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Issue 275

March 2019

Netherlands AW139 Delivery Armenia EMS Start-Up Nigeria - a tissue of lies? UK Coastguard now at the start

Police Aviation News - out there for 23 years

- BUNDESPOLIZEI -



# LAW ENFORCEMENT CANADA

**BRITISH COLUMBIA:** The new Airbus Helicopters H145 helicopter for the RCMP was officially unveiled as Air 5 in Langley early last month. Air 5 cost \$Can13.4M, funded 70% by the province and 30% by Ottawa. It's expected operational lifespan is about 20 years.

The new helicopter has been dedicated to a pilot who died in a training crash seven years ago in Chilliwack. Both the name and call sign are in honour of the late civilian pilot Dave Brolin. Brolin's initials form (DJB) the last three letters of the aircraft's call sign, and "The Spirit of Holidave" has been written on the side of the helicopter, after Brolin's nickname.

Compared to the smaller and lighter Air 1 and Air 2 helicopters [AS350] often employed in RCMP service the new Air 5 is more of a workhorse. It will be based out of the RCMP hangar in Langley but will operate province-wide. With its twin-engine design – a first for an RCMP helicopter in B.C. – it can travel over water by night and is also capable of dropping off patients directly at hospital helicopter landing pads.

Despite the vast area assigned to all RCMP helicopters there are complaints about night flights undertaken by the AS350 fleet. Night operations have been undertaken on a regular basis for thirteen years. It is hoped that the quieter H145 will at least reduce the disturbance for some of these instances.

The H145 isn't fully operational yet. There is an expectation that pilots and crews still have one or two months of training to undertake.



COVER: The Federal Police in Germany has a national responsibility for police air support over and above that of individual state police operations. It originated as the militaristic Border Guard [Bundesgrenzshutz] but changed its aircraft marking and uniforms to reflect a new civil role as the Bundespolizei in July 2005.

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

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**POLITIE:** Dutch Police AW139 PH-PXX arrived at Staverton on Tuesday 5 February 2019, & it went straight to Babcock. It is believed that it is being role equipped to a similar standard to the recently upgraded EC135s.

### POLAND

**POLICJA:** After the impasse last year when it seemed all would be lost the Polish Government has announced that three new Bell-407GXi helicopters will be supplied under a deal with Bell Helicopter Textron Inc. and enable Polish police to retire their outdated Mi-2s.

The Polish police announced the deal at the start of February but did not disclose its value at the time. Subsequently a spokesman for Poland's National Police Headquarters (KGP), Mariusz Ciarka, told public broadcaster Polish Radio that the PLN 50 million price tag covered "the delivery of three helicopters, training of flying and technical personnel and the cost of equipment and service materials."

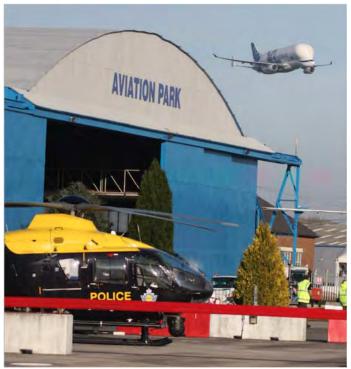
Under the contract, the first of the helicopters is due to be delivered by the end of this year, and the other two by March 2020. [IAR]

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# UNITED KINGDOM

**NPAS** News from the HQ part of the organisation has apparently morphed onto the use of Twitter. Somewhat overdue this development has recently seen adverts to recruit line pilots and TFO's – a constant need – and a Training and Development Co-Ordinator.

The 13 operational bases have long used Twitter, so this was apparently a penny taking an awfully long time to drop in Wakefield and they now link more and more into a range of day to day success stories based on what might potentially be low interest storylines. The whole tends to promote NPAS to the public. It is a voluntary activity by unit staff so potentially beset by many pressures. There have been fewer instances of individual units showing their displeasure at official interference by neglecting to Tweet. Long term readers will no doubt recall the many months that the most active and most followed Tweeters - NPAS London - was silent. It can be an embarrassing medium at times.





Some of the Tweet news is local going on international—certainly not fake.

NPAS Hawarden base lives n an airfield that promotes itself as a very English Chester Broughton Airport but is actually in North Wales. On their doorstep is an interesting aircraft factory run by Airbus and an Airbus Helicopters maintenance base. Both good reasons for interesting passers by.



ADVANCED POWER SOLUTIONS

#### March 2019

Ed: Notwithstanding the apparent move to Twitter I quess we are not supposed to have noticed that little real news was coming out of Wakefield recently. There have been news reports including the launches of Almondsbury (Bristol) and North Weald but they have been closed events. The lack of the historic pack of journalists and photographers at both national and local level plays into NPAS hands. The numbers of people involved in the media industry has spiralled downwards, so they prefer supplied news stories from afar. NPAS does not even attempt to offer potentially interested aviation media access.

We are still awaiting the long delayed Strategic Board minutes [now a year astray] and there has been no sign of a response to Matt Parr's Her Majesty's Inspector of Police and Fire and Rescue Services report on NPAS. Either the response has been in secret or, as been suggested to me, they are still waiting and the HMICFRS may well finally be getting somewhat discomforted in their protracted wait.

Who would seek to rock the boat when they are all in the same self-serving boat together?

Many rue the day West Yorkshire Police stepped up to the table and declared that they would create and operate a National Police Air Service. There was a reason no others wished to undertake the difficult task and they were very right to avoid that poisoned chalice. Those that might have headed off the impending disaster - including the National Police Chiefs Council - were distracted by their own tunnel vision agendas. Some were serial offenders in the trail of destruction they left behind in the police service. To a man they have all retired and now simply spend their days polishing their medals and awards. Those that remain may be good and worthy people, but they appear to have an imperious opinion of their own worth, sweeping in to staged events and not acknowledging the importance of understanding the operation under their care.

The organisation is tainted by staff disquiet, alleged bullving, overt criminal activity – let alone quiet retirements of senior staff associated with those assaults and criminal activity. Some of these can be said to be 'not directly connected' to NPAS but in most cases the link is sadly all too real.

The worst result though is that finding an individual police officer on the street who declares an expectation that airborne law enforcement can play any part in their crime fighting is now almost impossible. Prior to October 2012 there were thousands.

Still more complaints have surfaced about the poor service NPAS is giving a variety of areas – including Wales and Avon in the West, Dorset in the south and Lincolnshire in the east. In the latter county the town of Grimsby has reportedly seen police air support availability from Humberside "plummet" since NPAS took over. There will be others but not all are yet in the public domain. The theme seems to be a wholesale move towards a greater reliance on drones and other surveillance options.



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#### March 2019

Reports from Avon and Somerset Police over in the west of England are that helicopter use plummeted from 1,315 sorties in 2016 to 379 in 2018 – as stark and salutary an illustration as any that NPAS is not working. Avon and Somerset have an expectation that they will save £500,000 from their £1.4M annual payment to NPAS. So both will lose out in significant ways.

Unlike Scotland or Northern Ireland, although it is partially self-governing Wales is still subject to having its policing policy set by Westminster.

The Welsh Parliament has been consistently denied the powers necessary to deliver the style of policing it says it wants to and records the loss of in excess of 500 police officers since 2010 along with the dedicated Dyfed Powys Police Agusta A109 helicopter. [Hansard]

In Dorset the local police say the success of its own drone unit, one of the first in the country, has seen savings in air support services estimated at  $\pounds$ 170,000. At the same time the force is paying fixed fees for the shared helicopter and additional fees each time it is used.

Chief Constable James Vaughan believes that because the police helicopter is based locally, at Hurn Airport, there is a tendency to use it. He is looking into whether that bias is misplaced, and they could place greater reliance upon their drones.

The force drone unit, which was formed in May 2017, was deployed 182 times in the last financial year and by the end of next month is likely to exceed 300 uses in the current year. Crucially it costs at least one -third less than using NPAS. [WDP/MJ]

Ed: The NPAS assistant operations director for the south west is Simon Hepworth these days [he was the former control room inspector at Wakefield] and the Western Daily Press claim he welcomes the reduction in use by forces. He quotes the availability of just one aircraft based in Almondsbury [Bristol] as if there were no other [in South Wales, Exeter and elsewhere] but I guess he may well be right. Reports from the front suggest that aircraft availability is dire and there are regular reports of only one aircraft being available to cover vast areas. Perhaps there are hopes, or delusions, that the upcoming rebid of the maintenance contract will improve the situation.

Rumours that the number of NPAS bases is to be cut still further might not be far from the truth. At this rate the number of hangars without operational helicopters in them rises and they may as well be converted to sports halls for the local community.

**SCOTLAND:** David Young, the pilot who flew the doomed Clutha chopper on the shift before the crash has pulled out of the fatal accident inquiry it was revealed in court early last month.

The former flight safety officer was due to give evidence as the pilot who passed the helicopter to tragic Captain David Traill, 51, before the November 2013 Clutha helicopter crash which killed 10.

The city's sheriff court was previously told that Mr Young had called a halt to a compressor wash during a pre-flight check on the morning of the accident when a missing person report came in.

