9KXLH]

FIRE

AUSTRALIA

NEW SOUTH WALES: Illustrating the international nature of world forest and brush fire fighting are these images from New South Wales. Correspondent Alan Norris stopped in to Illawarra Airport, NSW and Valhalla helicopters, from British Columbia, Canada, had just arrived for the fire season with their BLR fin fitted Bell 205's and a Bell 212. The other firefighting helicopter companies call them the "Ambulance chasers" as they monitor the information on fires and then head off hoping to get a short term ad hoc contract for each new fire before heading to the next.. Meanwhile back in California and far closer to home for the Canadian operator there was a huge fire!

Alan was in town visiting Touchdown Helicopters based at Illawarra Airport who have two ex-military Bell 205's and the one in the photo on the trolley is always on 30-minute stand by.







Erickson Incorporated, a manufacturer and global aerial services company that has fought fires for nearly 50 years, has returned to serve the citizens of Australia for its 20th year. The October start of the fire season parallels the beginning of summer "Down Under," and Erickson has six S-64 Aircranes located in or en route to Victoria, South Australia; New South Wales; and Perth, Western Australia. The National Aerial Firefighting Centre (NAFC) extended a contract to supply Aircranes for 2017-2018, through Australian partner Kestrel Aviation.

Erickson's first season in Australia began in 1997, with a single aircraft in Melbourne, Victoria and continued to grow and evolve to the current partnership with Kestrel Aviation which serve four states through five bushfire agencies. Erickson is remembered for raising public and international awareness of aerial firefighting effectiveness with 'Elvis' during the critical fire campaigns of 2001 in New South Wales. (All Erickson Aircranes have a nickname painted across the nose of the aircraft.) Four Erickson employees have served for all 20 years of the contract and look forward to returning this year.

UNITED STATES

CALIFORNIA: At the height of the devastating fires in northern California Sikorsky delivered two S-70i™ Black Hawk helicopters to the County of Los Angeles at a ceremony in Coatesville, Pennsylvania. The S-70i Black Hawk helicopters are yet to be customised to a Firehawk™ configuration to meet L.A. County Fire Department's specifications.

A Firehawk helicopter performs aerial firefighting and additionally, can plan missions and direct other firefighting aircraft, and provide emergency medical service transport, search and rescue, and logistic support. Once modified by a specialist outfitter with a 1,000-gallon (3,785-liter) water tank, extended landing gear, single pilot cockpit layout and a medically-equipped interior, the new aircraft will increase to five the L.A. County Fire Department's fleet of Firehawk multi-role helicopters.

Compared to LA County's three existing S-70A model Firehawk aircraft, the S-70i variant includes wide chord rotor blades for increased payload and manoeuvrability, enhanced engine power, a stronger airframe, a digital cockpit with flight management system for enhanced situation awareness, and an Integrated Vehicle Health Management System to monitor the aircraft's operational health. Among improved safety features, the S-70i aircraft includes a terrain and obstacle avoidance system that alerts aircrew to the proximity of potential hazards on the ground.



The L.A. County Fire Department was the first municipal organization to purchase the Firehawk in December 2000.



Within days of that handover, further south in California the San Diego City Council voted unanimously to spend \$9.8M to buy a third firefighting helicopter to add to its fleet. It too is to be the Sikorsky S-70i.

Because of maintenance downtime and the need for inspections, purchasing a new helicopter means that two helicopters will be available always, which isn't the case now.

The Sikorsky helicopter is also big enough to pull firefighting crews out of areas that become dangerous, he said. Cal Fire is planning to buy a dozen of them, according to the chief.

The existing helicopters were both used extensively last week to fight the Lilac Fire near Bonsall, particularly during the night-time hours.

The council separately approved using bond revenues to fund a \$13.7 million hangar for its helicopters that will include living and office space. The facility will be built at Montgomery-Gibbs Executive Airport.



INDUSTRY

Babcock engineering teams have broken new ground by upgrading an EC135 aircraft to T3 specification in-house at Staverton for the first time.

When a contract required an EC135 T3 helicopter, rather than sending an existing EC135T2 model back to the manufacturers for the complex upgrade programme, Staverton engineers embarked on the job themselves.

Turning an EC135T2 into and EC135T3 might sound simple, but, it's a hugely involved task.

While some elements are comparatively straightforward for an experienced helicopter engineering team – for example changing the blades, and installing new controls – there are several modifications required to the outside of the aircraft, including the positioning of air intakes, that require advanced composite work, and everything needs to be approved by the aviation regulators.

The end result was described as "flawless" and a "...tremendous success."

On 7 December 2017 **Pilatus** obtained type certificates from the European Aviation Safety Agency (EASA) and the US-American Federal Aviation Administration (FAA) for the first ever Swiss business jet. Certification of the Super Versatile Jet prepares the ground for initial customer deliveries, which will see the PC-24 business jet take off from Central Switzerland for its entry on the global market.

In 2013 Pilatus announced that the PC-24 would be ready in 2017, and it was. All performance data promised to the first 84 customers have been achieved or even exceeded.

In any project to develop a new aircraft, certification by the aviation authorities is by far the most important milestone, given that it means deliveries to customers may go ahead, generating revenue for the manufacturer. The PC-24 development project was officially announced in 2013, but work on the Super Versatile Jet has in fact been in progress for the past eleven and a half years.

The first PC-24 prototype completed its maiden flight in May 2015. All three prototypes used in the certification programme have flown a total of 2205 hours worldwide so far. Some flight tests were conducted in



extreme environments: in icing conditions and very hot temperatures, at altitudes and speeds not usually encountered in everyday operations. Other tests have included bird impacts, structural stress tests, noise tests and general function. All this to prove that customers may depend on this aircraft to operate safely and reliably always, in line with statutory requirements.

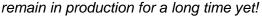
Pilatus invested over 500 million Swiss francs of own funds in the PC-24 development programme. A further 150 million francs went into buildings and state-of-the-art production machinery at Stans to expand production capacity in parallel. Pilatus currently has eight PC-24s on the assembly line in Stans, with 23 deliveries to customer around the world planned throughout 2018.

