

Police Aviation News

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Issue 282

October 2019

BAHAMAS AID

International effort for Dorian victims

GERMAN PLANS

1,000 DELIVERIES

Super Puma and AW139 hit delivery milestones

HEMS - THE BOOK

ESN - THE LONG WAIT



LAW ENFORCEMENT INTERNATIONAL

PAvCon Europe: And so, to another year of planning. At a recent gathering of the Bundespolizei at Hangelar, Bonn the editor was able to get together with senior figures working with the Bundespolizei in Berlin and agree that the event will be held at their facility on 8-9-10 June 2020.

Lots of details relating to the event to be clarified of course, travel, airports, taxis, hotels and even the boring bits like tables and chairs before we get on to the sticky bits like the programme of speakers.

There will be a further meeting in December so the storyboard for the event should be ready by Christmas. Meanwhile now is the time for you to mark out your business diary for June 2020 and perhaps plan on bringing your family members along for the delights of Berlin!

AUSTRALIA

VICTORIA: Seen at the Leonardo's plant in Vergiate near Milan during the celebrations for the 1,000th AW139 are two airframes said to be destined for delivery to police in Australia.

Earlier this year Leonardo announced that three AW139 were to be delivered late this year as part of Victoria Police Air Wing's fleet modernization effort. The helicopters will be supplied by StarFlight Victoria to carry out a range of law enforcement, patrol and surveillance, and maritime search and rescue missions from the Essendon Airport on behalf of the Victoria Police. The AW139s will be delivered from Leonardo's Vergiate final assembly line facility in Italy later in the year to enter service in 2020 following their role fit. [Leonardo]



One airframe is in Victoria colours the other is still in base colours but carries Police titles thought to relate to the same ultimate operator.
[Helilan]

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COVER: In Germany Airbus Helicopters has delivered its 1,000th Super Puma registered as D-HEGX to the Federal Police. The helicopter, a twin-engine multi-role H215 assembled in Marignane, France, is destined for the Havarie Command which manages maritime emergencies off the German coast. This delivery completes the German Federal Police's order for four H215s, the first three of which were delivered in December 2018, and increases the Bundespolizei e's Super Puma fleet to 23, including 19 AS332 L1s, making the police force one of the largest operators of the Super Puma in the world today. [image by PAR]

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CAYMAN ISLANDS

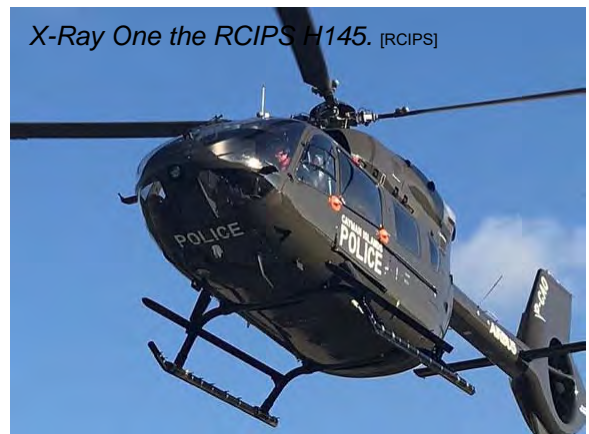
ROYAL CAYMAN ISLANDS POLICE: The identity and an image of the next H145 to be delivered to the RCIPS has been released by the police.

The airframe currently carries the marks N563AH, it will be delivered in December to take up the marks VP-CPS in Cayman. The dark green airframe currently wearing N563AH is the Airbus military demonstration airframe that replaced an earlier company demonstrator that became the operational H145 VP-CAO in April. The way that the US constantly reuses its marks complicates matters a little – there was a white version of N563AH flying in Navy marks at the Heli-Expo last year. That was a different machine.

Meanwhile the operational H145 VP-CAO and two crews has been undertaking its wider role of regional disaster response resource in the wake of Hurricane Dorian in the Bahamas. It is fair to say that it has further enhanced the value the local population already place on it.

Early in September the Bahamas was hit by Hurricane Dorian. The effect of the storm was catastrophic on most of the islands that comprise the Bahamas, with some 76,000 left homeless and the confirmed deaths toll climbing north of 50. Many remain simply 'missing.' With 700 islands spread over 180,000 square miles of bright blue ocean, it's difficult to imagine the airspace over the Bahamas becoming crowded. But so many U.S. military, government, private and other aircraft flew to the rescue in the aftermath of the hurricane that the crews were obliged to search around and above as well as below. Despite the large area most traffic was concentrated over Great Abaco and Grand Bahama.

Along with many other agencies, companies and even individuals Cayman deployed their Airbus Helicopters H145 into Hurricane Dorian relief based in Nassau. The crew members were Nigel Pitt and Richard Morcombe - and four tactical flight officers, Neil Mohammed, Ronnie Pollard, Greg Banks Jr and Daniel McIlhagga. They were later joined by a new pilot, Captain Elaine Hunter, her first week in the role. They joined numerous US military helicopters in rescue and resupply missions as an integral part of British Government aid primarily centred on a Royal Navy Royal Fleet Auxiliary.



X-Ray One the RCIPS H145. [RCIPS]



Devastation. [RCIPS]



Wildcat load lifting off the rear deck. [UKMOD]

RFA Mounts Bay, its RN Leonardo Wildcat helicopter and its crew were in the region working on diverse tasks that included narcotics patrols and being ready for air and rescue. They quickly steamed into Bahamas waters following in the wake of Hurricane Dorian and have "made a material difference to the lives of thousands of people" delivering water, shelter kits and medical care, as well as evacuating casualties around the clock.

The Wildcat and the RCIPS H145, "X-Ray One," were tasked by the same team to make the best use of each asset alongside the more numerous US resources that included US Coast Guard Sikorsky MH-60 Jayhawks with EADS/Airbus HC-144 Ocean Sentry providing top cover. Other government department resources include those of U.S. State Department, Department of Homeland Security and Customs and Border Protection helicopters and fixed-wing aircraft using the relatively small Nassau airport.

Added to the governmental organizations were the aircraft of the rich and famous, news organisations and private pilots who were also crowding into, and often overwhelming, Grand Bahama International Airport (MGYF), Treasure Cay Airport (MYAT) and Leonard M. Thompson International Airport (MYAM) at Marsh Harbour with little or no ATC. The FAA put a temporary flight restriction over Grand Bahama.

The difference in maintenance needs between the Wildcat and the H145 is that the latter needs less downtime. Where the Wildcat takes a day off the H145 generally needs only a few hours overnight.

The H145 Airbus helicopter was purchased as part of a joint deal with the UK to boost Cayman's capability to carry out search and rescue, law enforcement and border protection operations but also to assist fellow territories and other parts of the region during times of crisis.

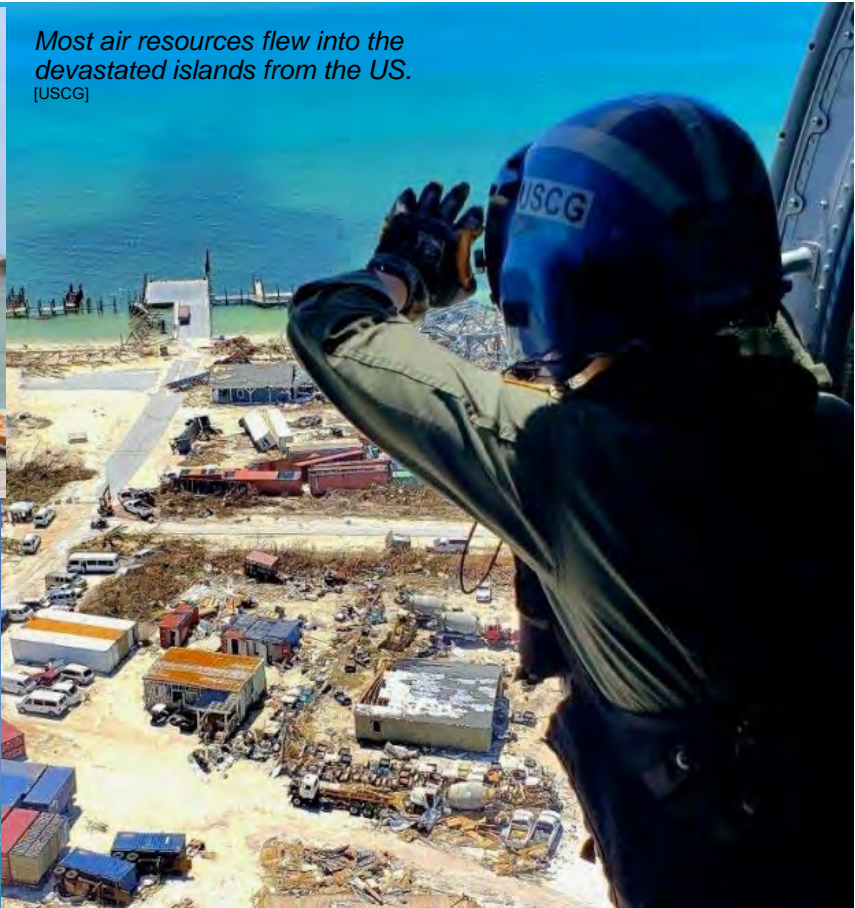
After six-days the RCIPS helicopter returned to Cayman after providing essential support to the islands that amounted to 42 missions transporting 125 passengers and shipping kit including tarpaulins and equipment to many inaccessible locations. With airfields operational using fixed wing aircraft, the decision was taken to return the team to home waters to undertake law enforcement, search and rescue and medical evacuation duties in the Cayman Islands.

Editor: An article relating to the formation of the RCIPS air unit, along with the part played by them in regional SAR operations appears later in this edition.

Meanwhile the damaged EC135T1 VP-CPS is back at Arrow Aviation in Louisiana ready for salvage. That airframe has a much missed EO/IR camera but the refit of the first H145 will bring a camera back into use in the New Year. At the moment the unit relies upon night vision goggles to get the job done.



RFA Mounts Bay. [UKMOD]



Most air resources flew into the devastated islands from the US. [USCG]



The 1,000th Super Puma is an H215 built in France [Airbus]

GERMANY

BUNDESPOLIZEI: Airbus Helicopters has delivered its 1,000th Super Puma registered as D-HEGX to the Federal Police. The helicopter, a twin-engine multi-role H215 assembled in Marignane, France, is to be assigned to the resources for the German Havariekommando (Command Central Command for Maritime Emergencies (CCME) mainly assigned to maritime duties in North Sea and Baltic Sea areas alongside two former coast watch Dornier Do-228 fixed wing.

