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PAR

# Bell 429 in Swedish Police Service Explorer's by the dozen Norway AW101 Roll Out Who am 1? Now SAFRAN rename

PLUS: Features on Bell Europe and Powervamp

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## LAW ENFORCEMENT

### CANADA

**WINNIPEG:** Records show that the maintenance costs relating to the operation of the Winnipeg Police EC120 AIR1 are increasing significantly.

Under freedom of information legislation local news media, the Metro, obtained records of 264 invoices billed to the service for repairs and refurbishments in the period 2011-2015. Last year the cost of upgrades amounted to more than \$180,000 but the identity of the parts involved has not been disclosed.

The cost of the upgrades seems to have nearly doubled over the past year. With the machine now logging more than 5,000 hours of flight time more major parts are due for replacement, such as a tail rotor gearbox and main gearbox – both expensive components.

In addition the operation has acquired a new EO/IR sensor budgeted at \$360,000. In order to minimize costs, the service tends to refurbish equipment rather than buying brand new and maintenance costs are recovered through the province's funding agreement to pay for the operation of the helicopter, which has also seen a steady rise to more than \$1.7M in 2014.

The city introduced the helicopter in 2010, after purchasing the aircraft for \$3.5M and brokering an agreement with the province to fund its annual operating costs. [Metro]

#### CHINA NATIONAL:

Ten helicopters are being bought for the police under the largest agreement of its kind in China, signed on last month on the opening day of the Eighth China International Exhibition on Police Equipment.

The Ministry of Public Security signed an order with local manufacturer AVIC for ten helicopters. The first four, two AC311s and two AC312s will be delivered to public security bureaus in Nanjing, Kunming, Hefei and Luoyang. The AC311 is a single-engine six seat machine similar to the AS350 and the AC312 a licence built AS365. The 10 helicopters will be made by AVIC subsidiaries Harbin and Change. A statement from the AVIC said that currently 50 helicopters are being used by 28 police aviation units on the Chinese mainland. Liu Daolin, deputy director of the ministry's Police Aviation Management Office, is quoted as saying that public security authorities expect to double the size of their helicopter fleets within five years. At that time they expect to have 50 police helicopter units operating around

**FRONT COVER:** Bell 429 duo over the outskirts of Prague during a press day held to launch the new enhanced Bell Helicopter completion and support facility at the Vaclav Havel Airport in the city. The pair of machines used by Bell on the day are the Slovakian Police VIP ship OM-BYM and the Air Transport Europe EMS craft OM-ATR. [image by PAR]

100 helicopters. He added that less than 10% of Chinese mainland cities have air cover, with more local police forces now beginning to understand the value of investing in aircraft. Yu Feng, president of AVIC Helicopter Co, said separately that police bureaus in cities including Nanjing, Hefei, Tianjin, Jiaozuo, Kunming and Zigong now operate helicopters made by the company.

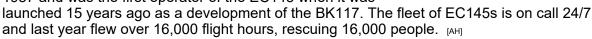
#### FRANCE

**SECURITY CIVILE:** Airbus Helicopters has been awarded a contract by the French Defence Procurement Agency (DGA) to retrofit the avionics suite of the 35 early model EC145 helicopters operated by the Sécurité Civile, an agency of the French Ministry of Interior that performs search and rescue and medical evacuation services throughout the French territory. As part of this retrofit, all aircraft will be equipped with an improved avionics suite allowing them to retain their ability to perform missions in all weather conditions with the highest levels of safety, while at the same time complying with the latest Performance Based Navigation regulations.

The retrofit of the 35 aircraft follows on from the global services solution contract for the Sécurité Civile and Gendarmerie Nationale's EC145 fleet awarded at the end of 2015. The aircraft, with this new contract managed by the Military Support Centre France (MSC-F), will be retrofitted over a seven-year period by Airbus Helicopters personnel deployed at the Sécurité Civile base in Nîmes in order to minimise the impact on the operational activity.

The mechanical and electrical modifications necessary to integrate functions such as LPV/SBAS guidance, digital maps, and GPS installations have also been optimised to reduce the length of the retrofit operations.

The helicopter division of the Sécurité Civile was created in 1957 and was the first operator of the EC145 when it was



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### SOUTH AFRICA

**KRUGER NATIONAL PARK:** The wildlife park in northeastern South Africa, one of Africa's largest game reserves, continues to be ravaged by poachers.

On May 25 poachers opened fire on a patrol helicopter in a "dramatic escalation" in the battle over rhinos hunted for their horns. The poachers shot five times at the South African National Parks' AS350 helicopter that was part of an operation to crack down on poaching in the southern part of Kruger where rhinos have been heavily targeted close to the Mozambique border.



The AS350 was supporting elements of the Police Air Wing and its K9 unit with a detachment of specialist Kruger National Park counter-poaching rangers when the shooting happened. The helicopter was not hit and touched down safely without any damage or harm to the aircrew. As far as can be ascertained this is the first time suspected poachers have shot at an aircraft in the park.

"Quick action by all the team members involved averted a catastrophe and the helicopter managed to land with all the crew on board safe," the department of environmental affairs said in statement.

"Four poachers have been arrested and three firearms, ammunition and poaching equipment recovered."

The incident came after 363 rhinos were poached in South Africa in the first four months of this year, 232 of which were killed in Kruger National Park. Nearly 1,200 rhinos were killed by poachers in South Africa in 2015 in another year of carnage by poachers driven by the soaring price of horn. Fewer than 100 rhinos were poached during 2008.



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#### June 2016

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#### SWEDEN

**POLISFLYGET:** The acceptance into service ceremony for the Swedish National Police's seven Bell 429 helicopters took place early last month. The fleet is being used for law enforcement and search and rescue, including mountain rescue, across Sweden.

"This is now the largest Bell 429 fleet in operation in the European Union," said Jakub Hoda, Bell Helicopter Managing Director for Europe and Russia. "Over a quarter of the Bell 429s in service across Europe today are flying parapublic missions, demonstrating the superior performance of the Bell 429."

Bell Helicopter has recently delivered 15 Bell 429s to the Turkish National Police, four Bell 429s to the New York Police Department, and two Bell 429s to the Slovakian Police.

The Bell 429 boasts more cabin space than any other light twin helicopter, with flat flooring and seating for seven passengers and one flight crew.

At the Farnborough Air Show in 2014 it was announced that the police were to replace their 2001 fleet of EC135P2+ helicopters with seven examples of the Bell 429.

At the time it was announced that the Bell 429s were to be delivered in 2015, the first was delivered last October and the rest were all in country before Christmas last year so the official handover ceremony showed quite a delay.

In March 2015, at Heli-Expo it was announced that Helinet Technologies of Van Nuys, California had been selected as the completion integrators for the new police fleet. This was to include a customized mission suite and a network of ground-based microwave receive sites designed to support policing, counterterrorism and public safety operations across Sweden. At the time it was said that the mission suite was to incorporate state of the art image capture, broadcast and receive technologies and provide uninterrupted, interference-free streaming of HD video and data across the entirety of Sweden. Aircrews will be able to deliver real-time video via encrypted microwave downlink to command centres and to portable handheld receivers utilized by officers in the field. SNP operators will also be able to instantly overlay critical information such as addresses, points of interest and other data on top of the live video and transmit this information in real-time.

In addition to transmission through the microwave downlink, an encrypted Internet protocol capability allows the delivery of live streaming video and data anywhere in the world via WiFi, cellular data and satellite networks. Each helicopter is equipped with both forward and aft cabin mission stations, allowing the system to be controlled from anywhere in the air-craft. Although this information has not been repeated since it has not been denied.