The very first PC-24 delivery took place at the factory last month to an American fractional aircraft ownership business. The aircraft will be flown to the USA this month. The PC-24's superb flexibility will open up countless new, as yet unexplored opportunities – as a business jet, Medevac aircraft and for other special

missions.

Ed: It is easy to dismiss this as being just another executive jet being declared as ready for its high-powered executive transportation role but Pilatus claim that this will be the replacement for the PC-12 and able to undertake all the police and air ambulance roles that types is already accepted in.

So far so good, but there may be issues getting in the way of that high ambition. The required runway length for a PC-24 is significantly more than the PC-12 so the latter will undoubtedly







Airbus has finally conceded defeat on the H120 (née EC120) and confirmed that the production line has been closed after delivering exactly 700 units. The Robinson R66 Turbine is the reason, and it is a trend identified and predicted some time ago.

It is assumed that the project to re-engine the H120 with a Diesel engine, either as an experimental or a production development will not proceed. [Helihub/PAR]



New to the market from Australian manufacturer **Avlite** is the AV-OL-75, a lightweight solar powered ICAO Type A Low Intensity Obstruction Light. The light produces in excess of 10cd and is suitable to mark aerial obstructions up to 45mtrs in height.

The AV-OL-75 is the smallest and lightest ICAO Type A Low Intensity Obstruction light on the market, and is equipped with Bluetooth® connectivity for convenient servicing via the AvlitePro™ mobile application from a distance of up to 50 meters. Operators save time, maintenance costs and increase safety of personnel by maintaining the light without leaving the ground.

The model utilises a tilted solar array which charges an internal battery during daylight hours, and at dusk the light will automatically begin operation. Contact Avlite at info@avlite.com Australia Sales & Customer Service: +61 (0)3 5977 6128 Americas Sales & Customer Service: +1 (603) 737 1311





Textron Inc. announced that its V-280 Valor has achieved first flight. The V-280 Valor is a next-generation tiltrotor that is designed to provide 'unmatched agility, speed, range and payload capabilities' at an affordable cost. This milestone represents exceptional progress on the V-280 development and brings Bell Helicopter one step closer to creating the next generation of vertical lift aircraft for the US military. The Bell Valor is part of the Joint Multi Role Technology Demonstrator (JMR-TD) initiative and has no assured customer. It is a proposal to provide the US Army with a second-generation tilt rotor craft that might replace all those military helicopters that might cascade down to feed the airborne (US) emergency services of the future. Suffice to point out that Sikorsky has an alternative project with very different technology waiting in the wings.

Bell Helicopter has announced that the company's Canadian facility located in Mirabel has completed its 5,000th aircraft.

The milestone aircraft, a Bell 407GXP, will be owned by China's Shaanxi Helicopter Co. Ltd. (SHC), which had signed a purchase agreement for 100 Bell 407GXPs earlier this year.

Times are difficult in South Africa and even the apparently strong industrial elements are struggling. After a meeting with **Denel** CEO Zwelakhe Ntshepe, CFO Odwa Mhlwana and trade unions, National Union of Metalworkers, Uasa and Solidarity, it has come to light that Denel did not have the funds to pay December salaries to its 4,000 employees. The company has been experiencing extreme liquidity issues, so much so that South African President Jacob Zuma has had talks with Qatar Defence Minister Khalid bin Mohammed Al Attiyah about selling company stakes. Denel needs R350 million in order to pay suppliers and staff, but only have R60 million. [Sunday Times].

The world's largest amphibious aircraft, the China-made **AG600**, made its maiden flight last month, and comes as the latest milestone in the country's efforts to modernise its military.

State television showed live images of the AG600 lifting off from Zhuhai airport in the southern province of Guangdong, which sits on the South China Sea coast.

It returned about an hour later and taxied to its stand accompanied by martial music and greeted by crowds waving Chinese flags.

Xinhua news agency said the aircraft was the "protector spirit of the sea, islands and reefs".

Leonardo ended last year with a trio of positive news stories.

The AW139 global fleet has reached an outstanding milestone of two million flight hours, across all operational scenarios on five continents, while performing a wide range of missions with commercial, government and military operators. This accomplishment was reached just three years after the achievement of the first million showing impressive reliability, effectiveness, safety and supportability across a range of missions.

With the AW139 fleet leader airframe having exceeded 12,000 hours, nearly 900 units are today in service out of over 1000 on order by more than 300 customers in 80 countries worldwide. The global reach of the AW139, assembled in Philadelphia and Vergiate, has resulted in the type becoming a benchmark as the best-selling helicopter in its weight category and the most successful helicopter programme in the last

15 years. The type covers the widest range of applications with high flexibility including SAR, EMS, law enforcement and homeland security, patrol, firefighting, disaster relief, offshore transport, VIP/Corporate transport, utility and military duties.

The Italian National Award for Innovation was awarded to Leonardo during a ceremony held in the Chamber of Deputies.

Established by the Italian Government at the National Foundation for Technological Innovation, COTEC, the Award, better known as the "Premio dei Premi", aims to enhance and support the best examples of innovation in many sectors including industry, design, education and research. The event is part of the National Innovation Day 2017, established by the President of the Council of Ministers.

Leonardo was awarded the prize for the research and development of an electric tail rotor for helicopters, a solution that offers numerous benefits in terms of reliability, safety, maintenance, operational use and fuel consumption, with a significant environmental impact reduction. This technology is part of plans to increase the use of electrical equipment in aircraft systems and propulsion.

Finally the company announced that the AW109 Trekker helicopter was issued with type certification by the European Aviation Safety Agency (EASA). Deliveries will start in the first quarter of 2018. The milestone marks the entry into the market of the latest variant of this legacy airframe for the public services

and utility market. The project, a seemingly simple additional variation on a theme was launched at HAI early in 2014 and has therefore taken four years to come to market.