This delivery completes the German Federal Police's order for four H215s, the first three of which were delivered in December 2018, and increases the German Federal Police's Super Puma fleet to 23, including 19 AS332 L1s, making the police force one of the largest operators of Super Pumas in the world today.

FUTURE PLANS

At the handover event Matthias Achteresch, head of administration and financial director of the air support operation, revealed that the Federal Police are moving towards selecting a new fleet. He said that they hope to launch the procurement process intended to replace a significant part of the fleet in the next 12 months, but it is dependent upon the allocation of budget from the German parliament. The process could begin in 2020 and lead to deliveries in the 2023-2024 timeframe.

The initial focus of the replacements will be the nineteen ageing Airbus Helicopters H155 medium-twins – the first of which was delivered in 1999 but the most recent only a handful of years ago configured for maritime work – and the most elderly examples of its heavier AS332 L1s. They are a mix of owned from new and others acquired pre-owned from the oil industry dating back to the early 1980s. Twelve are now 30 years old.

The EC155 fleet is set for replacement [PAR]



Achteresch says the Bundespolizei is looking to replace the two helicopter models with a single type in the 9-10t class, narrowing the field to the H215, H225, the Leonardo AW189 and possibly the Bell 525.



END OF AN ERA

At another hand-over event in the middle of last month Police Aviation News/ PAvCon was present to witness the official handover ceremony of leadership from Vice President Thomas Helbig to Senior Chief Superintendent Torsten Hallman on September 16th.

The event took place in a hangar at the Federal Police Air Support Headquarters in Sankt Augustin in the presence of other senior ranks, colleagues and families and in the shadow of the recently delivered 1,000th Super Puma.

As Thomas Helbig has been working on projects in Berlin for many months the day-to-day leadership task has fallen to the long-time deputy Polizeidirektor Torsten Hallmann in any case. The actual transfer of power took place in June, as briefly reported in the July issue. The September event was then the official handover, marking ten years of leadership ending.

As the proceedings were naturally held in German much of the detail (and the humour) was lost to the English speakers (PAN) but suffice to say that the programme of events included much that transcended the language barrier – including some great music from the Hannover based Bundespolizei orchestra. As most observers will have noticed English phrases litter every language these days and their irregular appearance from within any speech usually comes as something of a shock to everyone but the usually bilingual locals.

One wholly intended change to English was to greet an American, FBI Special Agent Matt Vernon, probably one of only three wholly English speakers in the hangar. We were a rare commodity at this domestic event. Matt is a pilot with the Washington DC based Hostage Rescue Team. They are working with the team at Sankt Augustin on 'projects'.

FUEL ISSUE

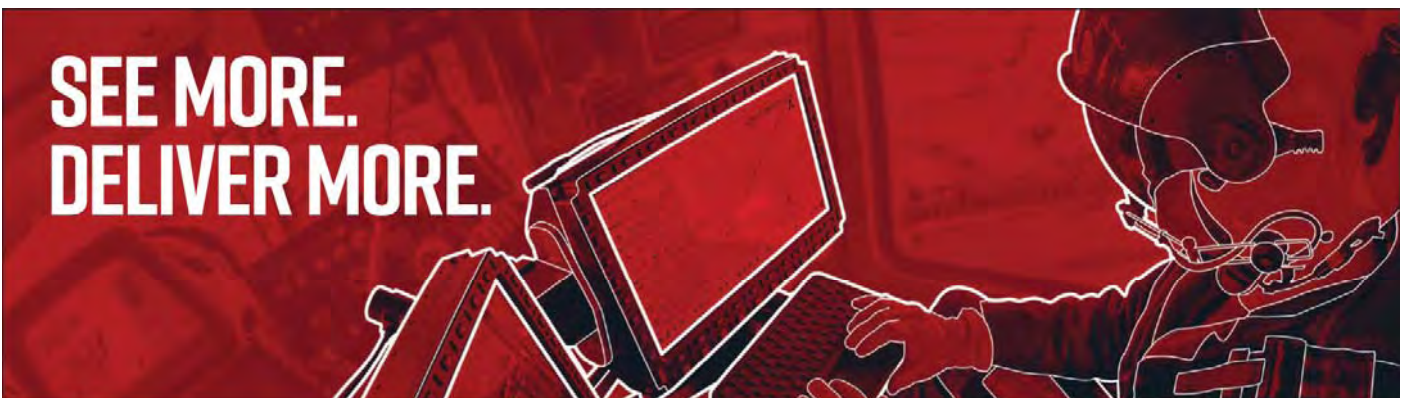
There is much speculation on a story carried by the media in Germany on the 'fining' of a three crew of a 2002 built Bundespolizei EC135T2 D-HVBM after they refuelled it twice with the incorrect fuel – believed to be AvGas – rather than AvTur.



Line of succession.

Above: Thomas Helbig shares a humorous memory with the attendees.

Below: Gunter Carloff handed over to Thomas Helbig a decade ago. He is seen here with the new incumbent Director Torsten Hallmann. [PAR]



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The German Federal Police have demanded a life ruining sum of more than one million euros in damages from the helicopter crew.

The incident is said to have taken place in March this year when the crew of pilot, co-pilot and flight operator from the Fuldata base north of Kassel were involved in a night surveillance mission using the role equipped helicopter.

The crew landed twice during the exercise at Stendal. Unfortunately, the police used fuel from the wrong tank and refuelled AvGas on both occasions. At the end of the exercise, the damage was noted during the routine inspection: The turbines were damaged, the technical report states they were “virtually burned out.”

According to the media reports the Federal Police had several options for repairing the damage, these included a major overhaul of the engines or an exchange for used turbines. It was decided to install new turbines, which was the fastest but also the most expensive solution and is the figure now being claimed from the crewmembers.

The sum of money being claimed is exactly 1,072,293.49 euros. Now the union of the police representing the occupation is arguing with the Federal Ministry of the Interior about the legality of the claim. [Der Spiegel]

Ed: We have no other details as to why such a simple mistake was made and repeated. Similar errors have been made time and again without serious damage as many military grade turbine engines are fuel tolerant up to a point. It would appear that on this occasion the Turbomeca Arrius 2B2 engine was not tolerant enough. The pilots flight manual is specific in ruling out anything that is not kerosene based.

Stendal – Borstel airfield is a large former Soviet airfield north of Stendal in Saxony-Anhalt. The airfield is around 300km [185 miles] from the Fuldata Bundespolizei base. Because the airfield also serves sports aircraft, there are two types of fuel stored in co-located tanks there: AvGas for sports aircraft with piston engines and jet fuel Jet A-1 for jet propulsion, as required by the helicopter.

The police union argues against the damages in full and refers to the judgment of the Federal Administrative Court, which stated in a similar situation that even with relatively serious fault the damages must not be enforced in full.

They say that even in a case of serious negligence the actual fine should be proportionate, especially as the three individuals involved would be financially ruined and the Bundespolizei has invested considerable sums in each of them by way of flight training. The union proposes a fine equal to three months' salary on each of the three federal police as an upper limit.

The latest from the Bundespolizei is that an enquiry is in hand. If the individual officers have insurance that may be called upon, other than that the [still punitive] three months' pay option is likely to prevail.

ITALY

GUARDIA DI FINANZA: Days after the Bundespolizei took delivery of the 1,000th Super Puma Leonardo held a ceremony to mark the handing over of the 1,000th AW139 helicopter.

The event represents a historic achievement: the AW139 is an important international helicopter programme. It also represents a production record in the annals of Italian aviation industry.

The 1,000th machine was delivered to Italy's Guardia di Finanza during an official celebration which was held at Leonardo's plant in Vergiate (Varese - Italy), in the presence of institutional representatives, customers, partners and suppliers, as well as the company's top management and employees. The AW139's first flight dates to the beginning of 2001. The helicopter boasts orders of over 1,100 units from more than 280 customers in over 70 countries on all continents. The aircraft has shown extraordinary levels of reliability and operational capabilities with almost 2.5 million flight hours recorded since the first delivery took place at the beginning of 2004. The type fulfils the needs of many different operators and that total more than 30% operate for public utility tasks such as search and rescue and air ambulance,





A somewhat unlikely candidate for Tactical Flight Officer in this milestone AW139, 414 of the Guardia di Finanza . [Leonardo]

law enforcement, firefighting, disaster relief; over 30% for offshore transport; around 20% for military tasks. The remainder are operating in VIP, institutional and corporate transport missions.

The AW139 fleet has a global presence: around 30% in Europe, almost as much in Asia and Australasia, 15% in the American continent, followed by the Middle East. The international success of the AW139 is so important that to meet market demands the helicopter is produced on different assembly lines both in Italy, in the Vergiate plant, and in the United States in Philadelphia.

The AW139, along with Leonardo's other new generation models, has played a significant role in boosting Leonardo's position in the world marketplace. These aircraft have contributed to the company taking a 40% share of the world's civil sector in terms of value in 2018.

Ed: The AW139 and Super Puma have similar delivery records although the Airbus model was of course preceded by the late 1970s SA330 Puma series. The AW139 has reached the milestone in deliveries some 20 years faster than the Super Puma but there were at least 700 of the earlier Puma built beforehand.

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PANAMA

SENAN: In early February, the U.S. government donated a hangar, equipment, and vehicles, to support units assigned to the Darién region, on the Colombian border in several law enforcement fields. The \$5M hangar and equipment contribute to the fight against drug, human, and arms trafficking and disrupt the influence of transnational criminal organizations in Latin America.

The hangar is being used to store and maintain SENAN's AW109, AW139, Bell 212, 407, and 412 helicopters and other aircraft. The infrastructure, the first of its type in the air base located in the far east of Panama, also includes a warehouse to store material, equipment, and tools, in addition to office spaces, sleeping quarters, and bathrooms.

The donation to SENAFRONT and the Panamanian Police Anti-Narcotics Operations Tactical Unit includes spare parts for counter drug operation speedboats, night and thermal vision devices, 15 Jeep J8 tactical vehicles, two ambulances, and a tractor.

In late June the US Government donated six Bell UH-1H 'Huey' helicopters to Panama's security forces for search-and-rescue, medical evacuation, and surveillance missions. The helicopters were already in country being used by US forces.

POLAND

POLICJI: In early July the police in Warsaw have awarded an inter-governmental contract for undisclosed digital camera systems to Bell Helicopter for installation in the previously ordered Bell 407 helicopters. The value of the procurement (excluding VAT) is given as 14,634,146 zloty or \$3.5M.

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AIR AMBULANCE

CANADA

BRITISH COLUMBIA: At the end of August Summit Helicopters deployed a brand-new Bell 412 EPI helicopter C-FXEP to support the BC Ambulance Service (BCAS) in Kamloops, central British Columbia. This reflects a new contract award.