The enquiry still has plenty of witnesses to listen to. The latest estimate is that 85 people are expected to give evidence between now and October. The Crown will lodge 1,400 pieces of evidence. [Scottish Sun]



**YORKSHIRE:** Intensive police aviation flying is about to commence out of Doncaster Sheffield Airport [aka Robin Hood Airport].

Anyone with ideas about fleets of twin engine yellow and blue surveillance aircraft leaping into action will have their hopes instantly dashed, however.

South Yorkshire Police based in Sheffield are meeting their own expectations on air support by joining the rest of the country in setting up a drone section. Led by the Airport Policing Group at Doncaster, the project started with the acquisition of two drones last year, specifically to provide flexible coverage of Doncaster Sheffield Airport's airfield in the event of an incident.

Funding has now been approved by senior officers to expand the force's fleet of drones from two to eight operational aircraft, which will be deployed routinely for a variety of operations beyond the fences surrounding the airfield. They made a case for investing in further aircraft, so that they can be used more routinely across South Yorkshire.

Operational Support Unit Inspector Martin Rodgers has supported the project: "Whilst we will still be working closely with our colleagues at NPAS (National Police Air Service) for certain operations, adding this resource will mean we can respond more quickly and spontaneously to incidents."

As well as increasing the number of aircraft, 20 officers from across the force will undergo extensive pilot training in line with Civil Aviation Authority regulations. Once training has been completed, the force will have 24/7 drone coverage and aircraft will be able to be deployed to help officers with a variety of operations including search operations; major incidents, crowd monitoring and proactive operations.

Ed: The ability to 'respond quickly and spontaneously to incidents' with eight drones and 20 officers! Shades of real police air support, I guess. The North East consortium managed a similar sort of service over four force areas with far fewer expensive staff – four pilots, eight observers and one BN Islander - working a 24/7, 12-hour shift pattern! Ah the nostalgia of it.

The further irony of this innocent little story is that the fledgling SYP drone unit was based at DSA and specifically protecting set up to protect the airport and, by default, the [non-operational] NPAS base at the location.

# **UNITED STATES**

**NATIONAL:** As from February 23, owners of small drones in the USA will have to display their FAA registration numbers on an outside surface of their aircraft. When the FAA first required registration of small drones in 2015, it allowed the marks to be in a closed compartment, such as a battery case. The perceived dangers inherent in this were put to the FAA and this led to the revision in thinking. The FAA has issued two proposals that will allow drones to routinely fly over people and at night. There is a comment period for these proposals that ends April 15.



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# AIR AMBULANCE

The first air medical **helicopter** set for use in the former Soviet Block country has arrived in the country.

The Airbus Helicopters H125 is the third helicopter to be operated by Armenian Helicopters based at Zvartnots Airport and according to the countries Health Minister **Arsen Torosyan** is set to be the basis of a new air medical service.



Armenian Helicopters bought the all-black aircraft from Airbus, it was delivered to Zvartnots International Airport carrying dual markings of F-WTBI and it local identity EK - H004 [panarmenia.net]

## CANADA

**STARS:** Calgary-based STARS Air Ambulance has selected SKYTRAC Push-to-Talk with real-time inflight data transfer capability for its Airbus H145 fleet renewal program.

The lightweight SKYTRAC hardware kit will enable fast and reliable group-talk, simultaneous uninterrupted flight tracking, and onboard satellite and cellular data transfer capabilities.

The package supports real-time in-flight data streaming from any connected device in the cabin or cockpit, including mobile devices and tablets. The system also streamlines the download process for flight data monitoring and other flight logs to save time and reduce manual labour post fight.

In 2018, STARS selected Airbus' H145 helicopter as the fleet replacement aircraft for its ageing air ambulance fleet, becoming the first Canadian operator to select the H145 in HEMS configuration. The data transfer capability provided by SKYTRAC has been ordered as part of the initial STARS configuration. The first helicopters are scheduled for delivery in 2019.

**SASKATCHEWAN:** From late January patients requiring urgent transfers from Cypress Regional Hospital in Swift Current can now benefit from a timelier response now that the helicopter landing pad in car park to the east of the hospital is operational.

STARS is flying certified flight paths that limit noise and exposure to the hospital and nearby area and it is recognized that the sight of aircraft landing and taking off will be a new experience.

Early February saw the official opening of the new helipad. Circumstances, the weather and availability, didn't allow for STARS to bring in a helicopter to round off the event but several people with ties to enabling the pad to be built were on hand to mark the occasion.



The new \$342,000 pad had its first landing on January 28. From late in 2017 until then, STARS had been picking up patients at the Swift Current Airport, which is 10km from the hospital.



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# INDIA

**KOLKATA:** Lifesaver Air Ambulance provides a free bed to bed air transfer service in Kolkata (formerly Calcutta) West Bengal. The same aircraft are available for commercial hire for other services and currently the equipment state of each aircraft is such that they are often promoting items of equipment seen as standard in other parts of the world as an attraction to potential customers.

Lifesaver Air Ambulance Services have been promoting the availability of a DVT pump, designed to relieve patients suffering blood clotting issues, as a positive addition along with the availability of a portable X-ray machine. Now they state they can treat critical patients who are a victim of severe accidents and other medical conditions effectively.

The service remains on-call and potential patients may well have to await hours to avail themselves of the service. HEMS it is not.

### **NIGERIA**

It will not be the first time that observers have commented that all appears not to be well in Nigerian aviation. There are indications that the National Emergency Management Agency (NEMA) can no longer support aerial emergency response following the grounding of the agency's Search and Rescue (SAR) air unit. It is being promoted as a recent development some are suggesting that the air operations have been at a halt for at least eighteen months.

The modern helicopter and aircraft officially launched in 2015 were meant to deliver emergency healthcare and quick transportation of patients and to replace existing Mil Mi-17 helicopters. There were management issues, the management was under a foreigner – which was flouting the rule book and verging on illegal – but the operation appears to have foundered on the all too regular problems of finance and maintenance.

The operation is reliant upon its modern aircraft, but it is said that the 12-passenger Cessna 680 Citation Sovereign aircraft, marked 5N–EMS, no longer has a Certificate of Airworthiness or insurance and last flew on June 7, 2017. It now requires a corrosion check, bench check, landing gear repair and total overhaul, while the 2012 Bell 429 helicopter 5N–NEM also requires a refit.

Until 2017 the pair were said to have been deployed for medical evacuation, rescue and security operations; regularly flying to the agency's headquarters and the trauma centre at the National Hospital. It is stated that problems started with the Nigerian Pilot who headed the airwing department, Captain Ibrahim Mamman-Ali being suspended with other directors in the agency. From that point the two aircraft, previously in perfect condition, deteriorated.

The aircraft, supposedly used to airlift wounded Nigerians, including injured officers when Maiduguri airport were closed after Boko Haram attacks, is currently parked outside the hanger of Nigeria Police Air Wing of the Nnamdi Azikiwe International Airport, Abuja.

Bell delivered two of their 429s to Nigeria in February 2012. The two modern hi-tech helicopters were for



the Nigeria Police Air Wing (NPAW) and another to the Nigeria Emergency Management Agency (NEMA), they were the first 429s to be delivered to Africa.

Contrary to the good work that NEMA claims to have done it is alleged by the International Centre for Investigative Reporting [ICIR] an independent, non-profit news agency that seeks to promote transparency and accountability that it is untrue. They say that the search-and-rescue helicopter – said to be acquired in 2014 – has never been used for any rescue operation. The nearest it got was undertaking a simulation exercise in 2015 when it was flown to the NEMA headquarters and the trauma centre at the National Hospital.

The Cessna did not fare much better when it was needed to fly two government ministers in 2017, they found themselves having to charter American aircraft to make the flights because the NEMA air ambulance's airworthiness and certificate of insurance had expired.

The ICIR reveal that the Mi–17 helicopter that NEMA claim to also use has had its certificate of airworthiness and insurance expire way back in 2011. The Mil is now used by the military in camouflage colours. Yet the aircraft is still on the NEMA website in civil colours suggesting a very different outcome. [ICIR]

### NORWAY

**NORSK LUFTAMBULANSE:** The Hungarian military have purchased nine Eurocopter EC135P2+ helicopters declared surplus by Norwegian Air Ambulance (Norsk Luftambulanse) and superseded by later purchases including one EC135P2+, three EC135P3s and eight H135s.

In recent months the nine helicopters have had their ownership changed to Ministry of Defence Electronics, Logistics and Property Management at an address in Budapest, Hungary. Starting in January, the first three have now been cancelled from the Norwegian register, and the helicopters have also been transported by road to their new owner.

Serial numbers of the nine aircraft range between 0350 and 0736, built between 2003 and 2008. [HeliHub]

## POLAND

**PMAR:** Polish Medical Air Rescue, operators of EC135 helicopters and an Avanti fixed wing have taken delivery of three Tecnam P2008JC MkII high wing, two place, single engine airplane equipped with tricycle landing gear for training. The three were ordered in September last year.