The Trekker, based on the AW109/Grand range of helicopters, is equipped with skid landing gear and a state-of-the-art Genesys Aerosystems glass cockpit. The cockpit display system provides pilots only with the necessary information to help reduce their workload while flying in challenging environments and in demanding weather conditions. The AW109 Trekker retains the same characteristics of high productivity, excellent performance and flying qualities, high manoeuvrability, robustness and advanced navigation capabilities of the type. Power is provided by two FADEC equipped Pratt & Whitney Canada PW207C turbine engines.



AIR ACCIDENTS

15 December 2017 Sikorsky S-76A N911FK Air ambulance. Monroe County Sheriff's Office Fire Rescue Helicopter landing at the Coral Shores High School when a fire was discovered in the upper fuselage engine bay. It is believed it started prior to landing.





FLIGHT SAFETY

Robertson Fuel Systems and StandardAero announced the attainment of FAA certification of their retrofit-table crash-resistant fuel tank (CRFT) for the Airbus AS350 and EC130 family of light single helicopters. Production deliveries to launch partners Air Methods Corporation (AMC) and WeatherTech Aviation LLC are already underway, with additional orders now being taken from operators worldwide. European Aviation Safety Agency (EASA) certification of the CRFT is expected to follow shortly. The CRFT has been developed by StandardAero and Robertson as a direct replacement for all AS350 models, including the AS350 C, AS350 D/D1, AS350 B/B1/B2/BA/B3 and AS350 B3e (H125), as well as for the EC130 B4. The tank's unique design features a robust crash-resistant fuel bladder, with the same capacity as the legacy fuel cell, and uses several innovations including magnetic field sensor fuel gauging technology and vent system roll-over protection. The CRFT is compliant with the latest FAR Part 27.952 fuel system crash resistance requirements, even when used in combination with a cargo swing.

UNMANNED

In September the **Drone Major Group** was launched, precipitating what they believe is a key milestone for the global drone industry. The company provides critical connectivity to the drone industry for the first time ever and the Drone Major portal will help facilitate the sale of construction related drones, among others, and inform potential buyers about the options that are available. www.dronemajorgroup.com.

Drone engine maker **Orbital** has set up shop in the US, across the river from their biggest customer. The Perth-based business has leased a section on the south bank of the Hood River in Oregon from where it plans to fully launch itself into the US tactical drone market.

Orbital had been looking for the right piece of land in the US where it could build a factory for some time. It will build a new factory on the site, which they have under a five-year lease, and they expect to be fin-



ished by February and ready for UAV engine assembly and overhauls in the first half.

Close by are the facilities of Insitu, a subsidiary of Boeing which makes the drones themselves and is the customer that helped to turn Orbital around in 2014.

Orbital designed the N20 drone engine for Insitu, which is used in the mainly military **ScanEagle** drones. It beat 40 global engine makers for a contract worth a minimum order value of \$US33 million (\$44 million) and a maximum of \$US91 million (\$120 million).

This year it won another \$800,000 engineering contract with Insitu. [Stockhead]

Criminals involved in a conspiracy that entailed flying remote-controlled drones laden with designer drugs, tools, phones and SIM cards into prisons have been sentenced to significant terms of imprisonment in one of the first UK court cases of its kind.

It follows a case in which prosecutors claimed almost daily flights were observed at prisons in areas including the north west of England, the Midlands and Scotland. The prime motive was profit in serving orders made by inmates between mid-2015 to spring 2017. Contraband items flown in over prison walls included synthetic cannabis and other psychoactive sub-



stances. These were wrapped up in parcels hung from beneath the unmanned aerial vehicles. Police closed in on the operators of the prison delivery service after some were caught on film by a hidden camera that had been set up in a nearby field to observe nocturnal wildlife. The fingerprints of some of the culprits were also found on illicit packages.

Not all deliveries succeeded, with prison authorities able to retrieve packages that yielded evidence on the range of material being delivered and who sent it. Authorities are aware of 34 successful deliveries. Eleven defendants admitted their roles in the conspiracy, although the charge sheet also referred to "others unknown" – meaning detectives think there were further co-conspirators who have not yet been identified.

The network who smuggled drugs, mobile phones and even a Freeview box into prisons using drones was been jailed for a total of 28 years.

Once the problem was trying to keep the prisoners inside, now it seems that life inside is a lucrative business. Drones are the weapon of choice for those attempting to smuggle illegal goods to inmates in prisons and the problem has become such a headache that the UK Prison Service and police are to pool intelligence to stop drones flying drugs and mobile phones. The invention of easy-to-fly, remote-controlled aircraft has caused a huge security headache for the authorities that they have yet to find an answer to.

Similar comment is being expressed in the USA.

ees, other inmates, and innocent members of the public.

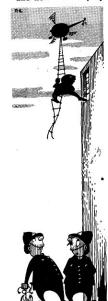
According to the US NIJ (National Institute of Justice*) "A widespread technology that allows people to connect with anyone, anywhere, has created concerns for corrections officials. The use of inexpensive, disposable cell phones has changed the age-old cat-and-mouse game of controlling whom inmates communicate with in the outside world and is creating serious problems for public safety officials."

"In the 1990s, cellular phones were larger and heavier and had audio capabilities only. Today they are lightweight, can be thinner than a match- book, and can send both audio and data, including written messages and streaming video. Although these advances are welcome in society in general, they have had a negative impact on the law enforcement community, as criminals have taken advantage of cellular technology to conduct illegal activities."

In recent years, the use of contraband wireless devices by inmates in correctional facilities has grown rapidly. Inmates use these devices to commit additional criminal acts from behind bars, such as ordering hits, running drug operations, and operating phone scams. Use of contraband wireless devices is a serious threat to the safety and welfare of correctional facility employ-

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Statistics released by Ministry of Justice in the UK show that in 2016 alone over 20,000 mobile phones and sim cards were recovered from prisons in the UK - helping to thwart the attempts of criminals to continue committing crime behind bars.

The Federal Bureau of Prisons in the US confiscated 5,116 cell phones from its facilities in 2016. Based on data available for the first six months of last year it is expected that the confiscations will rise. Solutions are labour intensive.

Two companies from the West Midlands have helped a prison to become the first in the world to use a new system designed to stop drones smuggling drugs, weapons and other contraband over perimeter walls.