Summit Helicopters has been operating a dedicated helicopter on contract with British Columbia Emergency Health Services, who operates the BC Ambulance Service, for seven years. Over seven years this has amounted to over 2,000 medical emergencies.

The aircraft features the latest in safety enhancements, an integrated avionics suite with a Garmin navigation systems glass cockpit and FADAC engines. Summit Helicopters is currently completing regulatory approval of its Aviation Night Vision Imaging System (ANVIS) and it is anticipated this equipment will be online shortly. <https://summithelicopters.ca>

ALBERTA: The HALO Air Ambulance is in dire need of funding and elected officials from the communities are calling on the provincial government for help resuscitate the charity funded air ambulance.

HALO was first established in 2007 and operates primarily out of the city of Medicine Hat, in southern Alberta. Like the UK air ambulances it is reliant upon public and private donations to sustain its activities but is only able to fundraise locally among a population of some 60,000 in the vicinity of Medicine Hat, the wider area of southern Alberta it serves is vast and remote with a population of just 272,000. While officials say communities and local businesses have been very generous, the operation has never secured stable funding. In stark contrast Wiltshire, England the air ambulance in one of the smallest counties – one twentieth of the size of southern Alberta - can draw upon the charitable giving of a local population of some 400,000.

The operation used a single Bell 206L LongRanger until last year when, as part of a \$1M donation from AHS (Alberta Health Services), they agreed to upgrade the aircraft for a more capable twin and now operate a 1988 MBB (Eurocopter) BK117B2 C-GRLH. The higher costs associated with the replacement twin engine aircraft exceeded the projections the HALO officials had allowed for. With that agreement expiring on October 1, HALO expect to be \$750,000 in the red with no money in sight to tide them over until the next batch of funding becomes available in March 2020 when the next helicopter medevac programme review takes place.

The Southern Alberta MedicAir Society offers the only dedicated medical rescue helicopter for the area. H.A.L.O. is an asset to police agencies, assisting with search and rescue, and other lifesaving emergencies in an area known to be remote and lacking landing strips.

The Society planned and fundraised to create their dedicated medical rescue helicopter for the South East Corner of Alberta. Under the current HALO Rescue partnership agreement, AHS EMS and STARS dispatchers can call in HALO to provide air ambulance assistance if its helicopter is best situated to provide the quickest response possible during an emergency. There is no charge for the service, it relies on donations as the prime source of revenue. When mobilized in an emergency, HALO travels with an AHS Emergency Medical Services (EMS) crew. Typically, H.A.L.O. expects to be dispatched 25 times annually and has undertaken some 500 missions since it was set up.

In a statement to PAN AHS say that “Alberta Health Services is committed to ensuring residents of south-eastern Alberta have access to appropriate emergency care, including ground ambulance, inter-facility transfer vehicles and both rotary and fixed wing medevac services when required.

“We appreciate the support HALO provides to AHS when we require assistance transporting Emergency Medical Services crews and patients in response to calls in south-eastern Alberta.

“AHS provided \$1 million in one-time grant funding to HALO in 2018. Prior to the grant, HALO has in-



voiced AHS for each medevac flight in a fee-for-service model. At the end of the grant term, HALO would return to a fee-for-service model.”

On its own behalf HALO confirm that the funding model by regional governments, responsible corporate partners and private donations and sponsorship but states that now there is no replacement agreement in place for the expiring grant term.

ALBERTA: Around 950km north in Grand Prairie A.B., the Shock Trauma Air Rescue Service (STARS) is a Canadian non-profit helicopter air Ambulance is seeking support to renew a far larger ageing helicopter fleet. STARS operate from bases in Calgary, Edmonton, *Grande Prairie*, Regina, Saskatoon and Winnipeg. STARS is funded by individual donors, service groups, corporate donors and government contributions to provide emergency care and transportation for critically ill and injured patients across Western Canada.



The first of a fleet of STARS H145. [STARS]

STARS started operations in 1985 and their President and CEO, Andrea Robertson, has launched an independent assessment to start looking at renewing the fleet. That confirmed that airframes – of a similar age to the one recently acquired HALO – were at the end of their useful life. STARS made the decision to replace the entire fleet by 2022.

Robertson says the process of renewing the fleet will be a combination of government contributions, selling the old fleet, and starting a capital campaign. The target of the campaign is \$4M for the Grande Prairie base, with Shell Canada already donating \$3.5M. Grande Prairie has similar population demographics to Medicine Hat, the HALO base, but the area has the bonus of the backing of an oil and gas industry.

Currently, STARS operate a fleet of Airbus BK117 helicopters and an AW139 which will be replaced by a fleet of \$13M Airbus H145 helicopters. The first replacement, C-GLLS was launched in Saskatoon late last month. The helicopter will be on training duties for most of this month.

LIBYA

LAA: The head of Libyan Air Ambulance, Fathi Naji, has stated recently that consultations are underway with the Ministry of Health to fund and purchase new Bell 429 helicopters, equip them and train the pilots.

The meeting at the Ministry of Health also reviewed the maintenance of a currently grounded aircraft – it has been out of service since 2015 – and revealed that it is expected to be ready to re-join the service's fleet by mid-September. [Observer]

ROMANIA

MINISTRY OF THE INTERIOR: Airbus Helicopters and the Romanian Ministry of Interior have signed a contract for the purchase of three H135 helicopters and associated support and services for air medical services and search and rescue (SAR) missions in the country, following a four-year framework agreement signed at the end of July 2019 that foresees the procurement of up to ten H135s.

“During 15 years of air medical services – the well-known SMURD mission, the H135 has proven its utility, being a rotorcraft, which adapts rapidly to all types of requests. All advantages – mainly the flexible maintenance, management of space for the transport of passengers and patients, the speed, the capability to land in a limited area, the possibility to operate life-saving medical interventions during flight, the capability to fly during day and night, and its versatility for mountain missions thanks to the hoist – are essential when it comes to critical lifesaving missions”, said Commander Dache Paul Catalin, IGAv general inspector.

SPAIN

MALAGA: Netherlands-based aerial services provider Zeusch Aviation has begun dedicated European medevac operations in Spain using its Beechcraft King Air B200 based in Malaga. The UK registered King Air, G-MEDZ, which has been configured in air ambulance format, is operating regular flights in partnership with IAS Medical, the UK-headquartered private air ambulance company which holds the AOC on which the aircraft operates.

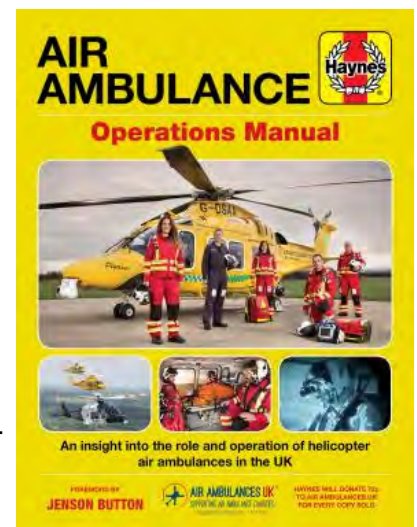
Medevac operations commenced in early July and at least 40 patients had been transported by September. The main flights are to transport patients between Melilla, a Spanish enclave in north Africa bordering Morocco, and Malaga, a thirty-minute flight. The local population of some 86,000 is served by three small hospitals that provide only limited health care. The Zeusch flights transport them to clinical centres of excellence in Spain.

In its medevac configuration the King Air can carry up to two walking patients or a stretcher. The cabin is equipped with a LifePort PLUS system that provides a stretcher, as well as high-tech medical equipment including a vacuum system, compressed air, a three-outlet 1000 watts inverter (230VAC) and a 3500-litre oxygen system with remote filling port. [Business Air News]

UNITED KINGDOM

NATIONAL: For many years now Haynes, the internationally renowned publishers of books primarily aimed at repairing your favourite old car have diversified their output as a reflection of how difficult cars are to maintain at home. Now they have been publishing specialist books on how to “repair and operate” your favourite space shuttle, steam locomotive or helicopter.

The latest in the series of guides focusses on the UK air-ambulance service, with the aim of raising awareness of the work carried out by the services, and the effort required behind the scenes to ensure the successful, safe and efficient operation of helicopters and crew around the country. Although there is a national Association of Air Ambulances, which provides support and facilitates cooperation between its member air ambulance operators, there is no coordinated national fund-raising body for air ambulances, each local air ambulance operator being responsible for its own fund-raising activities.



The new book looks at the origins and history of air ambulance services in the UK, the various models for their structure and how they are funded, organised and run. A brief description of each of the air ambulance units operational in the UK is included, along with photographs of each of the helicopters used. Coverage also includes an ‘under-the-skin’ look at the design, maintenance and operation of the Leonardo AW169 helicopter, including the specialist adaptations required for air ambulance work.

To that end the Dorset & Somerset [DSAA] helicopter features heavily. The publisher is based in their area. The whole is certainly a coup for Leonardo and financially rewarding for the financially hard-pressed Association of Air Ambulance Services [AAA].

A typical day in the life of an air ambulance unit is chronicled, from the start of a shift, and the necessary daily paperwork and checks, through a typical mission (including a night mission, using Night Vision Goggles), debriefing and shift handover. Case studies of life-saving Helicopter Emergency Medical Service (HEMS) missions are also provided, with input from patients who have since made remarkable recoveries thanks to the availability of an air ambulance and the prompt action and professionalism of its crew.

The author of the book, Claire Robinson, has been a writer and editor for more than 25 years, during which time she has edited and contributed to a range of motorsport, aerospace and defence publications. Claire helps Dorset and Somerset Air Ambulance produce their in-house magazine.

The book [H6206] is the standard Haynes size of 270 x 210 mm, 176 pages, and can be traced via the ISBN-13: 9781785212062 and ISBN-10: 1785212060. Although it is primarily about UK air ambulances it will be available internationally via the Haynes company website at a cost of £22.99 <https://haynes.com/en-gb/air-ambulance-manual>

Ed: This review is based wholly upon the details posted by the publisher, DSAA and the AAA. It is not therefore an independent assessment.

AAA: Late last month the shortlisted nominees for the 2019 Air Ambulance Awards of Excellence, sponsored by BMW, were announced. The winners will be revealed at the awards ceremony to be held on 18 November at the Millennium Chelsea Harbour Hotel, London.

CORNWALL: The £7.5M Leonardo AW169 destined for delivery to the Cornwall Air Ambulance for operations next year was flying in Italy in late August.