The Mk II version features several significant enhancements. These include a new avionic suite, including a new design of dashboard and glare shield enabling the introduction of the Garmin's innovative G3X Touch display with a MD302 attitude instrument and is also available as VFR Night. [MJ]

### UKRAINE

The State Emergency Service of Ukraine has taken delivery of its third Airbus Helicopters EC225. The helicopter was previously on the Isle of Man register as M-ABKB, c/n 2744 and was delivered on January 30 to Nezhin (UKRN) in Ukraine with a new identity as 53 blue. [Wilmink/MJ]

## UNITED KINGDOM

**NATIONAL:** One week from now, on March 8, applications for part of the new £10M fund for air ambulance charities, to help them with capital costs of upgrading equipment and facilities, closes.

Each of the 18 air ambulance charities will be able to bid for up to £2M of grant funding. This is the first time such funding has been made available to them although there have been monies made available through Bank Fines in the past.

Air ambulance charities will also be able to partner with NHS Trusts to make joint bids, for example to modernise helipads that are owned by the hospital trust. [Fundraising]



**GREAT WESTERN:** The charity air ambulance has succeeded in raising the necessary funds it needed to purchase the new purpose-built air base at Almondsbury near Bristol. The fundraising was under the banner of the "Buy Our Base" appeal; they have now completed on the purchase of the air base.

Meanwhile the former home of the air ambulance on Filton airfield has been earmarked for restoration.

Thanks to a Biffa Award grant of just over £547,000, the museum and preservation group Aerospace Bristol is to restore the 103-years old hangar to enable it to be accessible to the public. The award comes from a multi-million-pound fund that helps to build communities and transform lives through awarding grants to communities and environmental projects across the UK. Hangar 16M, a grade II listed structure, is now to be used as a conservation hangar for aircraft of the museum set up on the former heliport section of Filton. www.aerospacebristol.org

Aerospace Bristol is primarily focussed on recording a preserving the history of aircraft with local links. Filton was the manufacturing site of Bristol Aircraft that evolved into the British Aircraft Corporation and is now an Airbus factory. Aircraft preserved or in store include the Bristol Freighter, F2B Fighter, Bolingbroke and Concorde.

**WILTSHIRE:** The charity air ambulance operator has revealed how often it was called out to different parts of the county in 2018 as its total missions rose by 26%.

Overall, the total number of missions undertaken in 2018 by the air ambulance were 1,103, up by 228 on the previous year. The charity's helicopter flew 494 missions while its paramedics responded to 609 incidents in Rapid Response Vehicles (cars).

The demand for the skills of the charity's critical care team resulted in increased numbers of call outs to the Swindon, Melksham, Chippenham, Trowbridge, Warminster, Calne, Westbury, Malmesbury, Bradford-on-Avon and Corsham areas. The largest number of incidents that Wiltshire Air Ambulance responded to were in the Swindon area - 182 - equivalent to a call out, on average, every two days.



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The largest number of call outs were to cardiac emergencies, 248 - almost one in four of the total incidents - while 220 - one in five incidents - were to road traffic collisions and one in ten incidents - 109 - involved

children. In addition, the team were called to 62 sporting accidents with almost half, 28, involving horse riders.

Annual costs have risen by 15% to  $\pm 3.75M$  requiring the funding team to raise just over  $\pm 10,000$  a day to keep its lifesaving service operational. One in three of its operations were undertaken at night – the service is available until 3am each day.

The operation continues to fly a leased in MD902 as the charity team strive to overcome the operational and technical issues of its owned Bell 429 helicopter.

**YORKSHIRE:** The fundraising campaign for a life-saving Helipad at Sheffield Children's Hospital took a major step forward early last month thanks to a new charity partnership. The HELP Appeal's Chief Executive Robert Bertram has presented the first instalment of £562,500 out of a £2.25M pledge to David Vernon-Edwards, Director of The Children's Hospital Charity.

The HELP Appeal has been providing significant grants to fund life-saving helipads at Major Trauma Centres and A&E hospitals around England and Scotland since 2009. In 2016, it helped fund the helipad at Sheffield's Northern General Hospital. The donation to the Children's Hospital will cover half of the cost of the rooftop helipad. The Children's Hospital Charity's appeal is aiming to raise £6M to cover any rise in costs in case the price escalates before its expected completion in 2023.

The helipad will reduce the delays for patients who need critical care as soon as possible from across South Yorkshire, Derbyshire and Lincolnshire. Currently, air ambulances land in Weston Park and patients are then transported across a busy road under a police escort before entering the Emergency Department. The new Helipad would ensure air ambulances are able to land in the park after dark, significantly extending its operation throughout winter. It would also have electric trace heating incorporated into the deck to ensure that ice and snow do not disrupt the continued use of the facility during periods of inclement weather.



# UNITED STATES

**CALIFORNIA:** Mercy Air, a division of Air Methods, announced the opening of Mercy Air 66, a new base that will provide air medical services to the community of Barstow a town on the edge of the Mohave Desert at the California and Nevada border.

The new base will be located at the former site of the Barstow Community Hospital at 555 S 7th Street and will result in quicker response times for emergent and trauma situations. The location is just across the road from the new hospital complex ensuring patients have quick access to the full medical services available after initial transport.

Mercy Air 66 will provide air medical services 24/7/365 to Barstow and surrounding communities, will be staffed by 14 crew members, including pilots, flight nurses, flight paramedics and mechanics, and it will operate a Bell 407.

**COLORADO:** At the end of January Swedish Medical Centre [SMC] celebrated the re-opening of its helipad with a ceremonial ribbon cutting. The rooftop helipad at Swedish serves flight crews from a multi-state region including more than a dozen companies from the Western slope to the Eastern plains. Construction began in late October on the upgrades to the helipad include safety enhancements, including a new ramp for the medical crew on foot, new lighting, and a heated canopy designed to protect crews and patients from harsh weather. The landing pad sits on a rooftop at the hospital, located at 501 E. Hampden Ave., in northeast Englewood and were celebrated by SMC in conjunction with Englewood Chamber of Commerce and AirLife Denver.

HEMS pilot Greg Poirier, 46, landed Bell 407 N374AL on the Swedish Medical Centre rooftop helipad on the morning of January 29. The two prime helicopters used in the operation have also undertaken updates with engine upgrades undertaken last year to offer added power. The upgrade allows the helicopter to go to higher altitudes in the moun-



tains and take two medical workers rather than one, bolstering a crew's ability to respond. [Englewood Herald]



# SEARCH AND RESCUE

**COASTGUARD:** It seems almost unbelievable but four years after UK military transferred its SAR role to the commercial sector the system is finally in place.

Back in 2013 the plan was to put in place a contract with Bristow Helicopters for 22 state of the art helicopters operating from 10 locations around the UK. Ten Sikorsky S92s were to be based, two per site, at Stornoway and Sumburgh, and at new bases at Newquay, Caernarfon and Humberside airports.

In addition, it was planned that ten AgustaWestland AW189s were to operate, two per site, from Lee on Solent and a new hangar at Prestwick airport, and new bases which will be established at St Athan, Inverness and Manston airports.

The AgustaWestland AW189 [now of course the Leonardo AW189] had issues so many bases received earlier AW139s as a temporary measure. In 2015 eleven S-92A and some AW139s allows Bristow to equip nine bases without rushing the AW189. The larger S-92A stood in for the missing AW189 in Scotland and AW139 in England and Wales. The AW139 did not fulfil the requirement for the number of survivors carried.

Now four years after the contract start date, the full contracted fleet will soon be in place when the AW189 starts operating at Inverness in the spring.





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# INDUSTRY

According to a report from **Textron**, last year [2018] Bell delivered 192 commercial helicopters. This is 45% more than in 2017, when 132 aircraft were delivered to customers. At the same time, the company's order book at the end of the year was \$ 5.8 billion, which is 26% more than the figure for the end of 2017.

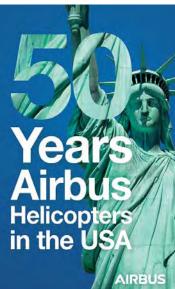
In the first half of the year, Bell delivered 103 helicopters, which more than doubled the company's result in January-June 2017. In the second half, the growth in supply was not so significant. Nevertheless, 89 aircrafts were delivered to customers, 5 units more than 2017.

The does not specify the number of machines delivered by individual models but other sources suggest that the Bell-505 and Bell-407GXP helicopters were the most popular among Bell customers.

Despite such a positive trend in the commercial sector, Bell noted a decline in revenues from sales of military helicopters. The company's revenue for the whole year amounted to \$ 3.18 billion, which is 4% less than in 2017. At the same time, the net profit of the manufacturer grew by 2.4% to \$ 425M.



the New York Police Department earlier this year. Chris LinseySmith A-B



Airbus Helicopters North America is celebrating two milestone anniversaries of operations this year. Airbus Helicopters, Inc., based in Grand Prairie, Texas, is celebrating 50 years of sales and support for U.S. helicopter operators, while Airbus Helicopters Canada Ltd., located in Fort Erie, Ontario, is marking its 35-year milestone.

Airbus Helicopters Inc.'s operations began in the U.S. in 1969 with the establishment of Vought Helicopter, Inc. in Texas, which France's Aerospatiale took over in 1974. The company opened the doors to its current facilities in Grand Prairie in 1980. Airbus Helicopters Canada traces its roots to MBB Helicopter Canada Ltd., founded in 1984 in Fort Erie, after successful negotiations between MBB Helicopters, Fleet Aerospace, and the Canadian and Ontario governments.