The group of businesses include steel fencing manufacturer Zaun. The firm is based just a couple of miles south of Featherstone Prison, which sits alongside the M54 and has been repeatedly targeted by drones. It and Coventry-based PIDs business Harper Chalice are working on prisons including the new £250 million super prison at Wrexham, which serves Shropshire. Other contracts include Les Nicolles Prison on Guernsey.

The companies have developed a new 'Sky Fence' technology.

The work has created a 600-metre shield around the prison in Guernsey to detect remote-controlled drones then uses a series of 'disruptors' – sensors to jam the drone's computer – to block its frequency and control protocols and divert it back to where it came from.

Les Nicolles Prison has ordered around 20 disruptors on the perimeter fence line and within the jail. Identical technology will be used for the £212 million prison in Wrexham but the use of 'disruptors' and even direct action remains a legal problem in many countries.

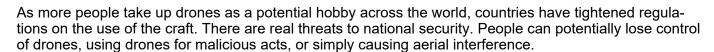
Last year, The Dutch National Police decided they needed to add eagles to their payroll to train and hunt a new type of "annoying" prey, drones.

The Dutch solution was praised across the world and they were revered for their out of the box thinking. None of the Eagles were hurt, but as for the drones, none of them survived. By the end of this past summer, the Dutch police team were reported to have 100 hunting eagles ready for action.

A year later and it looks as if the Eagle v Drone war is over. The programme has been parked up because of unexpectedly high costs, very small demand and the dangers presented to the birds

The training may have been undertaken under controlled circumstances, but it did not take into consideration advances in technology. A simple DJI drone can travel at 50mph and a racing

drone can top 120mph and either can easily injure a bird. Having both the drone and the bird falling from the sky simply doubles the danger to those on the ground. The Dutch police will be looking for alternatives to combat the current problem. [TDB/Politie]



We have just waved farewell to another Christmas where no-doubt thousands, if not millions, of extra drones, both large and small, have been added to the world's supply. Added to the number has been a spike in personal injuries caused to a range of people. I noted a video clip of a young woman with a domestic quad rotor very entangled in her hair had attached itself to yet another story of someone getting severely chopped by an out of control model helicopter. This clip ended with the apparent partner [and apparent video operator] of the footage running the machine again – to further screams of pain. Was he drunk? Who knows or cares.

The main story was that a man suffered multiple deep lacerations to his face and body after a toy helicopter turned into a dangerous weapon in a popular holiday spot on the south coast of New South Wales, Australia.

The 35-year-old was flying the remote-controlled helicopter when it spun out of control at Berry. Witnesses said the man was doing "flips" with the helicopter five minutes before the accident happened. The craft was bigger than a standard toy helicopter, about a metre in length.

As regular readers will recall from the death of young Roman Pirozek in Brooklyn, New York in September 2013 such remote-control vehicles can be dangerous. *The latest is just a reminder of the story in PAN 210 October 2013.* Drones, large and small, can and do kill.

All of which might go some way towards explaining why two police forces thousands of miles away in the UK might set up training courses in Drone operations safety.

Both Dorset and Devon & Cornwall have set themselves up doing safety training. These are not flight training courses, they are apparently more akin to punitive speed awareness courses developed as an alternative to fines and court procedure although they are perhaps a way to get drone owners to register. In the past such courses have attracted criticism for being cash cows and were at least partly involved in ACPO being renamed NPCC.

But with no one force in the UK yet able to effectively explain why they have Drones – they are all in their own words 'exploring' the options – who are they to be telling others what to do? There is no spare money for such work and each and every force is wringing their hands at being unable to afford more 'bobbies' on the beat rather than these 'extra curricula' activities!

Clearing this is one more step in the move to 'Empire Building' on the back of a policing tool that has been regularly described as no more than a long camera tripod.

It also cuts across the commercial opportunities of people better positioned to train and regulate drone use.

3W-International exhibited the new 3W-180 SRE hybrid Wankel engine

https://www.devon-cornwall.police.uk/saferdrones https://www.dorset.police.uk/media/54930/safer drones course dorset a4 poster.pdf

at this year's Xponential early in the summer of 2017. The 3W-180 SRE hybrid is unique in the drive technology for UASs. The engine features 180 ccm and a short-engine mass of 6.8 kg. Its highpower version achieves 38.5 hp at 7500 rpm (rated power is 28 hp at 6000 rpm). A 5.66 hp/kg power-to-mass ratio with a consumption of 340 g/kW at full load results from this. The hybrid system, which feeds in 15 kW for a time (e.g. 30 s to 60 s) independently of the storage system's capacity, is unique. This additional power can be drawn upon when starting a helicopter or during the acceleration of a fixed-wing aircraft. The Wankel engine's benefits here are obvious for many customers. Its construction is compact with few moving parts. The degree of mechanical effectiveness is therefore favourable since there are few friction losses. The compact construction enables greater power density with light weight and modest space requirement. Displacement is smaller compared to other internal combustion engines. Nonetheless the Wankel engine offers high power and torque with very low-vibration engine operation. In contrast to the Otto engine, the Wankel engine consumes less fuel at high rotational velocity. It can be driven with both gasoline and Heavy Fuel (HF).



ortunity to speak to police drone operators

A course to understand how to fly your drone safely,

legally and responsibly



PEOPLE

The Santa Barbara County Sheriff's Office's first helicopter pilot is to retire shortly. Sgt Gregg Weitzman, a member of the Santa Barbara County Sheriff/Fire Air Support Unit, will leave the department after almost 35 years of service. Weitzman is currently on medical leave due to a back injury.

Weitzman's first introduction to the Sheriff's Office was as a reserve deputy while attending university. At age 21, he formulated plans that were to reduce the reliance of Santa Barbara Sheriff's Office on neighbouring units. At that time, the only option if a helicopter was needed for a law enforcement mission was to call the Ventura County Sheriff's Office or Vandenberg Air Force Base for help. It would take eight years to realise his intentions.