When delivered next year this will be the first full ownership helicopter for the Cornwall Air Ambulance in its 32-year history. Cornwall was the first charity air ambulance operation to be set up in the UK and it is based in the far west of England at the former RAF St. Mawgan, now called Cornwall Airport Newquay. It is the main commercial airport for Cornwall.

Designed in collaboration with the charity, members of the community and marketing agency Wolf Rock, the helicopter will return to its original red colour with yellow chevrons – like the Essex and Herts AA.

The AW169 helicopter is being completed and test flown in Italy and will continue to bear an Italian registration while it undergoes manufacturers test flights over the next few months, before being brought to the UK to be fitted out with a special medical interior by SAS in Staverton.

The helicopter is being paid for by the local people, the appeal has another £750,000 left to raise by April 2020. Cornwall Air Ambulance chief executive Paula Martin said: "We set up the public appeal to raise the last £2.5million needed to buy the helicopter and we can now see we are so close to achieving the target. The paramedics and doctors cannot wait for the day when the new helicopter flies its first lifesaving mission." Visit <https://cornwallairambulancetrust.org/appeal/heli-heroes/>

GREAT NORTH: The new complex located near Teesside Airport, Progress House, is developing well, the offices are now available for outside bodies to hold events, the new hangar is structurally complete and the new helipad laid. Currently the aircraft remains operating from the airport and is projected to become fully operational in the New Year.

Late in September the venue was used to host the latest Cleveland & Durham SAR Liaison Group, chaired by HM Coastguard. The venue such a success that it is expected to host the next meeting in the Spring.



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GNAA has three helicopters with one based at Teesside, and another at Langwathby, near Penrith in Cumbria. The third aircraft is at Leeds for maintenance in a planned rotation. Newcastle Airport is used as a forward operating base. Currently, all aircraft are the Eurocopter Dauphin AS 365, N2 or N3. The intention is to upgrade to an all N3 fleet.

GREAT WESTERN: Nearly a year after the air ambulance and police moved into the new site near Bristol, the Great Western Air Ambulance Charity (GWAAC) officially opened their new purpose-built operations base on September 25 with His Royal Highness The Duke of Gloucester as special guest. # Moving into the new site was a huge milestone for the eleven year old life-saving charity. It was acquired



Royal opening. [GWAAC]

after a successful appeal raised the £1.3 M needed to purchase the site and secure the future of the charity's operations.

Also in attendance on the day were representatives from the National Police Air Service (NPAS), who lease half of the base for their operations. Almondsbury is one of the National Police Air Service bases. Air crews and a single NPAS helicopter operate from Almondsbury – in the first year at the base, crews have flown to more than 1,200 tasks.

KENT, SURREY, SUSSEX: The first AW169 air ambulance operated in the UK, G-KSST, left the country for Italy last month. The airframe is now with the manufacturers for unspecified work.

SCOTLAND: Scotland's Charity Air Ambulance (SCAA) has agreed a contract with Babcock to launch a new air ambulance service, their second, from Aberdeen International Airport.

The four-year contract will see aerial emergency services specialist Babcock operate and maintain the air ambulance helicopter – Helimed 79 - from a new base at the airport from early 2020.

SCAA has been operating Scotland's first and only charity-funded air ambulance helicopter service from its base at Perth Airport since 2013. In that time, the charity has responded to over 2,200 emergencies, working alongside the Scottish Ambulance Service's [SAS] air fleet, taking paramedic



care to those most seriously ill or injured anywhere in Scotland and transporting them on to definitive hospital care. The original operation started with a venerable BO105 and moved on to an EC135T2 when the SAS moved up to operating the H145.

The new aircraft - an EC135T2e - will operate from a dedicated facility on the east side of Aberdeen International Airport, beside the existing Babcock passenger terminals. Custom-designed for air ambulance operations, the helicopter will be equipped with the latest medical technologies and every emergency flight will be crewed with two highly trained paramedics. The service is predicted to launch in early 2020.

The launch of Helimed 79 in early 2020 will mark the culmination of a three-year strategy at SCAA to deliver a second charity-funded air ambulance for Scotland.

WILTSHIRE: If you visited their social media pages you would think that all was well in Wiltshire. All is not quite what it seems for the green and yellow Bell 429 the charity uses as a backdrop for its photos. Although the technical problems are resolved, it remains grounded by the Civil Aviation Authority while the charity waits the grant of its own Air Operators Certificate.

Despite successful flight inspections in August, the delay has cost the charity thousands of pounds to hire a back-up MD902 helicopter from SAS in Staverton. The hired helicopters and rapid response vehicles will remain the public face of medical response for some time [TIW].



Still out of service. [WAAC]



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UNITED STATES

WEST COAST: Life Flight Network of Aurora, Oregon has completed HAI's Accreditation Program of Safety (HAI-APS). The HAI-APS was developed to help participating businesses fly to a higher standard of safety and professionalism, improve safety cultures, and reduce losses that result from avoidable accidents and incidents.

Life Flight Network is a not-for-profit air medical transport service with 25 bases throughout Oregon, Washington, Idaho, and Montana. For more than 41 years, Life Flight Network has worked together with local police, EMS, fire departments, emergency responders, and hospitals to help ensure patients receive the highest quality care.

To become HAI-APS accredited, participating companies must first demonstrate their operations follow internationally accepted standards of safety and professionalism for helicopter operations. The HAI-APS is a voluntary non-profit program offered as a service to HAI Regular Operator members. rotor.org/home/safety-accreditation.

SEARCH & RESCUE

MACEDONIA

SAR/HEMS: The Government of the Republic of North Macedonia in Skopje has issued a tender document inviting a contract for Establishing Public-Private Partnership for the Purpose of setting up a HEMS operation.

The plan is for the selected helicopter to undertake to meet both HEMS and SAR needs in the region. See also page 20 story.

The European Tender was issued on September 5 and is due to close on October 5. [TED]

NETHERLANDS

MINISTRY OF DEFENCE: A European tender proposal issued by the Ministerie van Defensie in Utrecht is seeking industry comment on proposals to issue contracts for the provision of helicopter SAR by the Coastguard (NLCG) in the Netherlands beyond July 2021.

Before publishing this tender, the authority has decided to further consult the market. The first market consultation was published in November 2018. The information gathered in the first market consultation has been used to adjust the functional and other requirements for the SARHC of the NLCG. The documentation is published on the Negometrix system. <https://negometrix.com/instruction-page/suppliers>



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INDUSTRY

On September 1 **Adams Aviation Supply Co Ltd** was acquired by global aerospace and defence industry expert, and the world's largest independent aircraft parts supplier, **Pattonair Group**.

Pattonair's customer-focus, ambition and global reach add to Adams' long-standing mission of getting aircraft where they should be; back in the air. The ethos of both companies is very alike in that both put customer service first, whether that be customers, suppliers or staff. All three are key and treating them as second to none, vital for success.

The team previously owning Adams Aviation will be staying on to aid the transition to the new ownership and are sure that Adams' future is very bright indeed. They will retain their trading name.

Harris Corporation and **Elbit Systems Ltd**. Has signed an agreement under which Elbit Systems of America, LLC (ESA) will acquire Harris' Night Vision business for \$350M in cash. The transaction is conditioned on completion of Harris' previously announced proposed merger with L3 Technologies, Inc. Headquartered in Roanoke, Virginia, the Night Vision business is a developer, producer and supplier of night vision technology for the U.S. and allied military and security forces and for the federal homeland security market.

Weighing in at around one kilo, the **Hensoldt** LCR is amongst the lightest of crash recorders. Friedrichshafen, Germany, based airplus is now a distribution partner for the 100 and 200 versions and is in the process of obtaining an EASA Cessna Caravan STC.

Hensoldt's newly developed Lightweight Crash Recorder (LCR) combines all recording functions, including cockpit voice, flight data and image recording, in a crash-protected memory. Previously these were distributed over several devices to record data such as flight altitude and direction, engine temperature and speed as well as the pilots' voices. The fact that it weighs only about a kilogramme means that Hensoldt's LCR is the lightest of its kind in the market. [BAN]

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In Norway the Royal Ministry of Justice and Public Security, a Norwegian government ministry that oversees justice, the police, and domestic intelligence, has awarded a 14M Norwegian Kroner contract to **Patria Helicopters AS.**, Bardufoss, Norway for the supply of Mobile Hydraulic Test Units for up to seven helicopter bases. The contract also includes a 10 years' service and maintenance agreement with the possibility of two 5-year extensions. The main locations are to be Sola, Ørland, Banak, Bodø, Rygge and Florø. [TED]

Air Bear Tactical and **Airborne Innovations International** have teamed to provide a fully mission ready Cessna T206 capable of flying a 15" EO/IR sensor recessed into the aircraft body. Now the affordable 206 ISR platform can fly a world class sensor without the aircraft performance degradation currently encountered with side or wing mount sensors. The system is available as new or as a retrofit option. The recessed Mounting System is designed to accommodate a 10", 12" or 15" EO/IR Sensor whilst still offering reduced drag that in turn offers higher aircraft performance. Added features are that the system offers a huge increase in field of view and an ability to orbit in any direction. For covert and discrete operations, the retracted system is less conspicuous on the ramp. The T206 will become the high-performance entry-level aircraft for surveillance, patrol, search & rescue, fire mapping and tactical support. The improved mission performance and low operation cost per hour for this design has no equal.



Precision Aviation Group, Inc. (PAG), a leading provider of products and value-added services to the worldwide aerospace and defence industry have announced the acquisition of Momentum Services Corporation (MSC). MSC is a leading global provider of Repair services for LCD Flat Panel Displays. (www.precisionaviationgroup.com).

Kaman Aerospace have announced the receipt of a new order for the K-MAX® medium-to-heavy lift helicopter, bringing the total number of firm orders since the relaunch of production to twelve aircraft. The most recent order is from Rotex Helicopter AG, of Balzers Liechtenstein, which currently operates multiple K-MAX® aircraft focused on aerial construction and logging. Delivery of this aircraft is expected in the fourth quarter of 2019.

"Rotex Helicopter AG has been a K-MAX® operator for over 22 years and has flown over 45,000 flight hours. A new production K-MAX® will add to our proven aerial lift operations, while providing our customers with a highly reliable low-cost solution", stated Urs Riebli, Owner of Rotex Helicopter AG.

www.kaman.com.

StandardAero has acquired Safe Aviation Solutions. Terms of the transaction were not disclosed.

Save Aviation Solutions (Safe Fuel, Accel and B&E ACR businesses) is a privately held company that provides comprehensive testing, repair, overhaul and modification of engine fuel system components, pneumatic/hydraulic/actuation systems and aircraft power generation systems for airlines, freight companies, OEMs and other MRO providers. The company operates from two primary locations in South Florida, with nearly 56,000 square feet of operations and approximately 120 employees.