SE-JPI

#### June 2016

Before the equipment was fitted and operating Bengt Grönlund, head of unit for the Swedish Police National Air Support Unit had high expectations of the promised system that was expected to provide a complete, end-to-end package backed by an unparalleled support and training infrastructure.

At that time Helinet already had a strong relationship with Bell Helicopter and the 429, having already worked on the New York Police Department's (NYPD) fleet of 429s. They worked with FLIR, Churchill Navigation, Troll Systems and Thommen in deploying the completion mainly utilising COTS products. The project was important to promoting the work of Helinet Technologies into the European market. In October 2015 Bell Helicopter formally handed over the first of the new Bell 429s SE-JPU, just 15 months after contract signature. The formal decision to replace the six EC135s, and to expand the fleet to a total of seven operative helicopters, was made by National Police Chief Bengt Svenson in September 2012. The seventh aircraft aimed to substitute for one of the EC135s lost in an accident back in 2007.



© FSI

The fleet have the FSI 380HDc sensor turret nose mounted and the Thommen searchlight at the rear.

The 60-inch-wide side doors provide quick and easy access and make the type handy in the winching role. Three Goodrich winches have been acquired primarily for use on the helicopters based in the north of the country.

The Swedish Police Wing has operated helicopters since 1964, when operations began on Bell 47s, several Bell 206 Jet Rangers were added to the organisation in the 60s and 70s, and between 1979 and 1982 the Long Rangers modernized the fleet. By year 2000 the Swedish National Police operated four Long Rangers, three Jet Rangers and one Bell 47. These aircraft were all replaced by a batch of brand new Eurocopter EC135 P2s in 2001. A Jet Ranger remains in the organisation for flight training purposes, the EC135s having now departed. [Bell/PAR/Helinet/FSI/police]



## **Notice of sale of Aircraft**

#### Available for sale:

Aircraft 1: MD902 Explorer G-SASH Aircraft 2: MD902 Explorer G-CEMS

Consideration given to selling as whole units or as individual components for use as spare parts

Enquiries to Mr Bruce Burns, Vice-Chairman: 01422 237900 or b.burns@yaa.org.uk

#### Prices and details on application



#### UNITED KINGDOM

**NPAS:** More than 1,400 incidents of lasers being shone at aircraft were reported to the UK's Civil Aviation Authority (CAA) in 2015.

The number was slightly lower than in 2014 - but reports by police helicopter pilots more than doubled.

The British Airline Pilots Association (BALPA) said the increasing power of lasers raised the possibility of a serious accident, one pilot calling for the sale of strong lasers to be controlled.

The CAA said 1,439 laser incidents had been reported in 2015, a slight decrease on the previous year's total of 1,447.

In an interview with the BBC an NPAS pilot Janet Alexander, agreed that the lasers were inherently dangerous and of greatest concern when the pilot was engaged in landing. When the interviewer tried to draw her on whether a crash was inevitable all she would say was that she did not think it was out of the question.

The NPAS MD902 Explorer fleet has started to appear for sale through a single agent. Multiflight the Leeds based operator and maintenance provider won the right to represent NPAS in the sales and have a number of the aircraft posted on their website and in print adverts in industry publications.

The airframes all offer different standards of equipment, reflecting their multiple origins and therefore being offered role equipped with a mix of EO/IR turrets and searchlights. Multiflight warn that sales restrictions may apply – presumably a reference to the level of role equipment and ITAR.

The airframes in the list at the start of May included G-SYPS 900—00104 10,555hrs., G-GMPX 900-122 8563hrs., G-BXZK 900-00057 10,805hrs. The highest hours example of all the police fleet is G-YPOL 900-00078 18,861hrs. Some of these remain in service others are parked up, no word on prices being asked but a ball-park figure of £1M each is assumed.

Ed: There are about to be a very large number of MD Explorer's being offered onto the second hand market place and that is inevitably going to drive prices down. In addition to the handful of NPAS airframes

In addition to the handful of NPAS airrames there are those two being advertised by Yorkshire Air ambulance. When the Humberside Police example comes on-line in September the UK second hand market will be awash with surplus airframes and that discounts the other unwanted air ambulances – displaced by newer, arguably more modern, types.

And that is just in the UK. Elsewhere in Germany the police MD900 fleets are being sidelined in favour of the Airbus. Indeed in some cases the latest BK117 variant [H145] is replacing the type that had ousted it a decade ago.



Ignoring the new arrivals on the Explorer sales lot there were already a handful of the type awaiting sale. It looks as if the market will face an unprecedented 15% or more of the world MD900 fleet vying for sale to customers that have never exactly clamoured for the type- a market so short of spares that there will be pressure to part out many of these high hour airframes.

Police forces have sufficient capability to respond to armed attacks, according to Deputy Chief Constable Simon Chesterman the NPCC senior officer responsible for firearms coverage. The issue was raised by the Hampshire branch of the Police Federation chairman John Apter. He opined that officers in a terrorist situation felt they would be like "sitting ducks."

The NPCC spokesman countered that all areas of the UK are covered by armed response vehicles concentrated in areas at the greatest risk with plans in place that would enable 'surge' support elsewhere when needed and the further option to call upon the military, rather than the restricted airlift resources of NPAS, to support a 'lift and shift' with helicopters if the cars were not enough.

The NPCC position is not universal though as the Home Secretary [a politician called Theresa May] stated that the planned increase in firearms officer numbers announced earlier this year was the move needed to ensure defence against a Paris or Brussels style attack with no reference to the mutual aid version.

In a country where firearms carriage is a choice potential firearms officers were being put off by the risk of prosecution over their use of a firearm after one officer was arrested over a killing. The Independent Police Complaints Commission states that in twelve years of investigating a total of twenty-nine fatal shootings, they have only used its powers of arrest this once. Officers involved are generally treated as witnesses and no basis for disciplinary or criminal proceedings has resulted so the citing of a single instance of arrest appears to have caused a disproportionate response. [Oracle/PAR—also see page 28 for a similar comment]

**SCOTLAND:** The police Scotland EC135T3 to be completed by Babcock [formerly Bond] at their Staverton facility is to be equipped with the Britannia 2000 Compact Airborne Mission Computer [CAMC].

The equipment was similarly selected for the seven NPAS rotary airframe upgrades currently underway at Staverton [with two currently completed] and the fixed wing project underway with Airborne Technologies. The CAMC system is designed to run the CarteNav AIMS coftware, including the Moving Target Indication [MTI] at maximum efficiency.

CAMC provides multiple sensor outputs for up to three touch-screen displays to assist in reducing the operator/TFO workload and improve mission efficiency and task sharing between crew.

Britannia 2000 is a UK company specialising in the design, development and manufacture of specialist ISTAR and Communications systems used by Government Agencies, Police Forces, Militaries and Fire Services.

Where specific products do not exist, Britannia 2000 has the design and manufacturing capability to develop a solution. Associated partners include specialist vehicle designers, electro-optic turret manufacturers, coach-builders and also communication manufacturers.

The Police Scotland airframe will not be reliant upon the manufacturers standard CVR and FDR equipment in their airframe completion. Babcock tell PAN that the customer selected a high specification fully crashworthy system.

The airframe destined for the Police Scotland has been noted arriving at Staverton. The H135 D-HECR arrived pre-painted in conspicuity colours and is believed to be destined to ultimately carry the marks G-POLS. [MJ]



#### UNITED STATES

**CALIFORNIA:** A family filed a lawsuit against the San Bernardino County Sheriff's Department after suffering injuries during a pursuit last year that ended when a deputy in a sheriff's helicopter shot a fleeing suspect on the 215 Freeway. As a result the vehicle he had been driving careered out of control crashed into their vehicle and caused them injuries that are the direct fault of the agency.