Shortly after graduating college in 1983, Weitzman was sworn in as a sheriff's deputy and started taking flying lessons. He worked several different assignments in the early years of his career, including patrol, the Dive Team, Transportation Unit and the Special Enforcement Team, during which time he helped protect President Ronald Reagan at Reagan's ranch. He was also a detective and the senior deputy in Carpinteria after the Sheriff's Office took over providing law enforcement services for



In 1993, newly elected Sheriff Jim Thomas, who supported Weitzman's vision, assigned Weitzman to Special Operations full time to continue his work on a proposed new helicopter unit. He was tasked with finding an affordable way to fund the enterprise.

Through the Department of Defense's military surplus 1208 program, now the 1033 program, Weitzman was able to acquire four aircraft, two flight examples and two to provide spare parts. The Sheriff's Office used funding from asset forfeitures and the Sheriff's Council to pay for work needed to get the aircraft up and running.

In 1996, Weitzman was assigned as the first helicopter pilot for the new Air Support Unit for the first eight years of the unit's existence. In 2003 he was promoted to sergeant and returned to street patrol work for six years. In 2009, he returned to Air Support and remained there when the Sheriff's Office and Santa Barbara County Fire Department merged to form a joint Sheriff/Fire Air Support Unit in 2012.

During his career, Weitzman logged 5,950 hours of accident-free flying time in both helicopters and fixed wing aircraft, was named deputy of the year in 1999 and has numerous other awards and citations.

Weitzman is a flight instructor for both helicopters and airplanes, as well as an advanced ground instructor. He has spent the past 16 years as an ALEA board member and is currently the group's CFO/treasurer. Weitzman also is the co-founder of "Project: Rescue Flight," which has raised more than \$3 million to help rebuild rescue aircraft for the county and related equipment costs. [SYVN]





In the Queen's New Year's Honours list **Sgt Scott Gallagher** receives the MBE for services to policing and the National Police Air Service.

Scott, 49, lives with his family in Connah's Quay, North Wales. He joined North Wales Police in 1992 and has held the rank of Sergeant since 2000.

Stationed in the eastern and central parts of the force, Scott spent a significant part of his service as a community sergeant in Flint until 2008 when he joined the North Wales Police Air Operations Unit. Whilst at the now closed Rhuddlan base he managed the facility providing support to the communities of North Wales. In 2012 Scott managed the transition of the North Wales Unit into the national collaboration of all police air support in England and Wales (NPAS). Since 2013 he has been designated as a Project Manager with NPAS. Scott currently works as part of a team of people delivering change within NPAS predominantly focusing upon aircraft modification, fleet standardisation and replacement. Significantly the refurbishment of 7 aircraft with improved mission equipment, fixed-wing aircraft and replacement aircraft communication system (ESN).

HeliOperations, operators of military helicopters to UK military flying regulations and providers of aircrew, equipment & training to military, civilian & coastguard operators globally have named one Sea King after **Captain Dara Fitzpatrick**.

The Portland, Dorset UK based organisation announced the move after receiving the approval of the family of Dara Fitzpatrick one of the crew killed in the crash of an Irish Coast Guard helicopter last year.

The recently refurbished Sea King ZA166 now carries the name "Dara." HeliOps has a long working relationship supporting Irish Coastguard and many of the company crew members worked with Capt. Fitzpatrick.

The Sea King may have left UK military service but XV666 and ZA166 remain on the military register leased to Heli-Ops and operated under a CFAOS Approval (Military Flying). ZA166 nears completion at Culdrose and will join XV666 ["Damien"] at Portland to assist with the SAR training work. [Twitter]

In mid-December the Board of Directors of Airbus SE decided on a series of Executive changes that ensure an orderly succession in the Executive leadership of Airbus.

Tom Enders (59) has advised the Board that he does not wish to seek another term as Chief Executive Officer (CEO) beyond his current mandate which runs until the 2019 Annual Shareholders Meeting (April 2019). Fabrice Brégier (56), Airbus Chief Operating Officer (COO) & President Airbus Commercial Aircraft has indicated to the Board that, as he does not intend to be part of the selection process for the CEO position in 2019, he will step down in February 2018 and pursue other interests.

Guillaume Faury (49), currently CEO of Airbus Helicopters, will succeed Fabrice in his role as President Airbus Commercial Aircraft.

During 2018 the Board of Directors will assess both internal and external executives for the CEO role with a view to announcing Tom Enders' successor in good time for confirmation at the 2019 AGM.

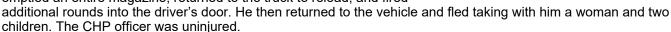
HELI EXPO AWARDS

Throughout mid-December Helicopter Association International (HAI) announced the winners of various awards scheduled to be presented at the annual Salute to Excellence Awards Dinner during the HAI Heli-Expo 2018. The event is the world's largest helicopter trade show and exhibition, will be held at the Las Vegas Convention Center, North and Central Halls, February 26 – March 1. For more information visit heliexpo.rotor.org.

Riverside County (CA) Sheriff's Department Deputies Eric Bashta and Jerry Osterloh are the 2018 recipients of the Salute to Excellence **MD Helicopters Law Enforcement Award**.

On the night of January 11, 2017, Osterloh and Bashta responded to a call for assistance by a California Highway Patrol (CHP) officer who had stopped a suspected drunken/reckless driver. As the helicopter approached the scene, Tactical Flight Officer Osterloh observed the driver remove a rifle from the cab of his pickup truck and begin firing at the patrol officer and his vehicle.

Osterloh immediately broadcasted a call for assistance as the suspect emptied an entire magazine, returned to the truck to reload, and fired



Bashta and Osterloh pursued the truck, illuminating it with the searchlight as the driver continuing to fire the rifle at pursuing officers in vehicles. The suspect left the freeway, entered a suburb and stopped in front of a house. The driver fired at approaching vehicles. Using the FLIR camera, Osterloh directed SWAT officers to safer approach

At that point, the suspect began firing at the helicopter orbiting 600 feet overhead, shooting 60-80 rounds at it. They remained on station. A second Riverside PD aviation unit arrived.

The suspect entered the home, then came back outside repeatedly, shooting. After approximately 30 minutes, a SWAT member engaged the suspect and ended the threat.