Safe Aviation Solutions has an outstanding reputation for superior repair quality on difficult-to-repair components and highly skilled and experienced employees focused on serving commercial aerospace programs with large installed bases of aircraft. Some of the more notable programs currently served include V2500, CFM56-5, CFM56-7, RB211 and Boeing 787platforms.

With the addition of Safe Aviation Solutions' two Florida repair locations, StandardAero now has 39 primary repair facilities located on five continents with more than 6,100 employees worldwide. www.standardaero.com.

Airbus Helicopters Inc. has delivered to **Metro Aviation Inc.** the first EC145e produced at its U.S. assembly plant in Columbus, Miss. This latest aircraft delivery is part of an order for 25 that Metro placed in 2018, and the remaining aircraft will all be delivered out of Columbus.

Metro is a Shreveport, Louisiana based company that operates air medical heli-

copter services for hospitals and customises new helicopters for a variety of missions. Metro was the first customer in the world for the EC145e when Airbus Helicopters launched the model in 2015. The twin-engine EC145e was initially introduced for use with Visual Flight Rules (VFR).

Metro developed its own FAA approved avionics package in partnership with Genesys Aerosystems, as well as air medical and utility configurations. The Metro/Genesys upgrades include Supplemental Type Certificates for a Single Pilot/Dual Pilot Instrument Flight Rules (IFR) system; a VFR electronic flight instrument system (EFIS); and autopilot and stability augmentation system upgrades.

Airbus Helicopters opened its Columbus plant in 2004, where it began production of UH-72A Lakota helicopters for the U.S. Army in 2007. More than 440 Lakota's, also a derivative of the EC145, have been delivered to date. Airbus also performs final assembly of its top-selling H125

Virtually every year the HAI Heli-Expo and other larger shows attract the presence of a booth for the **ADAC Training** organisation based on the Hangelar airport near Bonn, Germany. It has hitherto been a mystery as to why any organisation would be tempted to travel all the way to Germany for time in the Airbus Helicopters simulators when the manufacturers offer access to simulators at their facilities. During a brief visit to the airfield at Hangelar near Bonn the editor encountered an operator from the oil and gas sector using the ADAC simulators.

Based on their experience it seems that the owners of all H145 simulators charge much the same for use of their machine. The customer attracting difference primarily relates to the periphery options – the flexibility of the training, the availability of wet leasing the machine, and more importantly, the cost of getting to and staying at the facility. For instance, although the training cost is the same, for non-Scandinavians attending and using a simulator in Finland costs twice as much as the one in Hangelar based on travel, living and hotel costs.



HEMS Academy hosted a tour as part of the 2012 PAVCon. [PAR]

The **Robinson Helicopter R66 Turbine** fleet surpassed 1,000,000 flight hours. The R66 with the Rolls-Royce RR300 turbine engine achieved the million-hour mark without a single reported in-flight engine failure. This accomplishment demonstrates a level of reliability that exceeds EASA's stringent requirements for single-engine helicopters performing commercial operations.

Certified in October 2010, the first production R66 was delivered the following month. Since then, over 960 R66s have been produced.



In July **Enterprise Control Systems Ltd (ECS)** announced the award of a further contract to provide the RF Defeat element of AUDES (Anti-UAV Defence System) that forms a part of the Liteye Systems Inc., C-AUDES (Containerized AUDES) C-UAS system being supplied to the US Department of Defense (US DoD).

This is the latest in a series of contracts awarded for the supply of C-UAS equipment to the US DoD during the past three years. The order, worth in excess of £2M, will be delivered during 2019 and was secured through Liteye Systems Inc., the US integration partner of ECS.

The contract will see the technology further integrated into US military operations and facilities world-wide. The unique C-AUDES system integrates AUDES into an ISO container providing protective and habitable space for

the user. This not only provides a highly effective, TRL-9 military C-UAS solution, but also enables rapid deployment and re-deployment of the system in support of critical facilities. For further information, please contact: sales@enterprisecontrol.co.uk

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High altitude H145. At 22,840 feet in western Argentina. If you check out the Wikipedia entry for the mountain, first climbed on foot in 1897, this landing is already part of the text! [© Airbus Helicopters]

Some years ago, in 2005, **Airbus Helicopters** flew an H125 to the very top of Everest and put its skids down on the world's highest mountain. Although flying at the extremes of the capability of the much-lightened airframe, it was a first and they gained a great deal of publicity from the flight.

Last month the company were pursuing a similar marketing coup by announcing that the latest version of the H145 has set its skids down on the Aconcagua, the highest mountain in the Southern Hemisphere, culminating at 6,962 metres (22,840 feet). This is the first time a twin-engine helicopter has landed at this altitude, confirming the performance and the extensive flight envelope of the new H145.

The conditions for this mission were extreme, due to the atmospheric conditions in the area and the winter season. The aircraft took off from Mendoza, Argentina, flew 30 minutes to the foot of the Aconcagua where it began its ascension. After 15 minutes of climbing, the helicopter landed at 1.45 pm on the summit, at a temperature of -22°C. The crew onboard the helicopter consisted of Alexander Neuhaus, experimental test pilot and Antoine van Gent, experimental flight test engineer.

"We had to stay focused on the mission due to severe winds with gusts up to 30 knots and the low air density. The handling qualities of the new H145 are excellent and combined with Helionix and its 4 axis-autopilot, we reached the summit safely," said Alexander Neuhaus, experimental test pilot at Airbus Helicopters. "The aircraft performed outstandingly. We flew over the summit of the Aconcagua and still had power reserves that would have allowed us take two people on-board."

The flight test was supported by the Fuerza Aerea Argentina, who provided aerial support with their Lama helicopters; Patrulla de Rescate de Alta Montaña de Policia de Mendoza, who assisted with a contingency plan; Parque Provincial Aconcagua, facilitating operations and logistics, and Helicopters AR, a local operator with over 15 years of experience flying in the Aconcagua area with their Airbus H125 helicopter.

Prior to the successful high-altitude test campaign in South America, the new H145 performed several test campaigns including in Spain at medium altitudes and Finland for cold weather. In total, more than 400 flight hours have already been clocked on the two five-bladed H145 prototypes to ensure EASA certification by early 2020, followed by FAA certification and first deliveries later that year.

The new version of its best-selling H145 light twin-engine helicopter was unveiled at Heli-Expo 2019 in Atlanta in March. This latest upgrade adds a new, innovative five-bladed rotor to the multi-mission H145, increasing the useful load of the helicopter by 150 kg. The simplicity of the new bearingless main rotor design will also ease maintenance operations, further improving the benchmark serviceability and reliability of the H145, while improving ride comfort for both passengers and crew.

North Macedonia's Pilot Training Center (PTC) will train almost 60 Polish and 30 Bulgarian military pilots over the coming weeks. The PTC was established to train military and police helicopter pilots under a \$43M agreement between the Macedonian Ministry of Defence (MoD) and Elbit Systems in May 2011. Located at Petrovec airbase, near Skopje, the PTC operates five Zlin 242L single-engine training aircraft, four Bell 206B-3 JetRanger III helicopters, and two Mi-8/17/171 and Mi-24 full mission simulators from Elbit Systems' Romanian subsidiary, Simultec. [Janes]



North Weald base with an EC145 and EC135 on the pad. [PAR]

Operations by the former Lippitts Hill (NPAS London) base have now settled on the new hangar as NPAS **North Weald**. The arrival on the airfield has brought new vibrancy to the airfield and in particular the public café of aircraft restoration engineers Weald Aviation. Families are turning up there apparently for the regular air movements of the police and ambulance helicopters. Previously it was a quieter place with occasional movements by historic aircraft and the military providing less than regular treats.

There is other, very different, activity on the other side of the airfield. Works are taking place as part of the Government's belated preparations for a no-deal EU exit. The works are required by **HMRC** to prepare sites for temporary customs use to reduce the pressure on known problem spots approaching the sea ports. North Weald Airfield will provide additional customs capacity and help to facilitate the flow of trade in the Dover Straits area. The work includes widening of Gate E to enable lorries to exit airfield; removal of some vegetation; the addition of modular buildings and security cabins. Planning permission for the proposed use of the site was granted to allow the use of the site until late De-



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ember 2020. The site will only be used in the event of a no-deal EU exit, and this usage will remain under constant review.

In total there will be approximately 60 HGV spaces allowing the site to act as an Office of Departure and Destination for lorries transporting goods under the Common Transit Convention. The site will also facilitate the wet stamping of ATA Carnets which allows goods to be moved in and out of the EU on a temporary basis. The facilities will be managed by an external contractor and will be staffed by officials from HMRC and Border Force.

Time, as we all know, marches on. Another mark in the sand has come to pass and it is time for PAN to say goodbye to the long-standing adverts from **Powervamp** based in Bristol and Bedford.

Over 20 years ago Richard Roller, who set up Powervamp, ran the occasional company advert in support of Police Aviation News. Then in 2003 we thrashed out an annual advertising deal for his company in the then new PDF edition. Priced on a quarter page, a lack of immediately available artwork meant that it ran as a half a page in Police Aviation News. We never got around to downsizing the fixed price deal and up until last month the keen price they paid 16 years ago held firm.

From being a British company Powervamp grew immensely and progressed from carry on power boxes to providing ground power for the largest airliners and supporting some of the biggest air shows in the world. It is still impossible to avoid tripping over a product with the Powervamp logo on it. It is now part of a French company, the Alvest Group, they are in the same field of ground support and are probably best known for the Taxibot that tugs full size airliners to and from the parking bays at airports.

The sum total is that Powervamp will no longer be advertising in any publication under its own branding. Powervamp will revert to manufacturing only and will be leaving all advertising and general marketing duties to the other companies within Alvest.

Aero-Specialties will become the main reseller of all PV GSE.