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Last September last year a husband and wife and their 13-year-old son were traveling in their Dodge Durango when a man, later identified as 32-year-old Nicholas Johnson, who was driving the wrong way on the freeway at speeds of 100 miles per hour, struck their vehicle after he was shot and killed by Deputy Paul Kowalski from a sheriff's helicopter. The father suffered a fractured leg and subsequent lung complications, his wife had six fractured ribs, a fractured wrist, water in her lung, internal stomach bleeding and trauma to her neck and jaw. Their 13-year-old son, who was born with a kneecap issue, suffered further damage to his leg in the crash. He is currently in a wheelchair and cannot walk. All these injuries led to massive medical bills amounting to millions of dollars. [SB County Sun]

**LOUISIANA:** East Baton Rouge Parish Sheriff's Office, led by Sheriff Sid Gautreaux, has had its surplus Bell OH-58 N530SD refurbished and upgraded with a new Aerocomputers UC6000 mapping system. The 45 years old Bell is said to be one of the better examples of its type. [EBRSO]



**OHIO:** The Toledo Police Department is considering getting out of the helicopter business as it struggles to source grant money to cover the cost of an upcoming mandatory factory overhaul of its Robinson R44 helicopter. Toledo need to find \$300,000 to undertake the work and without grant funding a grounding could result.

Toledo bought the Robinson R44 helicopter N135WB in 2001 for the department's aviation unit, which was organized that year. The R44 cost about \$504,000 and has been used the past 15 years for surveillance, search and rescue, night patrols, to oversee chases, and in other emergency situations.

Officer Jeff Violanti who collected the R44 from the factory is the only remaining Toledo police officer qualified to fly the helicopter and some wonder whether it is worth the \$300,000 overhaul cost. Currently the R44 flies once or twice a week, with current costs being only fuel and parts most major funding items being grant funded rather than by setting aside money for the predictable eventuality. Day today maintenance and the hangar space has been provided by LifeFlight, an air ambulance service operated by Mercy Health St. Vincent Medical Center without charge.

City budget problems have affected the helicopter programme in the past. It was grounded in January, 2005, for about five months because of a city budget crisis that year.



## AIR AMBULANCE

**CHILDRENS:** It has not been announced independently but the Air Ambulance Service (TAAS) have confirmed to **HeliHub.com** that they are to add two AgustaWestland AW169s to their fleet, and both will be dedicated to their paediatric operation, known as The Children's Air Ambulance (TCAA). One will be based in North and one in the South of England in order to provide a national service, although the actual locations have not yet been announced.

The first AW169 is expected to be in service in January 2017, with the second following in May 2017 although those dates are considered optimistic. [Helihub]

This story may well be linked to an announcement that Leonardo-Finmeccanica has renewed the long standing [Agusta] distributorship agreement with Sloane Helicopters The Distributorship Agreement renewal and expansion will allow customers continued benefits by making use of Sloane Helicopters' product and market expertise while also dramatically reducing delivery times. The announcement, made during an official ceremony at EBACE 2016, also includes within the Distributorship Agreement the new generation AW169 light intermediate 4.6-tonne helicopter for the U.K. and Irish executive/private transport market. Although SAS/PAS/MAS have been the first to introduce the AW169 to the UK market it has not been in the role of Distributor, simply as customer.

This will introduce choice into the market; choice in acquisition and choice in who will support the aircraft in service.

Leonardo-Finmeccanica and Sloane Helicopters have successfully been partnering for approximately 20 years to meet market demand in the U.K. and Ireland. More than 75 new light single and light twin aircraft from the AW119, AB206 and the AW109 series have been sold in this region to date.

**ESSEX & HERTS:** The air ambulance service is in the process of setting up a 24 Hour response service to cover its area of operation. Rather than develop the air ambulance to undertake the role in stages it intends to primarily rely on Rapid Response Vehicles [RRV] supplemented by the helicopter.

Trustees recently approved the decision in order to meet their vision to provide the highest level of clinical care across Essex, Hertfordshire and surrounding areas. Work will now begin to introduce the extended service, in stages from autumn 2016.

The Board of Trustees also gave the green light to the introduction of a double pilot operation to ensure that the best patient care can be provided during transportation to hospital and further boost aviation safety.



Currently, the service operates 7 days a week - 7am to 9pm or sunset, whichever occurs first. The extended service will see greater use of our RRVs which will operate into the night, initially for two nights from the North Weald Airbase.

Like the helicopters, the RRVs transport both a Critical Care Paramedic and Pre-Hospital Care Doctor rapidly to the scene; and carry the same life-saving equipment as carried on the helicopter. This brings an advanced level of clinical care and equipment to the patient that goes beyond that of a land ambulance. In addition, the RRVs will continue to be used when the aircraft are grounded due to bad weather or unplanned maintenance.

In approving plans for a double pilot operation, Trustees took on board industry best practice and recommendations from the Civil Aviation Authority which highlight the benefits of improved specialist support available to the pilot and an increased ability to recover aircraft in the event of a pilot becoming incapacitated.

Cliff Gale, Operations Director said: "EHAAT has an exemplary safety record and whilst the Civil Aviation Authority recognises that UK single pilot operations are safe, by moving to a two pilot operation we are enhancing aviation safety and patient care whilst establishing a sound model for future expansion of the HEMS Service.

"Two heads are better than one in emergency situations and we recognise how vital a second pilot will be should a challenging situation occur."

**NORTHERN IRELAND:** A helicopter announced as being the new Northern Ireland Air Ambulance touched down at St Angelo Airport last month to launch a local fundraising initiative in support of the service.

In March it was announced that the new £4M service in the North would be based at Belfast International Airport and not in Enniskillen as had been hoped.

The helicopter was a AW109 G-MEDX operated by Sloane Helicopters.

Ed: A source [KC] tells me that although G-MEDX appeared for its PR role during the recent Northwest 200 motorcycling event, as soon as a real accident happened the rider was taken to hospital in a police [PSNI] helicopter!

**WALES:** Wales Air Ambulance (WAA) provides an airborne EMS service to Wales. At present they have three Airbus EC135s, and contract with Babcock MCS Onshore for the aircraft, pilots and support of operations from three bases across Wales. This is to change from next year as the service moves to operate the Airbus Helicopter H145 – again contracted through Babcock.

Equipped for night flights, the upgrade to H145s will move the charity a step closer to its goal of providing a 24-hour air ambulance service.

A former East Anglia Air Ambulance EC135T2 G-HEMN has been painted up in the colours of Wales Air Ambulance to move the Principality to its first fully night capable helicopter. It became available when replaced when the second H145 G-RESU was delivered to EAAA earlier this year. [Helihub]

**YORKSHIRE:** Next week the Yorkshire Air Ambulance takes official delivery of its first Airbus Helicopters H145 at its Nostell Priory base to the east of Leeds.

The helicopter arrived fully completed from the German factory at Airbus Helicopters UK [Oxford] on May 26.



June 2016

## SEARCH & RESCUE

RESCUE

#### NORWAY

**MINISTRY OF JUSTICE:** The joint Search & Rescue project between the Ministry of Justice [as the financiers and programme managers] and the Air Force [as the end users] reached its latest milestone at the end of May with the Official Roll Out of the first externally complete airframe by Leonardo/AgustaWestland at Yeovil. There are four airframes in existence at the moment the first flying example, the yet-to-fly second airframe and two others still in the build process.