Due to the efforts of Bashta and Osterloh, no officers or members of the public were injured, and the suspect's girl-friend and children were also uninjured.

Last summer these same officers were in receipt of the annual ALEA Gus Crawford Memorial Aircrew of the Year Award.



Jonathan "JR" Roebuck, remote access project manager for Lifeflight of Maine and MedComm, is the 2018 winner of HAI's Salute to Excellence **Airbus Helicopters Golden Hour Award**.

Roebuck is being honoured for his work in the creation of the Remote Access Project. Quickly locating and evacuating critically ill and injured patients in the remote areas of Maine is essential to survival. With an extensive Atlantic shoreline, hundreds of coastal islands, dense forests, mountains, and extreme temperature, LifeFlight of Maine operates in one of the most complex aviation environments in the country. In many cases, it previously took up to eight hours for a patient to reach a hospital. Roebuck oversaw the creation of more than 120 remote access landing zones (LZs), all on private land, that provide sites where helicopters can land to assist in rescue operations. In dire situations, minutes literally make a difference between life and death, and the Remote Access Project LZs provide helicopters with space to land in remote areas.

Claude Vuichard, of Bern, Switzerland, is the 2018 winner of HAI's Salute to Excellence **BLR Aerospace Safety Award**. This award honours those who have excelled in promoting safety in the helicopter industry.

Vuichard receives the award for his ongoing commitment to safe helicopter operations. He is best known for refining and promoting the Vuichard Recovery — a technique that trains helicopter pilots to recover from a condition known as "vortex ring state" with a minimal loss of altitude. In those conditions, the helicopter loses the ability to maintain lift and begins to descend. For more than 30 years, pilots have used the Vuichard Recovery to adjust their flight controls so that they exit the ring state by moving the aircraft to the side, thereby preserving as much altitude as possible. The significance of the Vuichard Recovery technique within the helicopter industry is widespread. The International Helicopter Safety Team and U.S. Helicopter Safety Team have both published Airmanship Bulletins supporting the its use, Robinson Helicopters has integrated the technique into its safety course, and helicopter operators around the world have adopted the procedure

Vuichard took an early retirement from the Federal Office of Civil Aviation in Switzerland to conduct safety courses worldwide. Today, he continues to teach globally and to develop new tech-

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niques to improve helicopter flight safety, dedicating his retirement to reducing helicopter accidents and saving lives. He has also set up a non-profit organization, the Vuichard Recovery Aviation Safety Foundation (www.vrasf.org), to further assist in spreading his message of helicopter safety.

Christchurch Helicopters, of Christchurch, New Zealand, is the 2018 winner of HAI's **Sikorsky Humanitarian Service Award**. This award is presented to the person or organization that best demonstrates the value of helicopters to the communities in which they operate by providing aid to those in need. The award may be for a particular mission or for outstanding service over time.

At two minutes past midnight on November 14, 2016, a devastating 7.8 magnitude earthquake shook New Zealand's South Island. Ruptures occurred on multiple fault lines in a complex sequence that lasted for about two minutes, causing massive landslides and destroying roads and rail links.

Crews from Christchurch Helicopters were among the first to arrive in Kaikoura, a seaside tourist community that was completely cut off from the rest of the country. Thousands of residents and tourists were stranded in an area with damaged infrastructure and no way of replenishing supplies. Within six hours, Christchurch Helicopters was transporting Urban Search and Rescue (USAR) personnel to Kaikoura, and starting to rescue more than 130 stranded Chinese tourists.

Charles "Chuck" Hagen, sales, training and field service manager at Aeromaritime America, Inc., is the 2018 winner of the **Rolls Royce Excellence in Helicopter Maintenance Award.** This award honours those who have excelled in conducting or managing maintenance operations in the helicopter industry.

John W. Williams, of Fort Worth, Texas is the 2018 winner of HAI's Salute to Excellence W.A. "Dub" Blessing **Flight Instructor of the Year Award** (sponsored by H. Ross Perot, Jr. and the Perot family).

The announcement that James Russell Spray (Russ Spray), retired president and CEO of Safran Helicopter Engines USA, is the 2018 winner of the **Bell Lifetime Achievement Award**. Spray, from Flower Mound, Texas, is honoured for his lifetime of service dedicated to the helicopter industry. The award will be presented at HAI's Salute to Excellence Awards dinner at HAI HELI-EXPO 2018 in Las Vegas.



LETTERS

Dear Sir,

The recent report, by HMICFRS, on the failings of NPAS has been described by one commentator as, "Putting into words the slow-motion car crash that many of us have been watching over the past few years." Therefore, it's the right time, you may agree, to highlight some additional problems for NPAS, largely self-inflicted, as they attempt to add fixed-wing aircraft to their fleet of helicopters that provides the 43 police forces in England & Wales with air support.

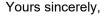
The choice of an aeroplane by NPAS was always a 'one horse race' with, in 2014, a specification for a high wing aeroplane with retractable landing gear and piston engines - not many of those in production! Actually, apart from the diminutive Tecnam P2006T, the only aircraft to meet this broad specification is the Italian Vulcanair P68R. The more detailed specification also requires an approval for flight in known icing conditions, one of the additional advantages of some aeroplanes when compared to the light utility helicopters in police service. However, it was known at the time, when NPAS wrote its specification in 2014, that the P68R is an aeroplane that is NOT cleared for flight in icing conditions, and, for that matter, neither is the P2006T. Also, there is a requirement, in the NPAS specification, for a minimum flight endurance of 3 hours with a crew of 3 x 100kg crew members. Moreover, the detailed specification also calls for an aircraft that can accommodate dual pilot training with, in addition, 2 observers. Many would agree that it's at least odd, and possibly more serious, that NPAS should have allocated public money to an aircraft that doesn't and is unlikely to ever meet its own detailed specification!