The U.S. and Canadian companies were renamed American Eurocopter Corporation and Eurocopter Canada Ltd. with the merger of the helicopter divisions of Aerospatiale and MBB to form Eurocopter Group in 1992. In 2003, American Eurocopter opened production facilities in Columbus, Mississippi, and in 2004, Eurocopter Canada expanded its presence in Fort Erie, Ontario & Richmond, British Columbia.

After a series of product development, sales, and delivery milestones, the two companies took on the Airbus branding in 2014 and now comprise a regional organization, Airbus Helicopters North America, which will be celebrating the milestone anniversaries with events and campaigns throughout the year.



**Cirrus Aircraft** have reported that they have had a very good year. The manufacturer announced last month that new aircraft deliveries for the piston SR Series reached 380 in 2018 [Flying]

**Frasca International**, Inc. announces that they have partnered with Garmin to integrate Real Garmin G1000 NXi software into their new Frasca RTD<sup>™</sup> (Reconfigurable Training Device). This is a first in the simulation industry and required extensive collaboration between Frasca and Garmin to ensure that Frasca's simulation software and Garmin's G1000 NXi software operate in harmony.

The Frasca RTD is approved by the FAA as an Advanced Aviation Training Device (AATD) and features Frasca's advanced aerodynamic software using flight test data, a browser/web-based instructor station, and convincing out the window visual graphics for a realistic flying



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#### March 2019

**CNC Technologies**, an aviation technology and wireless communications company serving the law enforcement, military and government markets, has launched CNC.LIVE a new, defence-grade online portal for hosting, viewing, sharing and archiving real-time aerial downlink footage. The platform deploys for the first time in support of Super Bowl LIII, serving as the aerial law enforcement hub for several agencies of the Urban Area Security Initiative (UASI) including Georgia State Patrol, Clayton County Police Department, Dekalb County Police Department, Fulton County Police Department, Gwinnett County Police Department and the Atlanta Police Department to coordinate and manage their public safety operations. Developed to enhance situational awareness and support multi-agency response during large scale operations, the new solution enables commanders and staff to securely access live video from their department's helicopters, fixed-wing aircraft and UAVs from any Internet-connected device. In addition to creating a single, centralized interface for all video downlink content, CNC.LIVE allows users to provide partner agencies with real-time access to the same video assets, improving their ability to coordinate effective joint responses during major incidents. In situations with multiple responders all fielding their own airborne assets, CNC can create a dedicated event page, pooling all resources in a single space.

Beyond its real-time capabilities, CNC.LIVE is designed to serve as a comprehensive, archival resource for law enforcement and public safety agencies to securely store all their aerial downlink video. To ensure robust data protection, the CNC.LIVE platform is housed on secure servers used by the Department of Defense and other government agencies for their sensitive assets.

The new **Leonardo** Gulf of Mexico Support Centre in Broussard, Louisiana is open. The 21,000 square foot facility provides blade repair, spare parts and technical support. Construction began in June 2017 on two acres near Highway 90. To celebrate the opening, Leonardo hosted customers and local government for a ribbon cutting ceremony.

The Gulf of Mexico Support facility is evidence of Leonardo's commitment to expanding material and technical assistance across the Americas, where over 700 Leonardo helicopters are in service, and aligns with Company's Industrial Plan aimed at strengthening the level of service worldwide. Customer feedback and growing market success were essential reasons for Leonardo to grow its footprint in the Gulf of Mexico area, allowing the Company to increase service to many of its regional customers including Arrow Aviation, Bristow, ERA, and PHI among others.

**Enstrom** Helicopter Corporation received Transport Canada validation of their model 480B helicopter on January 25, 2019. The 480B joins the other Enstrom models listed under FAA Type Certificate H1CE which have been approved for operation in Canada including the F-28A, 280, F-28C, F-28C-2, 280C, F-28F, 280F, and 280FX. For more information on Enstrom, visit <u>www.enstromhelicopter.com</u>.

The European Aviation Safety Agency (EASA) has awarded full type certification to the **Tecnam P2012** Traveller.

The arrival into service of the next-generation 11 seat P2012 Traveller is much anticipated by many airlines, who have been demanding a replacement for the many hundreds of 'heritage' aeroplanes in the FAR23/CS23 category currently in service around the world and is set to open many profitable opportunities in the Short Haul transportation segment.



With Federal Aviation Administration (FAA) certification is expected to follow shortly, Tecnam are on track to commence deliveries early this year. The two prototypes used in the certification programme have flown a total of 600 hours.

The certified aircraft is a high wing twin engine machine powered by two Lycoming 6 cylinders' turbo pistons TEO-540C1A. It is the first piston aircraft with electronic management of engine power, which, coupled with Garmin autopilot, en-

ables a reduced workload for pilots and a better lifetime of the engines. The anti-ice de-ice system chosen is TKS from Cav Ice makes the aircraft FIKI and capable to fly in all weather. The design and manufacturing of the seats has been made directly from Tecnam, ensuring safety and Italian styling. Particularly appreciated from the authorities' test pilots was the ergonomics of the cockpit that makes the flying experience of the pilot comfortable and safe. The P2012 superb versatility will open new unexplored opportunities as a passenger aircraft, Medevac, VIP, Cargo and for any other mission.

#### March 2019

**Curtiss-Wright Corporation** and **Honeywell** have partnered to develop an entirely new way for airlines to monitor and analyse flight data. The companies will use real-time connectivity to reinvent the Cockpit Voice Recorder (CVR) and Flight Data Recorder (FDR) for the commercial airline, cargo transport and business jet markets. The companies signed an agreement to develop the next generation of mandate-compliant voice and data recorders. As part of the new agreement, Curtiss-Wright will be the exclusive supplier for Honeywell's next-generation recorders for the Air Transport and Business Aviation markets. The companies will jointly develop the hardware for the new black boxes, and Honeywell will modernize the software capabilities for easier access to real-time data during flight. This will provide aircraft owners, operators and manufacturers with new voice and flight data recording options to help decrease aircraft downtime through better predictive maintenance and, in the unlikely event of an emergency, help with the subsequent investigation. Further, operators will benefit from real-time data streaming and cloud-upload capabilities, enabled by Honeywell's Connected Aircraft software, which allows for the swift and remote retrieval of data from the aircraft for storage or analysis.

The new CVR and FDR, based on Curtiss-Wright's industry leading compact, lightweight Fortress flight data recorder technology, will surpass the requirements of the upcoming 2021 European Aviation Safety Agency minimum 25-hour cockpit voice recording mandate. This means the aircraft data can be used for more efficient operations, allowing for additional predictive maintenance and real-time playback of data and voice communications. Along with added connectivity, the next-generation recorders provide an easy upgrade that saves installation time and lowers costs due to their design as form-fit replacements for Hon-eywell's HFR-5 series cockpit voice and flight data recorders. Curtiss-Wright recently certified its Fortress recorder, a 25-hour CVR/FDR recorder that is used as the foundation for the new Honeywell Connected Recorder-25 or HCR-25.

As part of the development of the new recorders, Honeywell will offer the product in several variants, including as a standalone CVR, as a standalone FDR, or as a combined voice and flight data recorder.

Airbus Helicopters Inc. and **Helisim** have broken ground on a new, state-of-the-art helicopter pilot and maintenance crew training facility in Grand Prairie, Texas.

With an initial investment of \$40M, the Helisim Simulation Center will provide introductory and recurrent training to thousands of pilot personnel each year. The first stage is scheduled for completion later this

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year when the first new Thales Reality H Level D full-motion flight simulator will be delivered.

The centre will house the first Level D full-motion flight simulators in North America for Airbus H145 and H175 helicopters, two high-tech civil helicopters, which are now entering wide use in the Americas.

This represents a major international expansion of the French company Helisim, which brings 18 years of experience in simulation training for Airbus Helicopters aircraft.

Eventually, the facility will expand to include an H160 simulator, once that helicopter model is certified and production is underway. The existing training facilities of Airbus Helicopters Inc., including its H125/AS350 full flight simulator and H135/H145 flight training device.

**DART Aerospace** ("DART") received STC approval from TCCA, FAA and EASA in the last three months of 2018 for its Replacement Crosstubes for the Airbus EC/H135 helicopters. Adding to DART's growing portfolio of Landing Gear, the ready-to-install Crosstubes are available in Standard Low and Mid-Height with factory-installed Supports.

This is DART's first venture in larger OD thin-wall aluminium tubes used on Airbus helicopter landing gears.

Metro Aviation, an air medical operator and completion centre based in Louisiana, received the first delivery of the new H135 Crosstubes.



Russia has delivered a **Mil Mi-171A2** transport helicopter to the first foreign customer in Kazakhstan. The rotorcraft is undergoing acceptance/delivery procedures.

The contract for the delivery of the Mi-171A2 was signed in 2017. The rotorcraft is a modified version of the Mi-8/17 helicopter with new engines, digital control system, improved aerodynamic airfoil and an effective rotor system with composite blades.

The Mi-171A2 offers a cruise and maximum speed that is 10% higher than the Mi-8/17. The company plans to deliver another Mi-171A2 helicopter to India by the end of the year.