It was the second airframe [above] that was used to act as the backdrop to the ceremony where Anders Anundsen, Minister of Justice & Public Security and Per-Egil Rygg, Chief of Staff of the Norwegian Air Force responded to welcomes by the manufacturers.



C PAR

After the ceremony the Minister and other representatives from Norway were taken for a flight in the still unpainted first machine.

#### PAKISTAN

DUBA

**AIR FORCE:** The Government of Pakistan has signed a contract for an undisclosed number of AgustaWestland AW139 intermediate twin engine helicopters. The signing was held in Islamabad. The contract is part of a fleet renewal programme spread over several batches including a logistic support and training package. The AW139s, deliveries of which are expected in 2017, will be used to perform search and rescue across the nation.

Civil and Military HELISHOW 2016 & Operations Exhibition 7th to 9th November 2016, Grand Stand, Meydan Hotel, Dubai, U.A.E

International



## INDUSTRY

The **CorvusEye**® 1500 wide area motion imagery (WAMI) provides the big picture by monitoring activity, tracking movement, and gathering critical intelligence over a city-size area day and night. Traditional video surveillance technology is important, but when coverage isn't wide enough critical activities are often missed. Enhancing situational awareness over a wide area, CorvusEye® improves utilisation of resources with the ability to stream up to 10 independent region of interest views simultaneously. This enables tracking of multiple objects and allows multiple users to view footage relevant to their specific needs from a single sensor.

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**Elbit Systems** performed a series of successful demonstration flights using the BrightNite<sup>™</sup> system, a solution that enables utility helicopters to successfully perform Degraded Visual Environment (DVE) missions in more than 90% of the nights.

The goal of the flights was to demonstrate the systems' performance in DVE conditions, in moonless, pitch dark nights, in which flights are rarely executed. Dozens of pilots from a variety of Air Forces around the globe participated in the demo flights, which took place in Israel. Installed on-board an Airbus Helicopters AS355 TwinStar helicopter demonstrator, the BrightNite system provided the pilots with night-piloting capabilities similar and even exceeding to those of attack helicopters.

Lightweight, compact and cost-effective, BrightNite is a multispectral end to end panoramic piloting solution that delivers the essential data directly to both eyes of the pilot.



In the United States Helicopter **Air Ambulance** operators need to mark their calendars for April 23, 2018, a date when new FAA HAA mandates take effect. Operators will be subject to a number of new requirements including a need to equip their aircraft with flight data monitoring (FDM) equipment, helicopter terrain and warning system (HTAWS) technology and radar altimeters.

Following on from the recent change to commercial **insurance law** in the UK, leading drone piloting academy UAVAir urges drone operators who are working commercially to take note of the legislative modifications in order to continue to fly safely, effectively and legally. The Insurance Act of 2015 will come into force on 12<sup>th</sup> August 2016 following on from an 18-month lead in period. The updated document looks set to be the biggest statutory change in commercial insurance law since the Maritime Insurance Act of 1906. New amendments are in place requiring commercial operators to take extra care in providing detailed and accurate information to their insurers when evaluating the risk they are insuring.

The full Insurance Act of 2015 can be <u>read online</u>, however the main changes for UAV pilots to be aware of is in regards to the Duty of Fair Presentation.

There is now a growing need for absolute disclosure of information about the job that re-

quires insurance, so that a more educated risk analysis can be made by the insurer. Failure to do this results in a void in policy, with all premiums kept by the insurer. You can read the full Insurance Act of 2015 on-line at: <a href="http://www.legislation.gov.uk/ukpga/2015/4/contents/enacted">http://www.legislation.gov.uk/ukpga/2015/4/contents/enacted</a>

**Safran Helicopter Engines** has officially opened a new headquarters and MRO centre in Singapore, with increased capacity to handle the growing helicopter operations in Southeast Asia.



The new centre, located in Singapore's Seletar Aerospace Park, is qualified for three Safran turboshaft ranges: Arrius, Arriel, and Makila.

In a presentation, the company revealed that there are approximately 1,000 Safran helicopter engines in use with 175 users in the Southeast Asian region and India - the centre will also support users in the Indian subcontinent.

Apart from a significant stock of spare parts, the centre also has three repair bays for helicopter engines. At its previous Singapore location, it had just one bay.

Other Safran Group companies, notably its aircraft engine and landing gear businesses, are also likely to set up shop at the centre.

The announcement also notifies the world that another name is in danger of going as what was **Turbomeca** is now becoming Safran Helicopter Engines.

From last month every company in the Safran Group now has a "Safran name". Another example is Sagem, which is now Safran Electronics & Defense [with the American spelling of Defense]. Each Group company will be communicating under a single brand name and logo, rather than having the subtitle "a Safran company".

Safran is celebrating the take-off of the **Ardiden 3G** engine aboard civil Russian Helicopters Ka-62. The maiden hovering took place on 28 April 2016 at manufacturer plant in Arsenyev. Since its first ground run in April 2013, extensive engines testing demonstrated the 3G's performance at Bordes (France). All development and performance tests were completed, and the engine will obtain type-certification later this year. The Ardiden 3G has already demonstrated 20% class fuel consumption improvement over engines operating in the same power range.

One of the 1,700 to 2,000 shaft horse-power Ardiden 3 engine family, the Ardiden 3G fea-

tures a remarkably compact modular architecture. The gas generator module comprises two centrifugal stages attached to a reverse-flow combustion chamber, a single-stage gas generator turbine, a two-stage power turbine and dual channel FADEC. This design ensures cost-effectiveness, particularly in terms of maintenance and cost-of-ownership with a TBO of over 5,000 hours at entry-into-service.

According to a report **Air National Guard** officials in Alaska, Pennsylvania and Texas are discussing the possibility of acquiring V-22s for search and rescue missions. Commentators have said that Alaska's interest makes a lot of sense, given that state's vastness and the far greater speed and range the V-22 offers compared to conventional helicopters.

Air National Guard interest in the V-22 is not firm, partly because it's not a cheap platform compared to alternative options - the MV-22B costs nearly \$70M each twice the price of a conventional military transport helicopter. [Jim McKenna R&W]

Popping back to Singapore again and there is an announcement by Leonardo-Finmeccanica that they are teaming up with **Aland Nanyang Technological University** (NTU Singapore) to start research collaboration in integrated and innovative composites helicopter structure and helicopter aerodynamics.

The agreement follows the Memorandum of Understanding signed in February in Singapore and establishes a partnership to contribute to the aerospace technological advancement by sharing talents and know-how, promoting scientific research and developing engineering and industrial capabilities, Leonardo-Finmeccanica said in a statement Tuesday. The collaboration will seek to further technology opportunities in the rotary wing sector whose changes are characterised by the progress in composite materials, reduction in hydraulics and dynamic components and growing efficiency in industrial processes. Joint projects may include research in innovative methods to advance the manufacturing of Leonardo-Finmeccanica's products, through the use of new composite materials which are lighter and stronger. The collaboration will also expand aerodynamics research modelling, which can potentially improve overall flight performance.

The third prototype (A/C3) of the AgustaWestland **AW609 TiltRotor** has completed its first ground run at the company's facilities in Cascina Costa, Italy, marking a critical milestone as the programme advances its testing and plans a resumption of flight testing activities. Aircraft AW609 A/C3 began restrained ground run testing with all engines and systems operating. These tests prepare the prototype for FAA certification flight testing this summer at the company's Philadelphia facility, where it will demonstrate that its capabilities satisfy a stringent set of airworthiness standards for the world's first commercial powered lift aircraft. The ground run of the third prototype followed a restarting of test activities of the first prototype (A/C1) on April 15. The fourth prototype A/C4 is undergoing assembly in Philadelphia with plans to enter the test fleet in 2017. Certification of the first commercial tiltrotor is expected in 2018, with deliveries to customers to follow.