Powervamp retains its main UK presence at 22 Bridgwater Court, Oldmixon Crescent

Weston-super-Mare, North Somerset, England, BS24 9AY. Tel: +44 (0)1934 643000 and has a factory in Bedford. <https://alvest.fr> www.powervamp.com

ACCIDENTS & INCIDENTS

14 June 2019 Pilatus PC-12 N420UH. Air ambulance of AirMed University of Utah, Salt Lake City, Utah, USA. Operated by Metro Aviation Inc. While on approach into Billings Logan International Airport, descending through 13,000 feet, the aircraft was struck by lightning. There were no indications of any failures as the aircraft continued the descent. A PAIP was initiated and the aircraft landed at Bozeman Yellowstone International Airport (KBZN) without incident. During post flight inspection it was discovered that the aircraft had damage on the prop, left winglet and static wick. The aircraft was removed from service. And subjected to a complete engine assembly replacement, propeller exchange and minor airframe damage repaired. [Concern]

8 August 2019 Bell 429 N???? Air ambulance of AirCare, Kearney, Nebraska. After patient was loaded into helicopter for flight from Alma to Kearney, crew loaded into helicopter and pilot started helicopter. The weather was hot outside that day, so crew members left cabin doors open during start up. Primary nurse proceeded to shut left cabin door and noted that right cabin door was cracked open a few inches. When pilot asked if crew was ready to lift, secondary nurse pushed the right cabin door the rest of the way shut. Everyone had eyes out and lifted from pad. After lifting and at the time when the helicopter started forward momentum, right cabin door opened approximately halfway. Secondary nurse was looking out this door and promptly caught the door, then proceeded to shut the door. Crew member then double checked that door was securely latched. All equipment, crew members, and patient were secured in helicopter. Flight was completed with no other issues. [Concern]

1 September 2019 Beechcraft B300 King Air 350 RP-C2296 Air ambulance flying from Dipolog Airport to Manila-Ninoy Aquino International Airport with a patient and relative on a medical evacuation flight crashed into a swimming pool of a resort at Miramonte Village in Barangay, Laguna State, Philippines. A video shows the aircraft descending at a significant bank angle trailing white smoke. All nine people on board were killed and two on the ground were also injured. The casualties were given as the pilot, Captain Jesus Hernandez, First Officer Lino Cruz Jr., Dr. Garret Garcia, nurse Kirk Eoin Badilla, nurse Yamato Togawa, Ryx Gil Laput, Raymond Bulacja, patient Tom Carr and his wife Erma. Two of the resort's caretakers, Malou Roca, 49, and her son John Rey Roca, 19, sustained injuries from the fire. [Media]



4 September 2019 Eurocopter AS350B3 D-HAUE Protection and Relief Intervention Group contracted from Meravo - Luftreederei Fluggesellschaft mbH, Oedheim, Germany. Helicopter operating on firefighting duties in Portugal. Crashed upon take-off from Pampilhosa da Serra Airfield, Coimbra with six occupants. The helicopter ended up on its right side, there was no fire. One of the five members of the Protection and Relief Intervention Group (GIPS), reported slightly injured. [ASN]



5 September 2019 Eurocopter AS350B CS-HEY HTA Helicópteros operated helicopter operating on forest fire fighting duties crashed after hitting wires near Valongo, a town some 20km (12 miles) inland from the northern coastal city of Porto, Portugal. The aircraft had just dropped off as number of fire fighters. The sole occupant, the pilot, Manuel Ferreira, the 37-year-old firefighter chief of a local fire station and an air force pilot by profession died in the crash and subsequent fire. The aircraft was one of several private helicopters brought in to fight the fires. The Navigator Company was one of several pulp and paper companies that Afocelca, a private firefighting company works with. [Media/ASN]

5 September 2019 Airbus Helicopters AS350B3 N804CP. Baltimore County, Maryland, USA undertook a precautionary landing in East Baltimore. The helicopter landed at Frank M. Bocek Park off Edison Highway and E. Madison Street. Officially they made the landing for a routine safety inspection after hearing an unfamiliar noise. [Twitter]

10 September 2019. Helicopter. Air ambulance carrying a patient landed after a potential maintenance issue was noticed at Fenton, Missouri, a suburb of St. Louis. The Jefferson County Sheriff's Office, states that it landed near George Guffey Elementary school on 13th Street.

SAFETY

So far it has not been a particularly accident free year and the United States Helicopter Safety Team (www.USHST.org) is calling for more helicopter safety experts to join their efforts to reduce fatalities in the industry.

Teams of safety experts have been working on 16 active safety enhancements aimed at reducing fatal helicopter accidents. The focus of the safety enhancements includes issues such as loss of control in-flight, unintended flight into instrument meteorological conditions, and low altitude operations. The USHST also is placing a special emphasis on four industry sectors: personal/private flying, air ambulance operations, commercial flights, and agricultural aerial application.

The industry-wide efforts are producing some positive results. Looking at three-year time periods between 1985 and today, total accidents and fatal accidents are moving on a downward trend.

Following a fatal accident in Norway Airbus Helicopters have issued an alert relating to recently manufactured AS350B3/H125/EC130T2 helicopters equipped with the SAFRAN Arriel 2D engine, having less than 300 flight hours since first flight.

There is a potential issue with the main gearbox (MGB) drive shafts, relevant fittings at flexible couplings on both ends (MGB input side / Engine side). The recent accident recently occurred to an AS350B3 helicopter, although the root cause has not been identified and the technical investigation is still ongoing a precautionary one-time visual inspection of the MGB drive shaft installation is required. Due to similarity of design, EC 130 T2 helicopters are also affected. This measure applies only to recently delivered helicopters. Depending on findings, operators are to consult the manufacturer regarding potential corrective action(s). This AD is an interim action and further AD action may follow.

www.policeaviationnews.com



UNMANNED

Drone Aviation Holding Corp. a manufacturer of specialised tethered aerial monitoring and communications platforms serving defence and homeland security customers, has received a Notice of Allowance from the US Patent and Trademark Office (USPTO) for the system and method of converting onboard battery-powered free flight drones into ground-powered tethered drones.

The filed patent entitled, "System for Converting a Safeguarded Free Flight Onboard Battery-Powered Drone to a Ground-Powered Tethered Drone," outlines the proprietary system and technology that allows the conversion of battery-powered free-flying drones into a tethered drone system with ground-based power. The new power conversion technology enables extended flight durations and improved safety using ground-based power for commercial and recreational drones. The Company expects the final patent to be issued in the 4th quarter of 2019.

Drone Evolution launched its new patented rotary UAV protection technology at DSEI 2019. Named SafeFlight, the system protects delivery drones from being jammed and its titanium shell protects it from a variety of external forces. Using a range of navigation systems, SafeFlight can switch between them if it comes under attack, meaning that it can always stay on course for its destination. The titanium shell ensures it remains lightweight but impervious to small arms fire and laser attacks. Anti-jamming systems in the motors mean that they also remain resilient to electronic interference.

At this year's DSEi DroneShield Ltd and BT Group plc., the largest telecommunications company in the United Kingdom announced a joint project designed to counter drones.

The effect of the partnership is that BT, with its millions of customers in the UK and globally, including, notably, airports and other civil infrastructure, is rolling out an anti-drone service UK-wide, using DroneShield's products and technology. While DroneShield has previously co-operated with larger organizations in several countries, this is a very different arrangement, with a very different company. This partnership with BT, coupled with the urgent need for the solution across the UK, cracks open for DroneShield one of the world's largest anti-drone markets that is also ahead of other countries in adopting anti-drone technologies. This is an important step-change for DroneShield.



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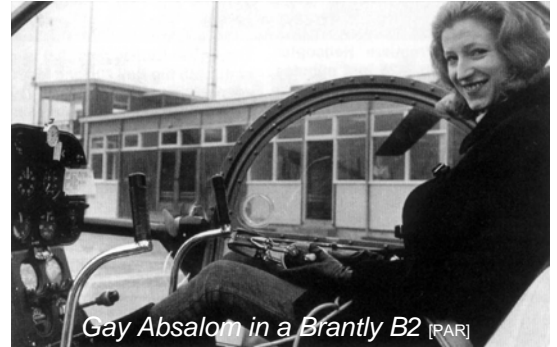
PEOPLE

Sometimes important figures slip away unnoticed and it was the case with **Gay Absolom Barrett** who died quietly in Warwickshire during January this year. According to the brief announcement in the *Daily Telegraph* she died aged 75 years on January 28, there was no funeral.

Born Penelope Gay Rowland Absalom in 1943, Gay Absalom earned her helicopter rating January 26, 1966. She was a member of the Royal Aeronautical Club and the Helicopter Club of Great Britain. She was feted as the United Kingdom's first female commercial helicopter pilot. She was also the first woman employed by UK police as a pilot and that record also probably covers the first woman in the world to be a police helicopter pilot.

Gay Absalom, a member of the Helicopter Club of Great Britain undertook a solo flight to Deuville, France -- across the English Channel -- to participate in an Aviation Rally. This was a helicopter First -- for which she was presented the French Aero Club's Helicopter World Trophy in June 1967.

While she was working for Air Gregory based in Oxfordshire and Buckinghamshire the company won a series of ad-hoc contracts to fly over London for the Metropolitan Police in 1970. Through surviving documents, we know she flew several missions for the police in Hughes 300 and Hughes 500 helicopters during April 1972. There were undoubtedly others. She married Barry Barrett who pre-deceased her.



Staverton movements'

From James Lloyds two very different images of business last month.

The Irish Air Corps provide pilots for the Garda Air Support and the police aircraft are serviced by Babcock at Staverton. It is a rare sight for an IAC aircraft (270) to be at Babcock.

Next door to Babcock are Specialist Air Services, the prime suppliers of Leonardo AW169 helicopters to several UK Air Ambulance charities. G-SASX is a SAS airframe used for maintenance support.



PROFILE

ROYAL CAYMAN ISLANDS POLICE AIR OPERATIONS

An appreciation of his team by Steve Fitzgerald

If we could move on from the issues the Air Ops Unit had from day one of a 135 that was received with a mixed reception. Over the nine years to February 2019, the EC135 T1 gave us the platform where we are now. We provided a policing response to the Cayman Islands that was unexpected, and especially successful in overwater interdiction work. Becoming an Air Ambulance in 2013 was also a decisive factor and proved the lifesaving capability. The Unit strengthened and developed the local support. But the turning point came in September 2017, with Hurricane Irma. The UK overseas territories of Anguila, British Virgin Islands and Turks and Caicos (TCI) were facing the strongest ever Atlantic Hurricane. Destruction was immense and the UK naval resource, RFA Mounts Bay with its Wildcat Helicopter was deployed to Anguila, with BVI as the next stop. Resources were scarce and TCI needed support. In 24 hours, the RCIPS Air Operations Unit, callsign X-Ray One, were pre-positioning to Guantanamo Bay Naval Station landing in the tail end of Irma in 50mph plus winds. The following morning at daylight, they deployed to TCI arriving as the all clear was given. For 36 hours, X-Ray One was the only outside aid in the Islands which had received catastrophic damage and with no communications. They had arrived, and over the following week were invaluable to the assessment and response to the Islands.