Now, after 3 years, the P68R is still awaiting clearance for flight in known icing conditions and the operational crew will be just 2, the pilot and one tactical flight officer. Observer training will take place, not on the aeroplane, but on one of the NPAS helicopters! Frankly, and despite the fact that the Vulcanair P68R never met the NPAS specification in the first place, the aircraft is just too small and with too many limitations for police air support in the UK. In a nutshell, the Vulcanair P68R cannot be flown with a useful payload and full fuel tanks at the same time, it's either one, or the other! Is this important? Yes, when you consider that many airfields no longer stock aviation gasoline (Avgas) for aircraft with piston engines, and those that do are often closed at night. Starting a flight with fuel tanks that are less than full is obviously a serious limitation for an aircraft that is, supposedly, providing a county wide, national police air service.

In the meantime, the safe, off the shelf option, the agile BN-2B Islander, not to be confused with the BN Defender 4000, was rejected because of its fixed landing gear and the more modern DA42 Guardian was also rejected, without a proper trial, because of an assumption that a low wing aircraft with an MX-15 camera turret on the nose couldn't do the job. It would seem that members of the former National Police Improvement Agency, together with other police officers now working for NPAS, cannot recall the remarkable demonstration of the 'stealthy' DA42 at Gamston in September 2011. When the crew of the aircraft followed vehicles travelling along local roads and kept an eye on shoppers at an open market in Retford with the images transmitted by 'downlink' to observers on the ground. Moreover, the parent company, Diamond Aircraft has, after analysing customer feed-back, now launched the larger DA62 Special Mission Aircraft with all of the many attributes of the DA42 Guardian, but with 7 seats instead of 4.

In addition to the recommendation, by HMICFRS, that the 'collaboration agreement' (the agreement which requires the 43 police forces of England & Wales to use NPAS for air support) should be re-written with a fresh sheet of paper there is, I would suggest, further action required. I strongly recommend that the long awaited and unsatisfactory delivery of aeroplanes for police service in England & Wales should now be put on hold pending a further inspection, by HMICFRS, of the provision of fixed-wing air support. Only then will it be possible to move forward with an aeroplane that, when compared to the helicopter, is both cost effective, is 'all weather', and is one that compared to the helicopter, is possible to make the support missions in

an aeroplane that, when compared to the helicopter, is both cost effective, is 'all weather', and is one that can complete all of the core police air support missions, including multiple tasks over long distances and for several hours, with a minimum crew of a pilot and 2 tactical flight officers.



James A Cowan MBE BA FRIN

Ed: The writer of the letter has been a close observer of UK police aviation over many years. He has an impeccable background in that he has flown with the Royal Air Force with hours on the Nimrod maritime reconnaissance aircraft and numerous light training aircraft. More pertinent was his time flying the BN-2-20 piston aircraft for the North-East Air Support Unit and a similar aircraft on EMS flights in Scotland. He was involved in a 1997 long distance flight in DHC Chipmunks. He is currently a significant person in the volunteer Skywatch Civil Air Patrol. He has flown many hours in the aircraft he mentions in his letter.





MOVE ALONG THERE CHRISTMAS CHEER

It was all part of Christmas – or at least the commercial aspects of it – when the police in Lincolnshire exhibited their defences for the annual Lincoln Christmas Market. It may be England where firearms are famously low key but, very much in your face, this event featured armed police deployed on the streets and drones patrolling skies "over the market" as the media would have it... but that detail might well be an illegal claim. The event traditionally held in sheds [or "chalets"] and marquees was seeing security boosted to a level probably never seen before at the city's biggest festive event.

But security staff working around the clock to keep punters safe say this is simply the way large public events are now run - and insisted there is no reason to worry. Dozens of officials based at a secret control room in an undisclosed location the city kept a watchful eye on 15



security cameras that have been positioned at key locations, such as the Lincoln Castle entrance. Oddly they publicly announced that there would be someone in the security control room from around 6am until midnight [not 24/7].

Roads had been blocked off at key locations across the city as authorities work to ensure the safety of the market's expected 260,000 visitors.

Mindful of recent terror attacks on mainland Europe, eight locations had been fortified to stop vehicles from being able to drive into the market, drones used by the county's police force gave officers an eye in the sky as part of security plans that had been developed over 12 months.

Unfortunately, it all went wrong on the last evening when snow was forecast across a wide area of England on the last evening of the lucrative event. With such an iron grip being held on the event it was all too easy for the local authority and the police to cancel it on the grounds of 'Health and Safety'... There was an uproar in the ranks of the traders who were hardy folk and well versed in trading in any weather. They had paid a lot of money to trade at Lincoln Christmas Fair and, without recompense, they found it was cancelled on the basis of the predicted weather. In the UK the more expensive equipment the Met Office gets the less it gets the forecast right!

Yes, and true to form, the snow came and caused widespread disruption across parts of England. But it did not fall on Lincoln—or anywhere near it. *Whoops*.

NEW YEAR RISE

Late next month many will be heading towards Las Vegas for the HAI Heli-Expo having nearly put the tragic events of three months ago behind us. Frequent travellers to The Strip were rarely aware of any imminent danger to life associated with the gambling city – simply conceding that it was America, and everyone had guns so getting involved in heated arguments was both futile and potentially lethal.

Well it seems that the events of a few weeks ago [October 1] has turned into a potential money spinner for the local cops. Disregard it was a solo effort by a man now deceased and it had nothing to do with celebrating New Year, it seems this New Year's Eve will see security stepped up! In the last few weeks the local police have been training with their rifles at the ready for an active shooter, the mantra being "It's not really a matter of *if* it happens again, more like *when*."

For decades, December 31 has been the biggest night of the year in Las Vegas, drawing tourists from all over the world who come to party with abandon on the Strip, the numbers quoted are 300,000. Like all big cities the place is



well covered by CCTV so if there is a call to action there should be a quick reaction. Most big cities have millions to cope with. At times Trafalgar Square in London UK quotes a million revellers in the one square. The unwritten bit is that on every one of those previous Las Vegas New Year's no one fired hundreds of rounds from a hotel into a Country Music crowd....

There are though grounds for muted celebration locally. It was noted that the local PD Swat Team, mainly volunteers, simply took a predictably long time to get on site in October, For years, the Las Vegas Metropolitan PD has lobbied Federal officials to give New Year's Eve the Department of Homeland Security's top special event assessment rating, which would provide the city with additional resources.