Lockheed Martin recently delivered two C-130J **Super Hercules** aircraft: one HC-130J to the U.S. Coast Guard and an MC-130J Commando II to the U.S. Air Force. The Coast Guard's HC-130J was originally delivered in 2015 and received post-production modifications at Lockheed Martin's Greenville, South Carolina, facility. It was ferried from Greenville on May 10 by a Coast Guard crew. <u>www.lockheedmartin.com/c130</u>.



Last month Bell Helicopter officially opened a new paint facility and delivery centre at Prague Airport. The facility will be providing a full aircraft completion and delivery capability to its European customers.



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"Bell Helicopter's continued investment in the region reinforces our commitment to our European customers to provide an in-region facility that offers the industry-leading service and support we are known for worldwide," said Glenn Isbell, executive vice president, Customer Support and Services for Bell Helicopter. "We are continually assessing our service capabilities to find innovative solutions to best meet our customers' mission requirements." The Bell Helicopter facility in Prague provides full maintenance, repair and overhaul capabilities. It is the company's official regional customisation, delivery and aftermarket service centre in Europe – complemented by Bell Helicopter's extensive support and service network located throughout the region.

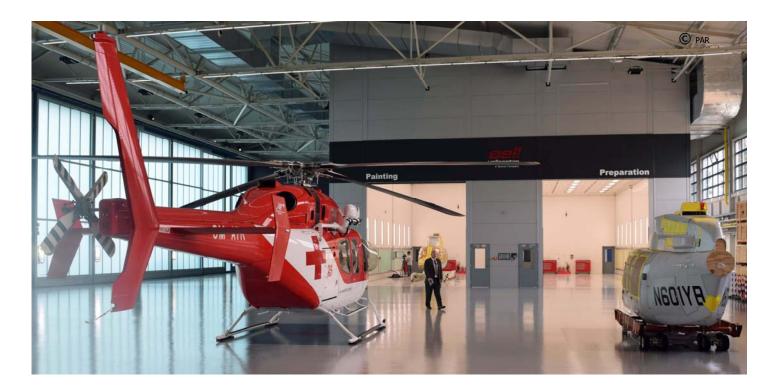
June 2016

"We are excited that that we have added full paint and delivery capabilities, with the installation of two brand new paint booths and a new delivery centre on-site," said Joachim Goldenberg, General Manager for Bell Helicopter in Prague. "Our customers demand excellence and we are working hard to exceed their expectations."

With a unique design concept accounting for minimum space area utilisation, the new paint facility is state-of-the-art, including technologies to enable exceptional quality. The size of the new paint booth has been designed to enable paint operations for all Bell Helicopter commercial products ranging from legacy products to those currently in development. And by integrating the latest requirements for safety of operations, ease of maintenance, energy sustainability, environmental and ergonomics – Bell Helicopter has been able to vastly improve the paint process.

For more than 40 years Bell Helicopter has supported its customers in more than 50 countries in Europe, Russia, the Middle East and Africa from its Amsterdam Supply Centre. The Prague facility is just one of a growing network of support and service facilities Bell Helicopter has located throughout Europe. Bell Helicopter also owns Rotor Blades, Ltd., in Warminster, England, a blade repair centre, and has 16 Bell Helicopter Customer Service Facilities (CSFs) located throughout Europe and Russia to perform maintenance, repair and overhaul on Bell Helicopter aircraft.

Bell Helicopter also announced just last year that it will be partnering with its sister company, TRU Simulation, for the first Bell Helicopter regional training centre in Valencia, Spain. The facility is anticipated to open in late 2016.



The Bell facility is located on the east side of the Vaclav Havel Airport close to Terminal 3 and the Ramada Hotel. Space was at a premium so the new facility will be familiar if you have been there before. The existing facilities have seen a major makeover.

Bell were making much of their other facilities across the region - not all customers are sold on having to have their airframe completions in Prague rather than locally – but the fact remains that it is planned that all European completions will be taking place in Prague and the site is equipped to a level that assumes that.

The Amsterdam facility will not have the right level of capability and the company presence in the UK is, as its name suggests, a repair centre. The CSF network can support but little more.

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There are always winners and losers and the Bell facility has always been handy for the Czech Police air operation, although not quite 'just across the road' it is close at hand and as a result the unit sent over their newest example of the Bell 412 OK-BYT to provide gathered media an overview of their current operations using the current fleet of Bell 412 and Airbus Helicopter EC135s. Vaclav Kricner [left] and Tomas Hytych provided the verbal insight to what is an important but fairly standard airframe for undertaking search, surveillance and transportation. Most of the day-to-day police work is handed over to the EC135s these days, the larger machines retaining a more specialist role. [Thanks to Bell Helicopter and Communication Manager Virginie Brizard for facilitating this site visit

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In direct contrast Bell in the Americas announced plans to relocate several programmes in order to optimise manufacturing capabilities across multiple **Bell Helicopter** facilities. Effective immediately, the Bell 505 Jet ranger X final assembly in Lafayette, LA, will relocate to the company's Mirabel Assembly and Delivery Centre in Canada. In addition, the Lafayette facility will receive the Bell 525 Relentless cabin subassembly, relocating from the Amarillo, TX, facility, and the MQ-8CFire scout UAV modification work relocating from Ozark, AL. Neither move is expected to impact the certification of the Bell 525 or Bell 505. Bell Helicopter built the first three Bell 505 flight test vehicles at the Mirabel facility and is working closely with Transport Canada to achieve type certification and production certification this year. Once certification is completed, Bell Helicopter will begin production and deliveries out of the Mirabel facility.

The Bell 505 Jet Ranger X continues to make terrific progress and achieve testing milestones. The flight test vehicles 1-3 have accumulated more than 700 flight test hours. To date, Bell Helicopter has received more than 380 letters of intent from around the globe for the five-seat Bell 505.

**Liqui Moly** the UIm based German specialist for motor oils and additives had received a contract from Austro Engine to include their product in every future engine delivery. The Liqui Moly Austro Engine Aero 5W-40 will also be used when the engines are serviced. http://www.liqui-moly.de

Also in Weiner Nuestadt the new airframe from **Diamond Aircraft** the DART-450 (Diamond Aircraft Reconnaissance Trainer) has flown as the worldwide first all-carbon fibre tandem, two-seat civilian and military trainer with a sidestick and pneumatic ejection seats.

The +7/-5G aerobatic airplane has a maximum take-off power of 500 hp, is equipped with the lvchenko-Progress / Motor Sich AI-450S turboprop engine, a 5-blade MT propeller, and a GARMIN avionic system. Maximum endurance of the DART is 8 hours plus reserve. Within the first 60 minutes of flight time, speeds between 60 – 200 knots IAS have been tested at various altitudes. Expected top speed is 250

knots TAS.



Since the beginning of 2016, Diamond Aircraft produces a complete re-designed variant of its special mission aircraft DA42 MPP.

The turbo-charged, jet fuel powered aircraft has undergone significant structural and aerodynamic improvements leading to a better overall performance.

The maximum take-off weight (MTOW) is now 1,999 kg (4,407 lbs), which means an increase of 99 kg (218 lbs) for additional payload or fuel. The average empty weight of 1,380 kg (3,043 lbs) offers now 619 kg (1,365 lbs) for crew, jet fuel, and airborne mission equipment.

The substantial weight reduction resulted in increased speed, enhanced overall performance and additional payload.