In November 2017, the Unit went live on night vision goggles, one of the few Units in the Caribbean region to work on such technology, further enhancing their ability and reputation. Following a second humanitarian mission to TCI in March 2018 relating to Haitian migrants, and working alongside RFA Mounts Bay, the Units reputation was growing. Over the following six months, I developed a vision of a Caribbean centre of excellence for Air Operations and was fortunate to have the support of the Governor and his office, the Premier of the Cayman Islands and Police Commissioner. The Cayman Islands Civil Service has a challenge to be the best, and that was my vision. That vision developed into the second aircraft, an Airbus H145 along with an MOU with the Cayman Islands Government and the United Kingdom for partial funding of an airframe and running costs. The buy in was that X-Ray One would deploy anywhere in the Caribbean if needed.

The EC135 incident in February 2019 resulted in the H145 being brought forward rapidly for a March delivery. Having achieved that, the Unit received a unique Royal Flight accreditation and was honoured to fly HRH Prince of Wales on two flights on his visit to the Cayman Islands. The Air Operations Unit now had the latest technology helicopter, and the boundaries continued to be pushed.

But the Units biggest challenge awaited. Hurricane Dorian hit the Bahamas on the 31st August 2019. This was now the biggest Atlantic Hurricane, and its destruction was immense. The length of time the Hurricane stayed over the locality meant the request to deploy did not come until the 4th September. When that



X-Ray One the RCIPS H145. [RCIPS]

deployment came, the Unit were part of the UK Response alongside their old friends of RFA Mounts Bay and the Wildcat helicopter. The scale was far above the previous experience of Irma, as was the response. This 'Police' Unit of nine staff and one helicopter were shoulder to shoulder with the Royal Navy and United States Coastguard, and over the next six days flew endless missions into Abaco Island and Grand Bahama. A total of 41 flights, 46 hours flown, 125 specialists flown in, 20 locals from remote locations rescued, and even flying relief Mounts Bay staff on scene. Constant medical and essential supplies to remote cut off areas, they were relieved by the Netherlands naval ship arriving on station.

When they arrived back in the Cayman Islands, the Governor, the Premier and Police Commissioner were present to greet them, along with the Islands media. This time, it was 'X-Ray One' returning, not the 'police helicopter'. Their deployment was mentioned in the UK Parliament alongside the naval deployment of RFA Mounts Bay, and compliments of their work came across international boundaries. X-Ray One had arrived. And not just back at base, but as a Caribbean resource. Is there another police unit in the world that deploys across countries to help?

The footnote is the faith in the Unit and support. The EC135 was not repairable, so guess what. A second H145 is due to be delivered by Airbus at the end of November 2019, equating to a \$23M investment by the Cayman Islands Government in Air Operations. Already with two of the most destructive Atlantic hurricanes in history under their belt, it is a reasonable assumption there may be more of X-Ray One to come.

Both helicopters return to Airbus US facility over the next six months for role equipment fits, including hoist fittings, yet another development of the Units capability.

About the man: Steve Fitzgerald was a career police officer, becoming the UEO of Lancashire Air Unit in the UK in 1996. That Unit became the test bed for the Airwave digital radio system, something that led to Steve becoming the national project manager for the air to ground element. The solutions found over the next eight years allowed the National Police Service to function with no borders now. Lancashire were also the first non-metropolitan force to go 24-hour cover, and Steve drove the no charge mutual aid in the North West of England, a precursor to the borderless national policing model.



Crowded cabin. [RCIPS]



X-Ray One the RCIPS H145. [RCIPS]



Multinational relief efforts. [RCIPS]

ERRATUM

Early editions of the page 29 item last month that mentioned the departure of rugby star Clair Garner from the staff of NPAS erroneously stated she was a pilot. She was in fact a TFO. Later editions were altered.

MOVE ALONG THERE

It's a strange old world. Junior police officers are constantly instructed by senior police officers on how they should behave in public and how they should undertake their duties efficiently and without fear or favour.

Yet constantly the newspapers are highlighting how these same senior officers fail to maintain the standards they themselves have set and fail to efficiently monitor the investigation of wrongdoings. It is not just inappropriate hair styles.

If that were not enough there is clear evidence that when they fail to meet their standards, they will move heaven and earth to cover their mutual errors and omissions.

They, like the many British politicians that have made the people the laughing stock of the world with their disarray over Brexit, feel they are safe in their ivory towers. There is a swell of belief across the nation that all too soon that safe position might become untenable.

The problem of renegade police chiefs can be found across UK policing, but it is noteworthy that there have been, and probably remain, clear instances within UK police aviation. They should never have been there in the first place, let alone remain.

A police campaign to get the public to prepare a "grab-and-go" bag in case of emergencies has been both criticised and mocked by social media users. The terminology appears to come from bags carried by air ambulances designed to ensure medics have all they need to save lives.

A Police Scotland Tweet urged people to pack essentials such as a first aid kit, radio, torch, and food and water as part of an annual Preparedness Month, which is being promoted by local authorities and emergency services across the UK.

The idea is not new. Years ago, many people built anti-nuclear underground shelters and bought plastic biological warfare suits. They too were barking mad. As were the 1960s plans of how the police were to rescue people after the nuclear bomb fell. Perhaps it was just bad luck that Police Scotland made the announcement in September rather than on April 1.

Still my 'severely stretched' local police have another hair-brained plan for mid-October, it seems that there is to be a 'Hate Crime Week.' It is not crystal clear whether they want to promote the hate or get rid of it. I wonder if anyone thought of sending these hate crime specialist people out to fight all types of crime sometime soon. That might be novel.



Up in the Peoples Republic of West Yorkshire [PRWY] there was a furore when troubled Prime Minister Boris Johnson used his visit to the police to score a few political points. The planned speech was all about the government's intention to recruit 20,000 extra police officers over the next three years, but it inevitably strayed into Brexit territory and the possibility of a snap election [no hope on that sir!]



Gender Bender. They say that the policemen are looking younger—especially so if they are female [AP]

You can tell the police people were worried about Boris being off message. One of the female officers behind him fainted but quickly recovered when the speech finished. Not quite sure what the shock was, 20,000 is a big number but in the Philippines, they recruit 10,000 cops each year. Maybe the shock is that the leaders in NPCC say they cannot handle the job as they dismantled most of the training infrastructure years ago.

It was noteworthy that the PRWY police have gone further than many in equality in that the officers standing behind Boris were all dressed alike. You could not tell man from woman [or undecided] among the persons ranged behind him. They all

wore similar peaked caps and clothing. All very politically correct in the hierarchy rulebook but downright dangerous for the ladies. On the streets it is a well-known fact that even today many of the worst-case criminals think for an extra nano-second before hitting a woman – it is ingrained from birth – well that tiny advantage is gone. I guess they will be complaining assaults have gone up next.

According to a South African source the latest plan for Crew Resource Management in all sectors of flying is designed to ensure that there are fewer pilot instigated errors and crew costs are trimmed at the same time.

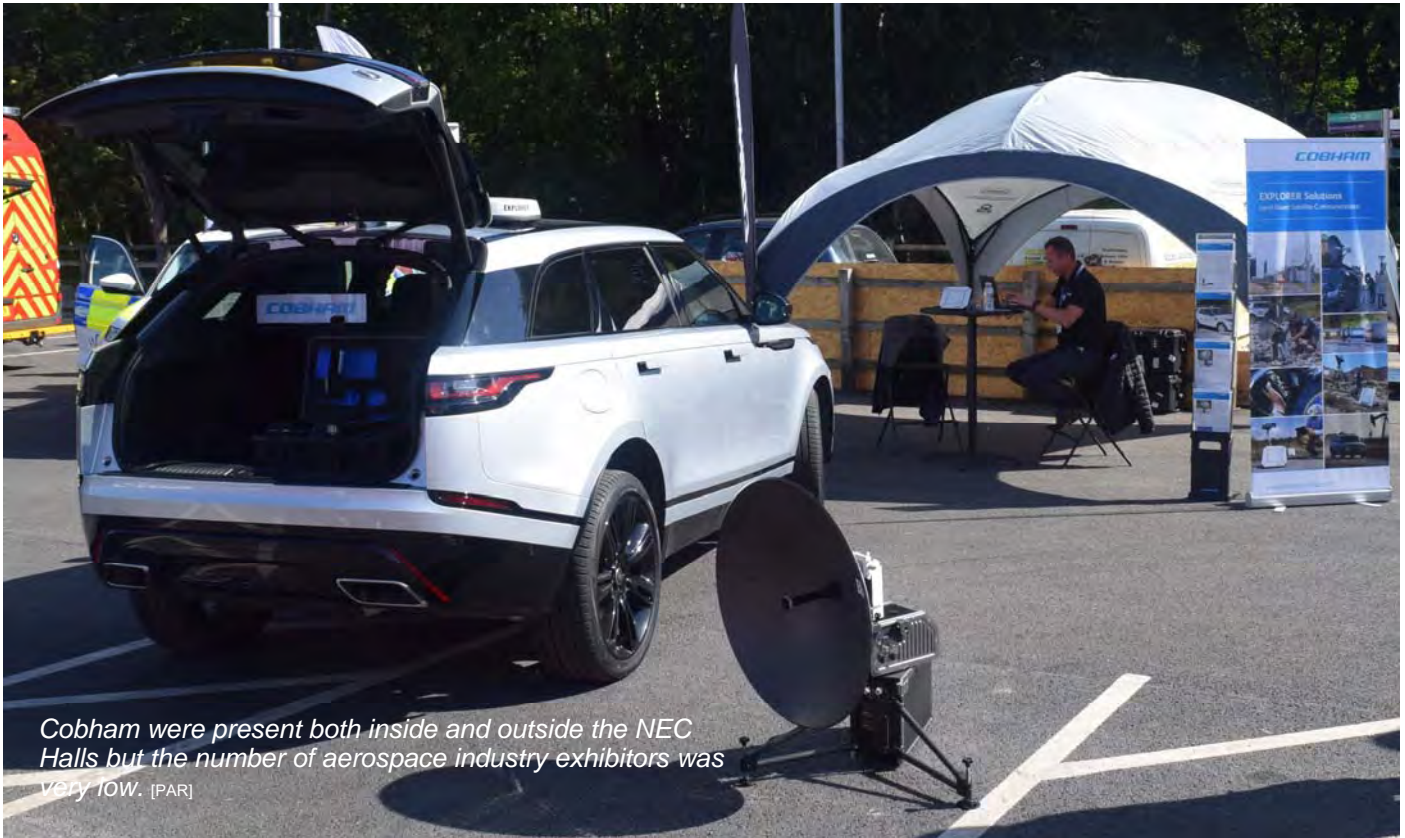
The new plan is to withdraw two-crew operations and employ a human pilot and a dog. If the pilot attempts to touch any of the controls the dog will bite him.