**Curtiss-Wright's** Defense Solutions division has announced the grant of a European Technical Standard Order (ETSO) approval by EASA for its Fortress family of flight data recorders. These are the newest range of flight data recorders on the market and includes combination CVR and FDR that surpass the requirements of the upcoming 2021 EASA minimum 25-hour cockpit voice recording mandate. These highly functional units deliver longer recording time.

The range combines a CVR, FDR, DataLink Recorder (DLR), and Airborne Image Recorder (AIR) in a single unit and can be rapidly modified to meet customisation requirements for aircraft needs. The recorder can support expansion, making it easier and more cost-effective to add new functionality within the unit.

**FLIR Systems**, Inc. have had a busy few weeks with various company acquisitions in the drone market and the opening of regional service centers in Frankfurt, Germany and Dubai to support its customers that use chemical, biological, radiological, nuclear, and explosives (CBRNE) threat detection products. The new FLIR service centers will provide its CBRNE product customers with local options for maintenance and support and demonstrates FLIR's ongoing commitment to customer satisfaction.

The **Bell 407GXi** light single helicopter has received type certification from the Civil Aviation Administration of China (CAAC). Outfitted with Garmin G1000H NXi integrated flight deck and dual-channel FADEC Rolls Royce M250-C47E/4 turboshaft engine, the Bell 407GXi takes the popular 407 series' user experience to a new level.

The brand-new Garmin G1000H NXi integrated flight deck on the 407GXi complete with high-definition displays and faster processors offers increased brightness and clarity, faster start-up and map rendering speed, the new avionics significantly enhances the pilot's situational awareness capability. Additional options for the 407GXi include the Garmin FlightStream 510 that allows pilots to upload flight plans from smart devices.

The Bell 407GXi further enhances the engine performance and its control system, which reduces pilot workload while improving the aircraft's reliability and maintainability. The new Rolls-Royce M250-C47E/4 dual channel FADEC with full automatic relight turbine engine delivering exceptional fuel efficiency and H&H performance, the power of the new engine is increased by 8% while the fuel consumption is reduced

### by 2% in H&H environment.

In addition, newly designed executive configuration options bring a modernized look and passenger experience to the five-seat club cabin. With a 1.55 meters wide door, stretchers can easily enter the cabin when the 407GXi performing air ambulance missions. In 2017, Shaanxi Helicopter ordered 100 Bell 407s and the company is determined to build an air medical rescue and law enforcement network in China. The Bell 407GXi debuted at Heli Expo in the United States in February 2018, the helicopter was certificated by the FAA and the first delivery was made to a Chilean customer in October of the same year. Currently, there are more than 1,400 Bell 407 series helicopters in operation worldwide.

March 2019

By the end of 2018 **Diamond Aircraft's DA62 Special Mission Aircraft** performed a successful maiden flight with a full COMINT/C-ESM airborne solution from Rohde & Schwarz, supported by an EO/IR state of the art sensor from TRAKKA System and a high-performance Line-of-Sight Link from Viasat.

Diamond's system integration engineers have been working in mounting a compact COMINT/C-ESM system from Rohde & Schwarz onboard the DA62 special

mission aircraft. The platform can provide valuable communications reconnaissance and surveillance using the most advanced techniques detecting, analysing and geolocating signals of interest automatically. The system provides COMINT/C-ESM capabilities for all types of communications signals from VHF to UHF. The DA62 MPP in a COMINT/C-ESM configuration also features an EO/IR sensor, which can be used for detection, recognition and visual identification of any potential targets and could be automatically guided to the direction as well as to the source of the signal. The combination of these sensors



can determine this platform as the ideal tool for surveillance and reconnaissance missions, as well as counter-drug operations, homeland security, and search and rescue.

After completing the complex design of this configuration, a flight campaign has followed in order to evaluate the performance and the capabilities of the system.

Whether used for border protection, rescue operations at sea or surveillance missions, the air-based communications reconnaissance systems from Rohde & Schwarz record, classify and locate communication signals reliably from an aircraft.

In Montreal the Federal Court of Appeal has upheld a lower court ruling that Bell Helicopter Textron Inc.'s Quebec-based subsidiary pay Airbus SE's helicopter division \$1.5M for a patent violation.

The ruling includes \$1M in punitive damages and \$500,000 in compensatory damages tied to its patent for the so-called "Moustache" landing gear.

The legal battle over landing gear has been raging since 2008, when Airbus Helicopters S.A.S. — then known as Eurocopter Group — launched court actions in Canada, France and the United States. In 2012, the Federal Court of Canada ruled that Bell had copied the landing gear design for some of its light helicopters from Airbus, though Bell modified that design before applying it to any models on the market.

The court found only one of the 16 claims tied to Airbus' Canadian patent to be valid, though it dubbed Bell's design a "slavish copy."

The 2012 decision states Bell — a Texas-based company with commercial helicopter production in Mirabel, Que. — had made plans to manufacture the skid gear and promoted sales of an upcoming model equipped with it — the Bell 429, now used by the Canadian Coast Guard.



# **ACCIDENTS & INCIDENTS**

**29 January 2019 Bell 407 N191SF.** Air ambulance of Survival Flight Inc. crashed in Zaleski, Ohio killing all three crew members on board. The helicopter was headed from Mount Carmel Grove City Hospital in Columbus to pick up a patient from Holzer Meigs hospital in Pomeroy, Ohio, at the time of the crash into heavily wooded ground. The crew members have been identified as pilot Jennifer Topper, 34; nurse Bradley Haynes, 48; and nurse Rachel Cunningham, 33. The crash site is located about 70 miles southeast of Columbus. There are reports of bad weather and that at least two other operators refused the mission due to it failing to meet their minima.

**29 January 2019 Beechcraft King Air 200 N13LY** Air ambulance of Guardian Flight, Alaska. The aircraft was on a flight from Anchorage to the south east Alaska village of Kake with a crew of three when it became overdue and a search was instigated. Crew names given as 63-year-old Patrick Coyle, pilot, the flight nurse is 30-year-old Stacie Rae Morse, and the flight paramedic is 43-year-old Margaret Langston Allen. All were based in Juneau. The US Coast Guard sent cutters and a Sitka-based MH-60 Jayhawk and the Alaska Army National Guard sent a UH-60 Blackhawk. Debris field found 22 miles from Kake.

**29 January 2019 Eurocopter AS350 N680DG** Hillsborough County Sheriffs Aviation Unit 5808 Wilkins Road Tampa, 33610 Tampa, Florida. Pilot was practising auto-rotations, landed hard and bent boom. [BEA]

**7 February 2019 Bombardier Lear Jet 35 XA-DOC.** Air ambulance of Jet Rescue Air Ambulance. Shortly after taking off from Toluca International Airport, about 63 kilometres (39 miles) west of Mexico City, <u>Mexico</u> on a flight to Bajio International Airport in Guadalajara it was forced to return with undercarriage problems. On landing the aircraft skidded along the runway sending flames firing beneath it and came to a halt in a plume of black smoke. Seven passengers and two crew members, named as pilot Gustavo N and co-pilot David N, were onboard but were reportedly unharmed. The plane's right-hand landing gear reportedly suffered a mechanical failure and the pilot had to request permission to land after huge sparks appeared from under the plane. The runway at Toluca International Airport was closed for 90 minutes after the incident.





**9 February 2019 Aeroprakt Foxbat A22LS Bantam microlight aircraft ZU-INH.** Patrol aircraft operated by South African National Parks, Kruger National Park, Kingfisher Spruit, Mpumalanga, South Africa. The light aircraft donated by the My Planet Rhino Fund sustained substantial damage subsequent to a hard landing following a loss of engine power while operating in pursuit of poachers. It crashed in the Kingfisherspruit section of the Kruger National Park (KNP). The pilot, Regional Ranger Steven Whitfield, received non- life-threatening gash to his head and minor lacerations. [ASN]

**13 February 2019 Airbus Helicopters EC135 D-HJMD** Air ambulance of ADAC. Landing in a public skate board arena in a park at Karl-Liebknecht-Straße in Neustadt an der Orla, Thuringia Germany appears to have put landing skid tubes on a metal pipe situated clear of ground which tilted the helicopter backwards damaging the base of the Fenestron housing damaging the structure and bump stop. Sortie abandoned. [Feuerwehr Neustadt].

**17 February 2019 helicopter** (probably AS350) Fire fighting machine operated by Reid Helicopters on behalf of Fire and Emergency New Zealand (FENZ) in Eves Valley, Brightwater crashed while dealing with the Nelson wildfire. The pilot was taken to hospital with minor injuries. s involved. There are no details, but it is understood that the pilot jettisoned a bucket and made a mayday call before making a hard landing.

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**18 February 2019 Cessna 182C Skylane N8704T** Air ambulance operated for the the Seventh Day Adventist Mission with three occupants, one a cadaver experienced fuel starvation in flight at Nismes, Guyana. Flight from Mabaruma. One injured. [ASN]

**22 February 2019 Cessna 172 C-**\*\*\*\* Civil Air Search and Rescue Association [CASARA] flying a training sortie out of Tillsonburg, Ontario made an emergency crash landing after loosing power on take-off. No injuries reported. [ASN]

**23 February 2019 military helicopter.** A police officer travelling in a helicopter fell to his death under unknown circumstances at Ishkashim district of northeaster Badakhshan province in Afghanistan. [Pajhwok]

# FLIGHT SAFETY

Members of the United States Helicopter Safety Team (<u>www.USHST.org</u>) will be providing their safety advice for Heli-Expo participants in Atlanta at 12 different workshops in a wide variety of topics. The USHST promotes safety and works to reduce accidents through a government and industry cooperative effort that has resulted in a decrease in U.S. civil helicopter accidents since the organization's inception in 2013.