The stronger generator provides 28V / 100 Amps (2.8 kW) solely for mission equipment. It is powerful enough to easily run a typical ISR configuration, consisting of a high performance EO/IR turret, a maritime radar, a SATCOM data link and an on-board mission management system.

The improved DA42 MPP variant also comes with the stability augmentation system Garmin ESP (Electronic Stability and Protection). Fully integrated in the Garmin G1000 glass cockpit, it provides additional safety for the crew during complex, long endurance land or maritime surveillance missions. The technology assists the pilot in maintaining the aircraft in a safe and flight stable condition.

A couple of months ago PAN [April page 28] ran an item on **Lufthansa Technik's** [LHT] fears that lower maintenance costs and longer times between maintenance of new air-frames were likely to cause problems for the MRO sector. Those fears spoken in the plush surroundings of the East India Room at the Raffles Hotel in Singapore seem to have been an early warning of their internal problems as well as the rest of industry.

On May 18 it was revealed that it was they, LHT, that would be cutting about 600 jobs from the engine department in Hamburg due to the reduced overhaul requirements of engines such as the LEAP and the PW1000.

The lower headcount will be achieved through natural wastage rather than compulsory redundancies. The cuts – to take place over 10 years – still represent more than a third of LHT's engine workforce in Hamburg.

Talking to German media last month, LHT's chief executive, Johannes Bussmann, reiterated that improving reliability – such as the new narrowbody engines' need for two rather than three overhauls during their service lives – would offset the benefits to the MRO sector of a growing global fleet.

The Federal Aviation Administration (FAA) has granted Technical Standard Order (TSO) authorization for **Universal Avionics** AHS-525 Attitude Heading Reference System (AHRS). This long-awaited approval allows the company to manufacture and bring to market a new addition to its product line. The AHS-525 is positioned as a low cost option for replacing legacy mechanical VGs and DGs in Part 23 and Part 25 Fixed Wing aircraft, and Part 27 and Part 29 Rotorcraft.

The AHS-525 contains multiple rate gyros to measure angular aircraft motion in the pitch, roll and yaw axes, and several accelerometers to measure aircraft linear motion along the longitudinal, lateral and vertical axes of the aircraft. It is a cost-effective solution for replacement of fragile mechanical "spinning" gyroscopes.



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A single AHS-525 provides an opportunity to replace multiple Line Replaceable Units (LRU) found in a typical aircraft installation. The stand-alone AHS-525 offers Micro-Electromechanical (MEMS) technology that has all of the advantages of reliable solid-state technology, along with ease of alignment procedures, a compact and lightweight size, and increased reliability over VGs and DGs. www.uasc.com/shop/avionics/ahrs

**Airbus Helicopters** in the UK has been selected by Ascent as the Aircraft Service Provider for the UK's Military Flying Training System (UKMFTS). The contract, worth £500M over 17 years, will see Airbus Helicopters deliver aircraft and an integrated support solution over the course of 18 months, ready to start training in April 2018. This will involve the manufacture of aircraft in addition to developing the support infrastructure and training initial crews and maintenance personnel.



Over the last 35 years, all UK military helicopter pilots have been trained on Airbus Helicopters, initially with the Gazelle and subsequently with the AS350B 'Squirrel'. From 2018 onwards, Airbus Helicopters will support Ascent's delivery of a key capability for the UK MoD. Helicopters have played a fundamental role in virtually all operational scenarios and theatres for many years and this new capability will prepare 121 pilots and 99 rear crew per year to successfully follow their predecessors.

As part of the contract, Airbus Helicopters will supply a fleet of H135 and H145 capable of delivering the 28,000 hours per year necessary to meet the training requirement. The two types, already a favourite for military helicopter training in the US, Australia and Germany among many other partner nations, incorporate the latest technology, allowing the crews to perform the widest envelope of training from basic flying to offshore, night time operations. *Ed: This might suit the UK NPAS as there are going to be a large number of black and yellow helicopters that look like police helicopters flying around. Historically the bad boys still tend to surrender to helicopters when they think they have been seen by them... the problem is now 'who are they going to surrender to?'* 

PowerTrunk, part of the Sepura Group, has been awarded a new TETRA network order by Rockwell Collins to provide a Terrestrial Trunked Radio (TETRA) system at San Francisco International Airport (SFO).

This is the third TETRA project that has been awarded to PowerTrunk as part of a programme by Rockwell Collins to upgrade its ARINC GLOBALinkSM network in use at several airport locations across the country. Prior to San Francisco, Rockwell Collins and Power-Trunk also partnered to install TETRA networks at the Los Angeles International (LAX) and New York's John F. Kennedy (JFK) airports.

The network is intended for mission critical airline and aviation ground-based communications, and will enhance operations and services such as for airline ramp area personnel, airline passenger services, ground handlers, terminal security teams, and other ground staff working at the airport.

Ten years after the first delivery of Camcopter® S-100 to the launch customer, the Austrian Schiebel company proudly celebrates the anniversary of its world class product. Unmanned helicopter development at Schiebel started in 1995 and once the first S-100 was

supplied to the UAE Armed Forces in 2006, it took only three years before Schiebel had sold the 100<sup>th</sup> aircraft. During its ongoing production since then and in line with the company's philosophy of permanent performance enhancement, the UAS has undergone continuous improvement in order to meet the ever growing demand for new capabilities from its customers.

The multi-sensor capability of the S-100 underpins the helicopter's performance across a wide spectrum of applications, from peace-keeping and humanitarian assistance to industrial, maritime and military support. With missions completed on thirty different vessels, Schiebel takes pride in its ability to deliver exceptional capability from remote and austere operating sites. The more high profile operations have included the use by the French Navy for an



Anti Piracy Operation in the Arabian Sea, or the Italian Navy and NGO Migrant Offshore Aid Station (MOAS) for humanitarian surveillance across the Mediterranean Sea. <u>Anniversary video on youtube</u>



June 2016

#### **POWER HOUSE**

Around 20-years ago, when PAN started up a company called Powervamp also appeared on the aviation scene selling basic ground support power to the industry. They were not the only UK based company offering the same service – there was Red Box – but at the start Powervamp produced equipment for both until an acrimonious parting of the ways many years ago. Both have been in the market since offering similar products.

Powervamp was selling battery packs to bus operators when it discovered aviation and it still has that market – and a whole host of ground based military support options as well as aviation.

From providing apparently simply battery packs for starting helicopters the business evolved to solving the specific needs of emergency services aviation – powering up a then growing need for running EO/IR equipment on the ground without powering up the aircraft – and solving the many questions that that raised. Once in the field of ground power it became a tussle between Powervamp and Red Box over who would power up the aircraft appearing at trade shows. There was a race to get 'your' box visibly under the nose of the latest airframe to be launched at Heli-Expo or Helitech in order to get the subliminal sales exposure – although now it is becoming increasingly evident that the units under the aircraft on display are having vegetation placed around them. At one time the units were



a free loan but now they tend to pay for them so the result is perhaps counter-productive! From helicopter shows came bigger things and successful bids were placed for running ground support at the major air-shows like Farnborough and Paris. The simple packs were not enough to support Jumbo jets so deals were struck with manufacturers of large GPU's and in time that led to incorporation of those products into the Powervamp offerings. Airport support – like London City – duly followed. The product line has broadened and a relatively new line is the supply of emergency lighting central batteries for buildings along with the Sidewinder, a moveable arm designed to safely provide power to airliners on the ground – a major contract for this was signed last summer for Heathrow Airport.