EVENT REPORTS

It has been a busy month for events but the number worthy of reporting in terms of the airborne emergency services has been restricted to **DSEi at the ExCel** in London and the **Emergency Services Show [ESS]** at the Birmingham NEC. In each case the subject airborne matter has been somewhat restricted. DESi is military orientated so that the airborne assets are restricted to drones, drone defences and military helicopters.

It has been many years since the ESS managed to attract full size aviation. Last time round the appearance of a helicopter inside created a major stir. It was a perfect public relations success for both the organisers and the exhibitor. Alas the appearance was very much a flash in the pan, the hope that the fire and rescue service would take up aviation quickly receded.



Cobham were present both inside and outside the NEC Halls but the number of aerospace industry exhibitors was very low. [PAR]

DRONES

Today the only visible aviation presence is provided by very few drone operators, even fewer drone detection services and the Civil Air Patrol (again promoting drone use rather than the light manned aircraft they are primarily hoping to operate in support of the emergency services).

I noted that the West Midlands Police Drone Unit were again present at the show repeating the performance of last year in providing some craft for the public to view and launching a camera carrying drone to provide a birds eye view of fire officers undertaking a car crash rescue scenario. As I stated last year, if police forces are truly short of money and personnel resources what a waste of their time operating this show for three days – let alone even having a drone unit when industry could provide such a service within a far cheaper contract.



ESN

Perhaps the 'hot' topic at the show is communications. There were very few Comms companies at the show and yet all emergency services use and constantly need to renew equipment. With the Emergency Services Network (ESN) supposed looming you might expect something of a sales promotion frenzy.

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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.

Unfortunately, ESN annoyingly remains just out of reach, a promise that has not been realised. ESN is to replace the current Airwave digital radio system with a more capable 4G system based on a greatly enhanced public network operated by EE. It is strange that the very broad content of the ESS includes an opportunity to provide access to the many explanations of why the programme continues to falter. Although there have been other communications shows in the past year, much of what was said in the NEC was ground-breaking and new.

On September 19, Day 2 of the ESS, in the IT Theatre Becca Jones the ESN Director of Deployment at the Home Office [right] gave a video and audio presentation to an overflowing audience.

It was a bit like stepping back in time for there appears to be no significant progress in this project. I entered the NEC in the unsure belief that all would be working in "2023" and after the presentation have moved that belief to not before 2024. Late, later and much later.

This important project that should already be in place has recently undergone a review and start-over. The team are currently writing a business plan. I guess that is a new business plan, for something tells me there must have been a business plan written before this project started. Whether the current business plan in writing is the second iteration or the third no-one seems sure.

Hopefully the new business plan will be available to the people who are rolling this programme out soon but that does not look likely. The core document should be ready in October - this month. It will then go to all the parties [Stakeholders] so it can be reviewed – or trashed. So, the expectation is that sometime in 2020 it may be considered acceptable. Then those involved may have a plan to work to. Perhaps.

Last month it was announced that Cobham had won the contract to put ESN in the aircraft. They too have a moveable target but their expertise in delivering the aviation content is not in doubt.

Ms Jones stated that it was intended to roll out ESN area by area. That was a revelation. Only the week before the plan had been to roll it out Nationwide in one go. It is perhaps a pity that no-one in industry knew of the new variation until September 19!

Based on that new information the NPAS and ambulance aircraft will undoubtedly be equipped with both ESN and Airwave during the now extended roll out of the system. Fortunately, that is quite feasible.

As you may recall, this system should already be in place, and yet the infrastructure is not in place and that by a massive degree. To ensure that the system provides 100% National coverage for the emergency services and public [999 calls only for the public] many existing aerials need modifying and new towers need to be constructed and that work is being undertaken by both EE and the Home Office.

System provider EE has built 391 of 466 of their first phase and has since agreed to build another 260 masts. In remote areas the Home office team have built 53 of 292 sites.

Both sets of figures show a massive shortfall in infrastructure for a system that should have been complete at least a year ago.

The figures of completed projects illustrates how far behind the curve the whole task is.

In the background several events have used elements of ESN in isolated trials and ESN Connect and Connect Plus have been tried and tested and found safe to use even though some were not expected to go well.

The ESN project lead for the National Police Chiefs' Council is Assistant Chief Constable Gary Cann, he holds the Lead for CT Command and Control and will no doubt be facing up to the difficult decisions facing individual police forces on how to fund this giant project. No one seems to have allocated additional funding for equipment and control rooms. The provision of resources for the airborne element is an additional question to be answered. Suppliers are developing equipment, but funding may be a problem when the customers are currently faced with renewing equipment just to keep Airwave going a few years longer.

COMING SOON

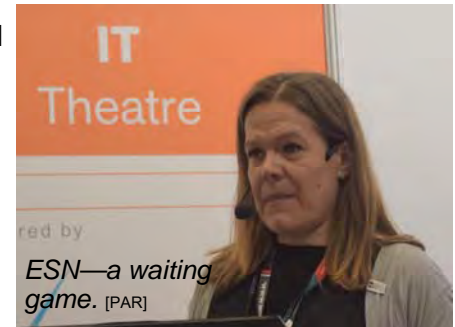
The inaugural **Vertical Flight Expo & Conference**, the event that replaces the former Helitech, will be held at Farnborough International over three days in early November.

The organisers say that over 75 manufacturers, suppliers and operators will exhibit the latest products and services on the show floor. The bad news is perhaps that many of the heavyweights in the industry will be absent.

Taking place on 5-7 November the event will attract exhibitors of specific interest to the Emergency Services sector.

As a leading supplier to emergency services, Axnes AS will showcase the MP50 PNG Transceiver, displaying the technological advances that have been made in the HEMS and SAR sectors. With the capability of being fit for purpose whilst at a depth of three metres for 24 hours, the transceiver is built with special mission operations in mind, to be durable across a variety of challenging environmental conditions.

Also expanding the capabilities of HEMS aircraft and aircrew is Northwall srl. Providing a solution for emergency rescue pilots who need a steady hand as well as a calm head, its LMT Pilot Helmet is reduced in both size and weight, allowing for extended wear without effecting a pilot's sense of balance.





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Universal Avionics will exhibit its Vision-1 Synthetic Vision System. The technology acts as a wingman, providing both pilot and co-pilot with a 3D terrain database integrated with the flight plan and projected flight path of the aircraft. The product aims to increase the situational awareness of those in control, allowing for a more precise operation whether applied in a commercial or mission guise.

A first-time exhibitor Malloy Aeronautics Ltd will display an example of its advanced systems available in aviation. Malloy is a specialist in designing, developing and producing heavy lift drones capable of autonomously delivering rapid response aid, equipment and people. Products such as the T-80 or T-150 – that can carry a 30kg+ payload will be displayed at the exhibition.

Long term readers will recall the load lifting vision enhancement modification offered by Swiss Rotor Solutions Ltd and the now world-renowned mounting and access products that come out of the Meeker Aviation Services facilities in the USA and Canada.

It will be worth studying the organisers website nearer the day to make sure that the exhibitors you want to see will be attending. As many who study the show sector will be aware the major exhibitors – including the airframe manufacturers – face very high costs in building stands that meet a high standard and then staffing them over several days. They will grasp any opportunity to walk away and the fragmentation of the former Helitech organisation last year was one such occasion.

The organisers, Reed, are hoping that the new venue will revitalise the event beyond the loss of that iconic name [Helitech]. The return of opportunities for private owners to fly into the site without facing landing fees might be enough but many diehards will undoubtedly still remind everyone in earshot that the missing link is actually the sight and sounds of active examples of the Spitfire and the Merlin engine from Duxford days.

Complete airframes are just one part of the industry, although this year will be challenging, important component manufacturers will be there. If the show gets through its undoubted problems the manufacturers will reassess their marketing strategy for next time.

For more information or to register to attend, visit <http://www.verticalflightexpo.com>



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9 November 2019 **American Heroes Air Show, Los Angeles, California.** A request by the organisers for the involvement of USAF resources has been accepted.

The Saturday daytime event is being run between 9:00am – 4:00pm at Hansen Dam Recreation Area, Lakeview Terrace, California. As is customary helicopters from law enforcement, fire, EMS/ENG, military and homeland security organisations demonstrate the unique capabilities of rotary-wing aviation. There will be a Career & Recruiting Expo for law enforcement and schools with a Criminal Justice curriculum, to profile careers in public safety, government service, homeland security and defence. Local Search & Rescue teams will be there with emergency vehicles, equipment displays and demonstrations. Various non-profit organisations are on site to promote their mission of public service, community safety and emergency preparedness. STAR Helicopters will provide sight-seeing rides.

Parking is located on Foothill Blvd. just south of the 210 Freeway. Metro provides bus transportation to the American Heroes Air Show via the Metro Local 233 at the intersection of Terra Bella Street and Foothill Boulevard. Call +1 (323) 466-3876. The organiser is JD Pauls / Heroes Air Show, PO Box 5188, West Hills, CA 91308 +1 (818) 631-8132 +1 (818) 347-4577 info@heroes-airshow.com



EC155 at the Berlin Air Show a few years ago when green was the in colour. [PAR]

A bit further down the line we have the **2020 PAVCon Europe** police event to be held on land of the Bundespolizei in central Berlin on June 8-9-10 which will undoubtedly impinge on further attempts by AeroExpo UK to expand its Multi-Mission offering in the days following. This is unfortunate but the date was selected by the Bundespolizei to avoid holding PAVCon Europe 2020 on a local public holiday (Whitsun on June 1).

For the record the AeroExpo UK event will be held on June 11-12, 2020 at Wycombe Air Park and marketed as AeroExpo UK/Heli UK Expo/ Multi-Mission Expo. The market sectors are different but many of the likely exhibitors are similar. The Wycombe event is posted as being 'The UK's Private Helicopter Owner and Pilot's Exhibition' so the additional features including the relatively new Special Missions section are not core features for them. They hope to cover applications ranging from: Air Ambulance, Aerial

Mapping, Aerial Photography / filming, Aerial Survey, Air Pollution Monitoring, , Agricultural / Forestry applications, Border / Maritime surveillance, Environmental Monitoring, Fire monitoring & mapping, Fishery patrols, Intelligence gathering, Powerline / Utility routes monitoring, Security, Thermal & Environmental heat loss surveys, UAV / Drone Platforms. The co-located events at AeroExpo UK – a General Aviation event – are designed to improve and enhance the overall experience. Events are run by AvBuyer Events AvBuyer House, 34A High Street, Thames Ditton, Surrey KT7 0RY United Kingdom office@heliukexpo.com