The full list of USHST-related workshops scheduled at Heli-Expo 2019 is the following:

USHST Helicopter Safety Enhancements	March 5, 8:00 am
What's the Best SMS Tool? You!	March 5, 8:00 am
Autorotations: Reality Exposed	March 5, 10:30 am
Helicopter Scenario-Based Training	March 5, 10:30 am
The Top 3 Types of Fatal Helicopter Accidents	March 5, 12:00 pm, &
	March 6, 4:00 pm
The Vuichard Recovery: A Better Way Out of Vortex Ring State	March 5, 1:15 pm, &
	March 6, 4:00 pm
Simulation: Learn from Your Mistakes	March 5, 1:15 pm
Human Factors: Protecting Us from Ourselves	March 5, 1:30 pm, &
	March 6, 10:30 am &1:30 pm
What the FRAT? Flight Risk Assessment Tools	March 5, 3:45 pm, &
	March 6, 2:45 pm
SMS for Small-Fleet or Private Operators	March 6, 10:30 am
Aviation Safety Ethics	March 6, 10:30 am
Operational Considerations for Personal Protective Equipment	March 6, 1:30 pm

In addition to offering their safety expertise, all USHST members will gather for a semi-annual all-hands meeting at Heli-Expo in Atlanta on Monday, March 4, at 1:30 pm. The public is welcome to sit in. Following that, at 2:45 pm, the U.S. experts will join with International Helicopter Safety Team (<u>www.IHST.org</u>) members from around the world in an annual gathering to discuss safety issues that affect the global helicopter industry. Both meetings will take place in Room B309 at the convention center.



As mentioned on an earlier page the South Yorkshire Police has acquired drones to go some way towards enhancing and guaranteeing its access to air support ©SYP

# UNMANNED

FLIR Systems, Inc. has acquired Aeryon Labs Inc., a leading developer of high-performance unmanned aerial systems (UAS) for the global military, public safety, and critical infrastructure markets for \$200 million. Aeryon's vertical take-off and landing quad-copter airframes integrate multiple sensors, including FLIR thermal technology, to provide users with immediate high-resolution intelligence, surveillance, and reconnaissance (ISR) capability.

Based in Waterloo, Canada, and with offices in Denver and Salt Lake City, Aeryon Labs was founded in 2007 and is a leading designer and manufacturer of mission-focused Group 1 UAS solutions built around aircraft under 20 pounds. Aeryon's family of UAS are deployed by 20 militaries in over 30 countries around the world, including the United States Department of Defense. Aeryon develops UAS solutions that includes hardware, embedded software, ground control stations, sensors, software for flight operations, as well as supporting services for its global customers.

Rugged, reliable, and field-proven, Aeryon's SkyRanger UAS are rucksack portable and can be deployed in minutes by a single operator. The UAS are renowned for operating in demanding environments and inclement weather, including at high altitudes, gusting winds, and rain and snow. The latest additions to the family of aircraft establish a new benchmark for small UAS performance and reliability. Now with a modular and open architecture, end users and third-party developers can create tightly integrated payloads and software systems for the Sky Ranger platform, enabling rapid solution development, onboard artificial intelligence, and autonomous operations.

On Jan. 23, Sundance Media Group, along with Fox Fury Lighting Solutions, Westwind Unmanned Vehicles, Yuneec Aviation, Pix4D and Autel Robotics, hosted a night-time drone crime scene investigation demonstration in Henderson, Nevada, USA.

Recreating a homicide scene at an equestrian park, the demonstration used drones to capture forensic evidence at the scene and map it in 2D and 3D for law enforcement use.

The demonstration started at 6:00 p.m. Douglas Spotted Eagle from Sundance Media Group greeted the attendees, representing law enforcement, security services and international delegations, and the group moved into position along the perimeter of the scene to watch as the Sundance Media Group crew worked to show what would happen if law enforcement were arriving at the murder scene and mapping it for the first time.

A model, outfitted with moulage, laid out as a murder victim. FoxFury provided four Nomad T56 scene lights to illuminate the surrounding area to aid with photo and video capture. Two drone launch pads were positioned at one end of the scene, one holding an Autel Evo, the other holding a Yuneec H520. Autel showcased its new LiveDeck technology, allowing the footage to be seen live at the Sundance Me-

#### March 2019

dia Group A.V.O.C. (Aerial Vehicle Operations Center). Once the data was captured, it was imported into Pix4DMapper software, which created maps and models of the scene. Attendees were then able to view these on a large monitor within a few minutes.

The goal of the demo was to show attendees how the combination of portable lighting, drone hardware and Pix4DMapper software could significantly save time for law enforcement officials, increase the accuracy of the investigation and keep officials at a safe distance from the scene.

As advanced technologies within the unmanned aerial vehicle (UAV) industry improve and become increasingly available to platform manufacturers, the autonomy and range of UAV platforms is also expanding, meaning that Beyond Line Of Sight (BLOS) operations are becoming more common. This in turn puts pressure on traditional RF datalinks which face challenges in a BLOS situation and quickly run into physical limitations caused by a variety of factors, including the atmosphere and curvature of the Earth. Government programmes such as PREDATOR (USA) and HERON (Israel) have used Satellite Communications (SATCOM) technology to overcome such range restrictions. However, SATCOM traditionally has been known to be expensive, bulky, heavy, and with limited bandwidth.

The latest systems on the market are now making SATCOM technology available to a much wider audience, with compact and cost-effective SATCOM systems weighing as little as 1.45kg now available for integration into drones.

UAV Navigation has announced its collaboration with Cobham to develop a small, light and cost-effective SATCOM solution available to the UAV community. Polar AHRS unit is integrated with Cobham's Aviator UAV 200 and designed to provide a reliable and cost-effective system.

Polar has been used in a wide variety of dynamic environments with optimal results — particularly in terms of inertial navigation, where it has held its own against Fibre-Optic Gyroscope Systems (FOGS) units, according to UAV Navigation. Although primarily designed for aeronautical applications, the POLAR has also proven to be a strong solution for other attitude sensing applications, such as terrestrial and marine platforms (e.g. antenna, weapon or camera array stabilization).



Mon 8 April: Pre-Conference & Workshop Programming / 13:00 – 17:00 (No Exhibits) Tues 9 April & Wed 10 April: Conference Programming & Exhibits

#### March 2019

8-10 April 2019 Commercial UAV Expo Europe, Amsterdam, Netherlands. After powering forward with nearly 40% growth in its second year (700+ attendees from 43 nations, 50 exhibitors, rave reviews) the show returns to Amsterdam in its preferred calendar slot. The leading pan-European conference and expo focused on commercial drones will convene top UAV experts and buyers from all key vertical markets, from across the globe. 1,500+ attendees and 75+ exhibitors. www.expouav.com/europe Diversified Communications technology group +1.978.371.1792 phone / +1.978.590.9164 mobile www.expouav.com/europe

# PEOPLE

**Alain Flourens**, 61, currently Head of Engineering for Airbus Helicopters, has been appointed Head of Industry for Airbus Helicopters, following Christian Cornille's departure from Airbus. Alain will be replaced in his current position by Stefan Thomé, 47, currently Head of New Business Models & Services at Airbus Defence and Space. These management changes are effective on 1 April 2019.



The last issue signed off with the announcement of the retirement of Inspector **Gary Smart** from the police in South Wales. And there it might have ended but for the invite to the retirement party in Cardiff. I was more than pleased to be one of the mass of people that jammed into the first-floor clubroom in the heart of Cardiff City. I assumed that arriving in Cardiff was not really expected of me, but I was not the only long-distance attendee that battled through [wholly unexpected] winter blizzards to get there and mark 30 years' service of an officer to Queen and Country. There were recent and former colleagues drawn from Birmingham, Cornwall and Essex. Many of the best aspects of the policing family were there in that room to mark service in many sections of policing.

Here were individual police officers who were able to recall an expectation that airborne law enforcement did play a part in their crime fighting past, many who delivered it in the past and some who were doing their level

best to still deliver that outcome.

Clearly missing from the room were senior officers' intent on thanking their staff for past services. In commercial industry even the humblest cleaner is thanked for 30 years' service. That simple act is missing from the ranks of the NPCC.

That is the bit that the NPCC and Wakefield do not understand in the manner they used to. It is the people in the whole family that matter and not just those in HQ.

Many of you will be aware that last year **Gareth Davies** resigned from being both the Chairman and organiser of the PAvCon Europe event. The move was kept a little quiet to allow the paperwork surrounding the 2018 event to clear through the books so there has been no official announcement until now.

The project that saw the planning and administration of the event transferring from the control of The Editor to Gareth is now at an end. It has been decided to keep the modified name PAvCon Europe and its associated website

[<u>www.pavconeurope.eu</u>] and linked e-mails. Little choice there as the original site was closed down as part of the thwarted transfer of operator! Gareth is in the throes of shutting down the Austrian bank account he created as part of the transfer. Banking now returns to *Police Aviation Research* in the UK and to UK pounds as the currency.