For the past 22 years Powervamp has been based over in the west of England with its long term base at Weston-super-Mare near Bristol, a head office being surrounded by dispersed production and storage units for the core product within the town.

Late last year it was the growth into the larger GPU market that precipitated a major change in production strategy. The head office remains in Weston but now all production and product support has shifted east to an area north of London in which all operations are contained in a single building.

Powervamp Ltd., is now located in the former Effekta factory at Barton le Clay north of Luton and with easy access to both the M1 Motorway and the A1 North Road, all the major airports [London and Birmingham] and most of the domestic customer base. The location was grown from the factory of one of the former suppliers to Powervamp now enlarged by incorporating adjoining buildings as they became available. Powervamp is currently building GPUs against a significant order from the British military and ramping up

to yet again support Farnborough Air Show in July and meanwhile producing and developing the familiar hand-held power units and their derivatives from bought in parts.

A significant attraction of the location was in the availability of the right calibre of person to the company – like it or not they tend to be nearer London than Bristol





and linked in with local universities. Twenty years ago product development was based on a few hand tools and soldering irons but today it is more advanced with university graduates sitting at computer loaded with a CAD program leading the development of product development.

In march Powervamp appointed AERO Specialties as exclusive distributor for its portable DC products for the North American continent and Mexico.

Following detailed talks over a 10 month period, the far reaching agreement was signed in Idaho at the Boise base of AERO Specialties Inc.

In a statement that summed up the current operation President and Founder of AERO Specialties Matt Sheehan commented, "While we have been aware for some time of the quality and range of Powervamp's products, it was the visit to their UK factory to see first-hand Powervamp's huge investment in software engineering that has convinced us that they are far ahead of any other manufacturer of similar portable DC products."



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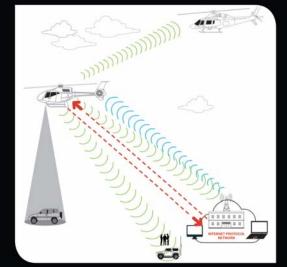
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## **ACCIDENTS & INCIDENTS**

**10 March 2016 Beechcraft E90 KingAir N17NM.** Air ambulance of University of New Mexico Hospitals Newborn operated by Seven Bar Aviation. The aircraft arrived at ABQ on a clear night and taxied into the general aviation parking area under the direction of the Fixed Base Operator (FBO) guideman. The ramp layout required the aircraft to taxi directly into the light of one of the lamps illuminating the ramp, thereby degrading the night vision of the pilot. As the pilot prepared to make the left turn into the parking spot, the right wingtip came in contact with the tail boom of a McDonnell Douglas 369FF helicopter. Both aircraft sustained damage.

**20 March 2016 Airbus Helicopters AS350B3 N914SM.** Air ambulance of CareFLIGHT, Grand Junction, Colorado, operated by Air Methods. Helicopter was taking off from Montrose Regional Airport en-route to Gunnison Valley Hospital. The crew noted a low flying aircraft and the pilot banked steeply to the right. The unannounced aircraft was approximately 100 ft from them and a near miss was reported. An over torque limit light flashed and the flight was terminated. [Concern]



**15 April 2016 Airbus Helicopters EC145 N145HH** Air ambulance of LIFE STAR Hartford, Connecticut operated by Air Methods Corporation. During the final approach and landing phase to a hospital based helipad in Meriden, Connecticut, there was a significant bang noise heard by the crew during the descent; no patient was on-board. The pilot reported no loss in control of the aircraft and deemed it appropriate to land the aircraft and did so without further incident. Upon shutdown and exiting the aircraft, it was discovered that the EC145 pilot's side hydraulic inspection cowling had opened and contacted all 4 main rotor blades. The aircraft was immediately removed from service. [Concern] **25 April 2016 Helibras HB350B2 Esquilo PR-YCB.** Corpo de Bombeiros de Santa Catarina, Taking off from Piraquara, Brazil, pilot lost control and helicopter rolled on to its right side and was badly damaged. The aircraft's two occupants suffered minor injuries. [ASN/youtube]

**20 May 2016 Airbus EC145** Gendarmerie Nationale France. The helicopter crashed into a cliff face around Cauterets, in the mountainous Hautes-Pyrénées in south western France, killing all four people, a pilot, crewman and two rescue specialists, aboard. All were said to be Gendarmes, two policemen in the platoon gendarmerie high-Mountain of pierrefit-te-Nestalas and two policemen of air detachment of the gendarmerie of tarbes. It was participating in a training operation close to the Spanish border when it went down. One report states that it was in close proximity to a cliff face when it suffered equipment failure.

**24 May 2016 Beech King Air 90 VT-EQO.** Air ambulance of *Alchemist airlines travel-ling from from Patna to Delhi* crash-landed in Najafgarh area of South West Delhi. Seven on -board were uninjured.

After both the engines of the 27-year-old Beechcraft King Air C-90A aircraft of Chandigarhbased Alchemist Airways shut down as it approached the airport, pilots Amit Kumar and Rohit Singh glided the seven-seater to a field in Khair village in south-west Delhi around 11 km from the airport.

The patient Virender Rai (42) was being flown in from Patna after a stroke, only one of the occupants Bhagwan Rai, the patient's relative suffered minor bruises on his forehead and abrasions on his thigh. [Media]

## FLIGHT SAFETY

Lots of column inches are being expended on a media and air unions frenzy as poorly thought through reports emerge of "ghost" collisions of airliners with unmanned craft. Naturally far less publicity attended the story retraction as it turns out that these collisions - upon which punitive legislation could well be based - turn out to be something less solid like a plastic bag. That was the case in a recent collision between a BA A310 and an object at Heathrow.

At times other threats - including laser strikes - are being overstated for effect and that too can ultimately have a detrimental effect on public support of it is seen to be unnecessarily highlighted.

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Legacy aircraft might be in for a rough ride in coming months if the activities of a US widow start to stick.

Ten months ago the crash of a near new AS350B3e air ambulance killed veteran pilot Patrick Mahany and left other crew members injured and the widow of the pilot is particularly sore about what happened. The accident in a car park at Frisco near Denver, Colorado appears to have been survivable but a fierce post-crash fire gave the pilot life ending injuries before he could be pulled clear.

The wife of the pilot, Karen Mahany, is trying to get the US Congress to require the retrospective fitting of crashworthy fuel tanks in older helicopter designs. She has been telling members of Congress they needed to do more to protect the lives of air medical crews across the country.

The crash, captured on surveillance video, caused the fuel system on the year-old helicopter to rupture with the footage clearly showing that the fire started in under 10 seconds after impact and engulfed the whole airframe. The NTSB agreed that all three people on board survived the initial impact but only a flight nurses got out of the inferno alive. Patrick Mahany made it to a hospital bed but ultimately died.

The point of her growing campaign is that there are thousands of airframes operating under outdated construction rules that are therefore more likely to kill the occupants than modern designs.

The object of Mrs Mahany's ire may be the AS350B3e/H125 but it actually affects airframes across the manufacturers that were designed well before the latest regulations came along. The late 1970s designed H125 remains one of the most popular police and EMS airframes around but in many ways it simply cannot be redesigned to be as safe as say a 1990s FAR27/FAR29 specification airframe.

Over the years Airbus has fitted some safety elements including energy-absorbing seats but the main safety feature for fuel – sticking it under the floor – is not an option because of the amount of redesign it would require. The result is that there is a large fuel tank behind the cabin – but one that could arguably be improved by compartmenting [at significant loss of capacity and weight penalty].