A few weeks after the October shooting of hundreds, the Police Department got word that they would receive the rating for the first time this year. [New York Times/PAR]



EVENTS NEXT MONTH

The Singapore Airshow will take place from 6-11 February 2018 amidst exciting but challenging times for the global aviation industry – rising demand for air travel is powering robust growth, with record 4 billion air passengers expected to fly this year. This will nearly double over the next 20 years to reach 7.8 billion passengers by $2036^{[1]}$. At the same time, technology innovation and digitalization continue to disrupt traditional business models, processes, and relationships, driving transformation across different parts of the aviation industry.

The Singapore Airshow has established itself as a strategic platform for regulators, airlines, manufacturers, entrepreneurs and other key stakeholders to chart the industry's growth trajectory. As Asia's largest and one of the most important aerospace and defence events in the world, the Airshow will also play a crucial role in connecting opportunities, driving change and shaping the future of the global aviation industry.

Boeing and Airbus predict that the Asia-Pacific region will account for 39% to 41% of total new global aircraft deliveries by 2036. The Singapore Airshow serves as the key gateway to tap into the wealth of potential opportunities in the Asia-Pacific – the world's fastest growing region for the aerospace and defence industry. These opportunities include:

The latest products and services in key areas like cybersecurity, unmanned aviation systems, avionics and aircraft, predictive maintenance, additive manufacturing and aircraft health monitoring will be show-cased by over 1,000 participating companies from some 50 countries that have confirmed their attendance at the Airshow.

Networking with key government and defence officials, and senior commercial executives, through the Airshow's VIP Delegation Programme.

Engaging with returning exhibitors including 65 of the top global aerospace companies such as Airbus, Bell Helicopter, Boeing, Bombardier, Embraer, Israel Aerospace Industries (IAI), Pratt & Whitney, Rolls -Royce, ST Engineering, Thales and UTC Aerospace Systems. For more information, visit www.singaporeairshow.com.







AND BEYOND

6-7 March 2018 AAMS Spring Conference. AAMC Learning Center, Washington DC. This conference is held each spring in the Washington, D.C. area. The focus is on legislative, regulatory and reimbursement issues. Members are encouraged to participate in our grassroots efforts and visit their Congressional representatives on behalf of the community. In addition to the grassroots lobbying, we also offer the highest quality educational content that consistently receives rave reviews! Attendees learn about what regulations are affecting them, how to speak out locally on issues affecting them, billing and reimbursement insights, leadership and management issues, and much more! AAMS offers a variety of educational opportunities throughout the year. www.aams.org

6-8 March 2018 Home Office Security and Policing Exhibition. Farnborough, Hampshire. This official Government event is an opportunity to meet, network and discuss the latest advances in delivering national security and resilience with UK suppliers, colleagues and government officials. The event brings together Government selected visitors, mainly from the UK, who have specific operational needs with any exhibitor able or willing to pay the entry price who have the relevant solutions, all within a secure environment. The unique three-day event also incorporates live demonstrations providing a setting for testing and collaborative showcasing. All in all, the sort of exhibitor that you might encounter at DSEi or many other open access security events meeting up with visitors that have been severely reduced by the organisers making arbitrary decisions on who is right to attend. www.securityandpolicing.co.uk



8 March 2018 The BBGA Annual Conference to be held at the Warren Weir, Luton Hoo Hotel, Golf & Spa, The Mansion House Luton, Bedfordshire LU1 3TQ. Less than a mile from M1 Junction 10 and nestled within the stunning 1,065-acre grounds of Luton Hoo Hotel, Golf & Spa, Warren Weir is an events village offering a range of luxurious bedrooms & Suites, five meeting rooms, a hospitality lounge, private leisure and conference facilities, all of which finished to the highest standards. The following day [Friday March 9] there will be a Golf Day on the Luton Hoo Golf Club course. BBGA Annual Conference online booking system will be live from January 2018 so book early to take advantage of the Early Bird Rate. BBGA are looking for conference sponsors, please contact Rachael Paskin to discuss our sponsorship packages. All packages include delegate passes, a trade stand, half page colour advert in the conference programme and extensive exposure prior to and during the event. www.bbga.aero rachael.paskin@bbga.aero

12-14 March 2018 Aerial Firefighting North America 2018. On its 10th anniversary this event will address the core issues affecting aerial firefighting operations in North America, with further contributions from South America and worldwide. Staging over three days in Sacramento, California it will provide the only dedicated platform to discuss the national, state, regional, local and international aerial firefighting. Tangent Link event.

PAvCon 2018

21-24 May 2018 The website at www.pavconeurope.eu is all ready. The outline of the event is posted there along with details of some of the hotels, how to get there and details about the location of the event—JB Investments private grass airfield and compact facility south of Warsaw [see below]

Bookings from exhibitors have started and we will ensure there is sufficient room for everyone.

Some of the finer details of the programme remain fluid as we await feedback from the police and security services in Poland. As might be expected they have little real appreciation of the event just yet having attended only a couple of the events in the past years.

PAvCon Europe, building on the legacy of past PAvCon events:

2009 London; 2010 Prague; 2011 Bilbao; 2012 Bonn; 2013 Vienna; 2014 Brussels; 2015 Breda; 2016 Munich;

2017 Doncaster

At the core of the event you can expect the usual mix of flight safety interaction, tactical presentations on aircraft, systems and crewing The Exhibit area can hold up to 50 exhibitors but we expect the usual 30-40. So far we have firm expressions of interest from Airbus Helicopters, Bell Helicopters and Leonardo, the Airborne Law Enforcement Association [now changing its corporate name from this month of course], Av-

alex; FLIR; Wescam; The Artworks Unlimited, LLC; PVL; but the final line up naturally relates to those who actually sign up and those that considered the 2017 event to be non-typical of the fare that PAvCon serves up as a matter of course. A great deal of dame was done last year—even one negative comment is one more than usual. Book at admin@pavconeurope.eu