Effectively Gareth has retired from the industry and any interest in Police Aviation and the conference. He can be contacted at his Austrian address.



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Police Aviation News includes materials produced for it by Ian J Commin of Insight Design of North Burnham, Slough SL1 6DS. This includes the banner titles and the PAvCon logo. In addition from time to times images specifically altered by Insight Design and others but originally produced for McAlpine Helicopters [now Eurocopter UK], Oxford, will appear with permission of the original owner. In some cases it may not be possible to indicate the source of this material directly associated with the images used. **Gordon (Gordy) Cox**, Redding Air Service, is in the running for the HAI Board of Directors this year. Born into an aviation family, Cox has been in professional aviation since 1982 when he joined the Royal Air Force at age 18, served 8 years flying in the back of BAE Nimrod's, as an Air Electronics Operator. Since leaving in 1989 he served in various positions in the US helicopter, holding the roles of line pilot, instructor, Chief Instructor, Chief Pilot, Director of Operations and numerous committee positions, across a wide spectrum of the industry.

During a period in the San Francisco Bay area he the Chief Pilot for Whirlybirds Inc. and was part of the initial team of pilots for the Contra Costa County Sheriff Department and an FAA Accident Prevention Counsellor in the Oakland FSDO in 1992, and continued counselling through 1998 when he left for Hawaii to work.

Back in mainland USA he is currently the Director of Operations for Redding Air Service in Northern California, overseeing a fleet of 8 light and medium helicopters working fire and utility contracts nationwide. He is currently the Chairman of the HAI Tour Operator Committee, Vice-Chairman of the Tour Operator Program of Safety, (TOPS), and a member of the HAI Regulatory Safety Working Group. A graduate of Helicopter Association International, (HAI), Advanced Helicopter Management Course, various "Flying in the Wire Environment," accident investigation, Leadership, SMS and Advanced SMS courses he now has almost 17,000 hours flight time in his career.

## **MOVE ALONG THERE**

Thank you to Cole Moreton and his recent article on DJ Simon Mayo in EVENT. It seems that the German language has a word to describe the current ills of NPAS. It is **Verschlimmbesserung** which means an attempted improvement that makes thing worse. Right on the nose methinks.

Sadly, I do not think it will catch on – I cannot even pronounce it - let alone remember it.

In mid-February NPAS in Wakefield Tweeted that in the last six weeks the crews of its helicopters spread across the nation "have saved valuable time when it matters & located 366 suspects, 80 missing people & 21 injured people/concern for welfare."

On the same day my local police boss Chief Inspector Lewis Basford who is in charge of an infinitesimally smaller bit of territory claimed that in the last four weeks his own far smaller band of officers had looked for 49 missing people, stopped 81 people, solved 144 crimes attended to 87 road traffic incidents and looked into 308 domestic abuse incidents etc etc ..... over 1,500 recordable items in all.

Not sure who has the bragging rights. Only another day at the office.

### It will end in tears ....

I mentioned earlier on that the people in the North Sea fishing port of Grimsby, Lincolnshire, were not happy about the service they were getting from police air support since the Humberside HSU was obliged by the Home Office edict to shut down. The information was based on an article on the Grimsby Live website. They had sought air support details via a Freedom of Information request to NPAS. The reply made a big point of stating that even though a helicopter was assigned to assist "the flight could have been diverted, abandoned or cancelled by the Force before arrival at the scene."

Well it seems that might have happened a few times. In less than five years air support for officers in North East Lincolnshire has dropped from the equivalent of about 10 times a week to once or twice a week.

This part of England has no great history of police air support so their needs should not be too demanding most of the time. It seems though that having experienced access to air support they got to like it and the added level of safety it gave to its patrols and citizens.

Grimsby Live found that officers were told it would take 50 minutes for a helicopter to fly from the Newcastle area to support them in the search for the man along a railway line. That search was called off and although the suspect's Mercedes was seized, he got away. They cited other instances that promoted an attitude of "why bother calling air support?" among those that needed it.

Grimsby Live's Freedom of Information request revealed there were a total of 1,044 requests for service in Humberside between December 2017 and November last year. Only 593 of those resulted in deployments.

Humberside Police are reviewing the possibility of buying a drone but they currently make use of a crossborder co-operation with Lincolnshire Police which results in a drone being used occasionally.

A retired police officer, who was a control room dispatcher for 30 years, contacted Grimsby Live to give his assessment of policing.

He is said to have told the journalist "I've seen staff in tears because they do not have the resources to send to incidents."

# **NEWLY ANNOUNCED EVENTS** Three Counties Defence and Security Expo

The Three Counties Defence and Security Expo, or 3CDSE – which will take place on Tuesday 16 July and Wednesday 17 July 2019 at The Three Counties Showground in Malvern, Worcestershire – will coincide with an MoD Industry Day.

This is the first time that the exhibition – which has been running for three years – has worked with The Ministry of Defence. Previous shows welcomed more than 100 exhibitors and 1000 delegates from a wide range of backgrounds and sectors including those working in Command, Control, Communications, and Computers Information Systems (C4IS), Unmanned Aerial Vehicles (UAVs) and Cyber Security.

The Industry Day will share the vision and work of The Special Projects Programme Delivery Group which is responsible for the procurement and support of a wide range of equipment used primarily by specialist users. It will also include presentations from each of the teams' specialist portfolios and allow for smaller breakout sessions to facilitate more detailed discussions with MoD staff.

The event will be split between the Industry Day on Tuesday 16 July and the exhibition and conference on Wednesday 17 July; following on from the success of previous years, there will be an expanded exhibition area – holding up to 150 exhibitors – offering excellent networking for SMEs. There will also be extra external space where vehicles, hardware and demonstrations can be visited. Wednesday will also see the introduction of MoD Connection Zones where companies and individuals will be given the chance to meet MoD officials, fostering conversation and networking.

A new feature for 3CDSE 2019 will see The ADS Group – Aerospace, Defence, Security and Space - running a series of free to attend introductory masterclasses on understanding and accessing the security and resilience market. Tickets for the Industry Day – security clearance is required – can be purchased via the website at

3cdse.co.uk. Entry to the conference and exhibition is free and aimed at senior members of the military, law enforcement agencies, government agencies and defence and security industry.

## PAvCon Europe 2019

The 2019 edition of the PAvCon Europe Police Aviation Conference will take place in Amsterdam on 4-5 June 2019. As has been customary police and emergency services attendees will be invited to attend at no cost. The fees paid by industry cover most elements.

In addition there will be a police training day on offer within the police complex alongside the conference venue on the Monday [June 3]. This will be able to cover more sensitive 'police eyes only' subject matter but it will not be exclusively directed to that end.

The venue for the event is to be Hangar 3, the JetSupport Service Center at Schiphol East the General Aviation section of the International Airport. The GA airport is within perimeter of the International Airport but operates from its own separate single runway. JetSupport BV is literally just around the corner from the Netherlands Police helicopter unit at Thermiekstraat 156-158, 1117 BG, Schiphol, The Netherlands

Airport: Amsterdam Schiphol Oost Airport. Location: Schiphol East – Hangar 3. ICAO code: EHAM, IATA code: AMS GPS Position: 52°18'44.20"N 4°48'29.43"E

There are four hotels close by the event to suit a variety of budgets fuller details are available on-line at <u>www.pavconeurope.eu</u> however a recent visit to two of the prime hotels discovered that there is little to choose between them and the only obvious divider is price.

**Renaissance Hotel** Amsterdam Schiphol Airport, Meester Jac Takkade 35, 1432CB Aalsmeer, The Netherlands

T: +31 29 72 286 52 groups@rhschiphol.com Marriott.com/amsra | instagram.com/ renhotelschiphol

**Steigenberger Hotel** Stationsplein ZW 951, 1117 CE Schiphol-Oost, The Netherlands. **T** +31 20 5400 823 | **M** +31 6 25 33 95 55 | bob.evers@steigenberger.com

The main event programme will see a two-day conference with half of each day dedicated wholly to police air support training. Industry will be asked to submit papers focussed on new technology and training. These will be of a length that focusses on the subject to the exclusion of overt branding. A call for papers will be issued. This year's event will again be directed by Police Aviation Research from the Waltham Abbey, UK, office www.pavconeurope.eu you can contact using any of the PAN/PAR e-mails but admin@pavconeurope.eu is the dedicated portal.