Before this item turns into an anti-Airbus trip I probably need to mention that other still popular old airframes with similar problems include such as the A109 and 119 series where the passengers sit on the fuel in non-attenuating seats that would probably kill the occupants before they even had chance to die in any fire. Some older airframes including the Bell 206 have better crash survival characteristics – often more chance than design – but fire is the leveller and tends to consume all without favour. I am not quite sure where hybrid designs such as the H145 lie. They do not meet all the regulations but have undergone many tweaks that have greatly improved survival. Such ill-defined developments are difficult to quantify and is an aspect that will greatly complicate this right minded campaign.

The fire suppression characteristics of more modern airframes meeting regulations set in the 1990s are far better and there have been numerous instances of recent accidents that tend to support that intention.

The campaign for flight safety legislation has been taken up by two Colorado Congressmen. They seek to compel the FAA to require manufacturers to place more crash-proof fuel systems in all new build helicopters immediately. It will be a difficult requirement to define.

The accident involved took place on July 3, 2015 when the AS350B3e N390LG air ambulance of Flight for Life operated by Air Methods took off from its base and crashed into the car park at St. Anthony Summit Medical Center. The other two crew members were airlifted out, one with critical burn injuries.



## **MOVE ALONG THERE**

I guess it could only happen in England

On the day that a terror suspect attacked people at Munich airport with a knife whilst shouting out the now familiar *Allah Akbar* a police force in Greater Manchester was apologising profusely for one of its officers shouting *Allah Akbar* when setting off a pretend bomb in the Trafford Centre as part of an Exercise designed to test the emergency services readiness for a terror attack!

As one newspaper subsequently commented perhaps he should have shouted "God save the Queen" – as those words are well known to be associated with terrorism!

A national shortage of armed police is leaving Britain vulnerable to terror attack, the Police Federation of England and Wales has said.

Officers are not volunteering to carry guns because they fear being "hung out to dry" and treated like a suspect if they discharge their weapon in defence of the public, the federation claimed.

Its chairman Steve White warned that Government's plans announced last month to train another 1,500 firearms officers to deal with the terror threat looked doubtful.

The warning comes as a survey of 16,800 officers shows that while 40% fear they will be attacked at work, just half this number (20%) have or want personal firearms.

Last month the threat from Northern Ireland-related terrorism in Britain was raised from moderate to substantial.

Last month the local police here in Waltham Abbey [no police station for three years now] decided to award themselves a new standard shift pattern of 0900-1700 daily, everyone of the 20 or so officers on the same shift so when they are off they are off. As for crime calls let us know when we get back if you will.

But this is a growing problem in Britain, even as the people bravely decide whether Europe is for them or not, the upholders of the law make their own rules based on the weakest decision maker. Within days of the local decision in Essex the Avon & Somerset Police did a similar thing. They stayed away from an illegal 'Rave' – a wild noisy party in the countryside. They failed to enforce the law.

The people of the pleasant Somerset market town of Frome were kept awake all night by the selfish thumping and yowling of an illegal party. Plenty of people, around 400, called to complain.

The police decided it would not be 'safe and proportionate' to do anything about it and they left the party intact until daylight returned – at 9.30am the next day.

Apparently the law breakers failed to inform the police in advance. How unthinking of them. A helicopter of NPAS was called in and spent an hour assisting by observing and advising on the access points as part of the service Avon & Somerset pay £1M a year for, but all to no avail the man in charge on the ground was having none of it.

The excuse was that they were outnumbered by the 200 people present and they were worried it might not go well.

Ed: As one that has cleared that many from a public house solo in my middle years I can only be dismayed – if not horrified - at such a dereliction of duty by the officers on the ground. That would have cost me a few days pay—at the very least.

Perhaps it is time for the UK Government to ask the US to remove its V22 Osprey's from British skies. It seems the news media have taken to talking gibberish about them. After just two of the half helicopter, half fixed wing machines transited across London last month the papers were captioning the images with lots of fancy theories. 'Operated by the Special Air Service' 'Anti-terror machines' and then this gibberish from 'getwestlondon'.... 'The aircraft can reportedly fly without having to refuel for eight hours, equal to 1,000 hours. 'Each of its three 19ft-long rotors attached to each wing can, as their name suggests, rotate 90 degrees - along with its engine - after it takes off like a helicopter to transform into a fixed -wing craft and fly at high-speed.'

Yes time to go, they are clearly wreaking havoc with weak journalistic minds!

#### **EVENT NEWS**

Housing for HAI HELI-EXPO 2017 in Dallas, Texas, **opens June 1 at 1 pm EDT**. Reservations can be made through OnPeak, the only official housing company for HAI HELI-EXPO 2017. You can book online at <u>rotor.org/housing</u>, beginning June 1. If you have any questions Contact OnPeak at +1 855-211-4838, or <u>heliexpohousing@onpeak.com</u>

#### LATER THIS YEAR

You can now sign up to visit the Emergency Services Show 2016 which is to be run between 21-22 September 2016, at the NEC, Birmingham UK.

The Emergency Services Show has a host of new features for 2016 as it moves to the larger Hall 5 at the NEC. New seminar programmes will cover Lessons Learnt, ICT Innovation and PPE. Home Safety 2016 runs as a new show within the show, the Drone Zone brings together everything UAV, while popular features like the Collaboration Zone and College of Paramedics CPD workshops have also been enlarged. Register now for free entry at: www.emergencyuk.com

Lessons Learnt from past incidents and training together to prepare for the future will be key themes at this year's event. A free two-day seminar programme focusing on lessons learnt, curated and inspired by JESIP and the National Operational Guidance Programme for the Fire & Rescue Service, will review the multi-agency responses to recent incidents, identify the operational challenges and capture positive learning. It will include new rescue techniques and communication models for improved outcomes in the future. Further seminars will also cover the areas of ICT Innovation and PPE.

Home Safety 2016 is an exciting new show running alongside The Emergency Services Show 2016, where emergency services will share collaborative approaches to helping people live safely at home and equipment suppliers will showcase the latest specialist equipment for the safe home.

As well as showcasing drone suppliers, the new Drone Zone will bring together industry specialists and end-users who will be making presentations on UAV technology and sharing their experiences with delegates. The programme includes a presentation on risk management for Remotely Piloted Aircraft Systems (RPAS) and the factors affecting RPAS operational safety in both civil airspace and commercial space. Other sessions will cover privacy, security implications and legislation.

The NEC is next to Birmingham International station and Birmingham Airport as well as being directly accessible by motorway. Visitor entry, seminar theatres and parking at the Emergency Services Show are all free.



8 June 2016 7<sup>th</sup> Essex & Herts Air Ambulance Trust Aeromedical Conference, Anglia Ruskin University, Chelmsford, Essex CM1 1SQ. The Trauma Epidemic: Adapting to the latest strain. Chaired by Dr Ronan Fenton, Medical Director of Essex & Herts Air Ambulance Trust with nationally acclaimed speakers. Subjects include Managing Penetrating Trauma and the Challenges of Triage, Introducing & Governing New Therapies, The Changing Face of Major Trauma, Where Does Pre-Hospital Care End? Etc. Evening Function at the Atlantic Hotel, Chelmsford £20.00 per person. <u>https://www.eventbrite.co.uk/e/essex-herts-airambulance-trust-aeromedical-conference-2016-tickets-22222626474</u>

It may be too late to remind you about PAvCon right now as there are just days to go—and yet I expect that there will even now be some very late bookings!

On Monday June 13 the first ever PAvCon Classes are to be held at the venue as the exhibitors set up their part in the event.

The following two days, June 14-15 is 'just' the ordinary 2016 PAvCon Police Aviation Conference. If you have never been before you really do not know what you have been missing all these years!