# **AIRBORNE PUBLIC SAFETY ASSOCIATION**

### **APSCON 2019**

15-20 July 2019 APSCON The 49th Annual Conference & Exposition. <u>CHI Health Center Omaha</u> 455 N 10th St, Omaha, NE 68102, USA. APSCON 2019 in Omaha will continue to set the standard for excellence in the field of public safety aviation. Filled with education and training, APSA will again offer some of the best conference courses and classes in our industry, presented by the experts from our industry. The exhibition floor is a great venue to check out the latest, cutting-edge technology for public safety aviation, in addition to providing a great opportunity to visit with peers. Exhibitors will showcase their products and services to aviation unit decision-makers and end users, while creating an exceptional learning environment, in one central location. The event includes much loved social events sponsored by corporate supporters.<u>www.publicsafetyasviation.org</u>

The event uses the HILTON OMAHA (located directly across the street and attached via a skywalk) at 1001 Cass Street, Omaha, NE 68102 +1 402-998-3400 Discount Rate: \$134/Night; (Single/Double), plus 18.16% room tax (current tax rate, subject to change) Discount Deadline: June 25, 2019. Check out the APSA website for the details. There is a Hotel Airport Courtesy Shuttle Available, on request (Omaha Eppley Field). A taxi would cost \$11 one way. Parking On-Site: \$15/Day Self-Parking/\$21/Day Valet

The alternate/overflow hotel is the OMAHA MARRIOTT DOWNTOWN at the Capitol District at 222 North 10th Street, Omaha, NE 68102 +1 402-807-8000. This offers a similar Discount Rate: \$134/Night; (Single/Double), plus 18.16% room tax (current tax rate, subject to change) Discount Deadline: June 25, 2019. Check out the APSA website. Hotel Airport Courtesy Shuttle Available, on request taxi and parking as above.

# SINGAPORE DUO

Rotorcraft Asia (RCA) 2019 and Unmanned Systems Asia (UMSA) 2019, taking place from 9 – 11 April 2019 at Changi Exhibition Centre, Singapore is requesting applications for media accreditation with later this month as the closing date.

According to Flight Ascend Consultancy1, Asia Pacific's fleet is set to command 33% of global market share by 2027 with the highest growth rate in the world – ahead of North America (26%) and Europe (23%). With the demand for





new-build helicopters in Asia Pacific continuing to increase, Rotorcraft Asia 2019 is designed to provide a strategic springboard into the wealth of opportunities in this thriving region. This year's edition presents the latest rotorcraft innovations in the industry's fastest growing markets in the civil, medical, rescue, military and parapublic aviation fields; covering the entire supply chain from airframes, components and parts, to avionics, safety systems, MROs and more. This biannual platform also offers thought-leadership and facilitates conversations on issues relating to the industry.

Co-located with Rotorcraft Asia 2019 is Unmanned Systems Asia 2019, which will present the future of drones across a vast spectrum of commercial and defence applications, showcasing cutting edge technologies and solutions in aerial, ground, surface and underwater domains.

Visitors can experience first-hand the all new Urban Mobility Showcase which will demonstrate how the twin worlds of rotorcraft and unmanned technologies converge to revolutionise the way we live, work and operate. For the first time in Asia, Bell Helicopter and Volocopter will showcase their new Electric Vertical Take-off and Landing (eVTOL) technologies such as air taxis at the Urban Mobility Showcase 2019. From the industry's biggest original equipment manufacturers (OEMs) to its nascent start-ups, witness the new wave of eVTOLs taking flight at Asia Pacific's first dedicated platform for urban air transportation.

Rotorcraft Asia 2019 and Unmanned Systems Asia 2019 will be held in conjunction with the 7th World Civil Aviation Chief Executives Forum (WCACEF) organised by Civil Aviation Authority of Singapore (CAAS).

The organisers have highlighted some of the event exhibits including the Bell 412EPX helicopter: There will be a chance to explore the improved features and capabilities of the commercial Bell 412EPX - the enhanced Bell 412 EPI twin-engine utility helicopter that **Subaru** and Bell are collaborating to deliver.

In the anti-drone field Aselsan is developing an anti-drone systems to combat or neutralize UAV threats in urban and rural environments. The largest defence electronics company of Turkey who will be showcasing their range of capabilities in air defence and missile systems.

Besides UAVs, Drones Solution Services operate rugged, all terrain operable Unmanned Ground Vehicle (UGV), as well as, Unmanned Underwater Vehicle (UUV) for underwater data gathering, mapping and reconnaissance. Discover the possible sea, land or aerial services for your business needs.



# WHAT'S ON THIS MONTH

First in this month's diary is of course the unmissable Helicopter Association International [HAI] Heli-Expo. The Helicopter Farnborough/Paris of the helicopter industry. It may have had some lean years in recent times but it remains the prime slot in every annual calendar.

This year we are in Atlanta, Georgia, and I am pretty sure it's a new venue for the Heli-Expo. It may turn out fresh and new but the last time a new venue was tried away from the southern states or west coast it was Louisville, Kentucky *"the home of KFC and the largest city in the Commonwealth of Kentucky and the 29th most-populous city in the United States."* It was also an unmitigated disaster.



This time Atlanta offers us the dubious accolades of being the capital of the state of Georgia, bits of US history and close by Centennial Olympic Park, built for the 1996 Olympics, and an aquarium.

We can but hope it gets better than that in terms of aviation technology.

The even opens with the March 4 APSA Rescue Summit. Atlanta Georgia USA <u>www.publicsafetyasviation.org</u> Then the show proper on the 5-6-7 March 2019.



European stay-at-homes can call by the 5-6-7 March 2019 Security and Policing Farnborough This official Government event is a world-class opportunity to network and discuss the latest advances in delivering national security and resilience with UK suppliers, colleagues and Government officials. The event will be hosted by the Joint Security & Resilience Centre and will be attended by Senior Government Officials. No press allowed so they and other interested parties that do not meet the right standard will have to go to all the other [dozens] of security events that paddle the same kit under another title. <a href="https://www.securityandpolicing.co.uk">https://www.securityandpolicing.co.uk</a>

7-8 March 2019 UAS DRONES Disaster Conference (UASDISCON) Los Angeles, USA. at the Columbia Memorial Space Center to explore how drones are evolving emergency management operations during the west coast version of the UAS DRONES Disaster Conference (UASDISCON). The Conference will mark the second edition of the series launched in 2018 at Florida International University in Miami. <u>www.uasshows.org</u>

### **NEXT MONTH**

8-10 April 2019 Commercial UAV Expo Europe, Amsterdam, Netherlands. After powering forward with nearly 40% growth in its second year (700+ attendees from 43 nations, 50 exhibitors, rave reviews) the show returns to Amsterdam in its preferred calendar slot. The leading pan-European conference and expo focused on commercial drones will convene top UAV experts and buyers from all key vertical markets, from across the globe. 1,500+ attendees and 75+ exhibitors. www.expouav.com/europe Diversified Communications technology group +1.978.371.1792 phone / +1.978.590.9164 mobile www.expouav.com/europe

### 9-11 April 2019

Rotorcraft Asia 2019 and Unmanned Systems 2019, Changi Exhibition Centre, Singapore <u>www.rotorcraft-asia.com</u> Unmanned Systems 2019, Changi Exhibition Centre, Singapore <u>www.unmannedsystems-asia.com</u>

9-11 April 2019 7<sup>th</sup> World Civil Aviation Chief Executives Forum (WCACEF) organised by Civil Aviation Authority of Singapore. The WCACEF is an exclusive by-invitation only Forum organised by the Singapore Aviation Academy (SAA). The last one was held in July 2017. Since its inception in 2003, WCACEF has served as a nexus for knowledge-sharing and aviation thought leadership, bringing eminent international aviation leaders together in Singapore for collective dialogue on issues and challenges facing aviation. The Forum also serves as a platform to catalyse critical discussions and partnerships needed to advance aviation for the future. This includes representatives on the Council of the International Civil Aviation Organization (ICAO). Speakers at the Forum include prominent and distinguished leaders and experts worldwide, including international and regional civil aviation organisations that are integral players in the aviation community





#### March 2019

11-12 April 2019 UAS Drones Disaster Conference, FIU | Kovens Conference Center, 3000 Northeast 151st Street, North Miami, FL 33181, United States. Details at <u>www.uasshows.org</u>

25-28 April 2019 6th Congress of the International Fire & EMS Motorcycle Response Unit Association [IMRUA] Leon Stukelj Square, Maribor, Slovenia. motorcycle paramedics from Slovenia, will organize the 6th International IMRUA Congress (International Fire and EMS Motorcycle Response Unit Association).

We inform you that on 24.4.2019 in Budapest, Hungary, we will organize interesting and rich pre-congress activities at the 10<sup>th</sup> anniversary of IMRUA. The Congress will be attended by EMTs, nurses, paramedics, doctors and firefighters on a motorcycle from all over the world. At the Congress we will learn about the latest rescue techniques, the latest international guidelines and the latest equipment that we use, or we will use in our everyday work. <a href="https://imrua-slovenia.eu/">https://imrua-slovenia.eu/</a> Contact: <a href="https://www.https://wwwww.https://wwwwwww/lttps://wwww/lttps://wwwwww/lttps://

30 April – May 2, 2019 World Aviation Training Summit. Rosen Shingle Creek Resort, Orlando, Florida, USA. The World Aviation Training Summit (WATS) is the world's largest gathering of aviation training professionals serving airlines, regulators, training providers and the training industry. The event brings together over 1,200 industry professionals from 50+ countries to learn, discuss and exchange views on the latest training practices and solutions for pilot, cabin crew and maintenance training. The event also encompasses the leading simulation and training exhibition for the airline industry, where over 80 exhibitors will be in attendance, all showcasing the latest services and technologies to improve operational safety and efficiency. <a href="https://www.wats-event.com/">https://www.wats-event.com/</a>



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