Police Aviation Research Issue 285 January 2020

BOTSWANA ENSTROM ORDER CAYMAN ISLANDS ARE TWO

HAPPY NEW YEAR

NORWAY HEMS WOES

FLY ELECTRIC COMING SOON

EDITORIAL

Happy New Year. Hopefully 2020 will bring each of us all emergency services aviation that we can be proud of.

The people have spoken and it appears assured that one of the most embarrassing period of British politics has come out into clear air. Brexit is to happen despite the worst efforts of many self



serving politicians who believed they alone knew what the people should be thinking and voting. They were wrong and many are now seeking new pastimes in keeping with their narrow view on life.

January 2020

I suspect that 2020 will bring us another group of displaced 'leaders of men' in Yorkshire. The clock is ticking and the resolution of that Inspectorate [HMICFRS] report is beckoning. The new political situation in Britain means that I have less reason to refer to the "Peoples Republic of Wakefield" for this former left wing stronghold has turned to supporting Boris in the National voting process. While it is doubtful that local politics will follow the seed change, the Pol*ice and Crime Commissioners* (PCCs) are elected every four years, the last election was in May 2016 and the next election will be on May 7, *2020*. Time enough for the present incumbent to feel the heat.

On the world front many will recognise that Brexit put the all knowing liberal elite in their place without riot or bloodshed but other potentially more volatile nations face similar challenges. In the US Senate there are similar moves by liberal politicians to remove the voters choice [Trump] from office. That may be courting significant trouble.

Recent events have proved that the weapons of choice of the average Brit are adapted, fire extinguishers and ancient narwhal tusks, other nations, those where real guns famously prevail, may well be less subtle.

Back in Britain there is a 'secret' report circulating through NPAS and others soliciting comments. I am not aware of the actual content of this document, *for it is secret*, but I know well the authors who are part of the Cambridgeshire team that seeks to put right the ills created within NPAS by senior officers and members of policing in Yorkshire.

Police Aviation News may comment but it has no say in the deliberations. I will however point out that on several occasions it has been pointed out in this newsletter that NPAS were discarding the very people that it needed to prosper. That opinion was regularly expressed directly to the leading figures of the Yorkshire based organisation by the Editor, so it was not a case of them not choosing to read the words here.

A bar was put on leading figures in police aviation simply because they were of a rank too high for NPAS to absorb. Meanwhile numerous persons with little or no knowledge of law enforcement or aviation were part of the monolith we know as the Strategic Board. Now, Richard Brandon, one of the leading persons discarded in that process is in the van of the team that seeks to mend the damage done.

To that band in particular, God speed you in your endeavours.

Bryn Elliott

COVER: Extracted from the 2020 edition of the limited circulation German Bundespolizei calendar, this snow scene is the subject for December 2020 by which time the meaning of life will be much clearer for all.



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LAW ENFORCEMENT BOTSWANA

POLICE: The Botswana Police Air Support branch has ordered three new Enstrom 480B turbine helicopters from Safomar Aviation and these will join its fleet of Airbus AS350 models.

In December Safomar announced that the three helicopters will be delivered in the beginning to middle of 2020. The new helicopters will be customized to Botswana Police Service specifications and include Trakka Systems day/night cameras and searchlights, navigation and communication equipment, cargo slinging and Light Emergency Medical Systems. Apart from specialist police duties, the aircraft can be quickly configured for the passenger role and carry three to five people.

In 2009 the newly established Botswana Police Service Air Support branch acquired an initial three AS350 B3s from Eurocopter, these were upgraded for night operations with a forward-looking infrared camera and modified pilots' instrument panel and observer's console that were night vision goggle compatible. They were fitted with LEO-II-A5-EP Extended Performance (EP) Airborne



Observations Systems (AOS), a Spectrolab SX 16 night sight, rescue hoist, cargo swing and external loud hailer system.

One of the helicopters crashed in April 2014, killing all three on board, and another crashed in July 2016, injuring the six occupants. In January 2015, Botswana ordered another three AS 350 B3es from Airbus Helicopters. All four AS 350s (H125s) are regularly used for anti-poaching duties, amongst others. They are based at Sir Seretse Khama International Airport in Gaborone. [Patriot]





CAYMAN ISLANDS

POLICE: Cayman's new police helicopter landed in the islands on December 6 after a ferry flight from the USA.

The US\$11.5M Airbus H145, the first helicopter purchased solely by the Cayman Islands government, will operate alongside the Royal Cayman Islands Police Service Air Operation Unit's current H145 helicopter. That helicopter was funded by a joint deal between Cayman and the UK. The total cost of both helicopters is \$23M.



Ed: Early last month the Royal Cayman Islands Police Service took delivery of its second Airbus H145 helicopter at a total cost of both helicopters pegged at US\$23 million.

A detail missed in one of last years many stories on the RCIPS was that following the incident with the former East Midlands Police EC135T1 VP-CPS the insurance company decided that it was uneconomical to repair the venerable helicopter and RCIPS accepted a pay-out of \$2.6M. According to my records the RCIPS paid \$2.96M to the East Midlands ASU in the UK in 2007. And many thought they were ripped off. The EC135, of a model that even then everyone considered pretty much junk, entered service in 2010 and gave eight years service that led to the Cayman Island legislature buying two vastly more expensive H145 helicopters.

Running costs aside Cayman Air Support was based on a helicopter that ultimately cost £36,000 to own. That 135 was terrific value for money by any measure.



INDIA

KERALA: Police use of air support in India remains at a low level and mainly flown under contract by commercial companies. In the south western state of Kerala the police have hired a helicopter for operational purposes. They have struck an agreement with Pawan Hans to hire a Eurocopter AS365 Dauphin N3, Medium Twin-Engine helicopter for 20 hours of flight time a month.

Operations are to primarily be in support of the *Kerala Thunderbolts*, an elite command force of the *Kerala* Police under the India Reserve Battalion set up in accordance with the Indian central government's directions in the wake of the 2008 Mumbai terror attacks and the police SWAT. The helicopter will save time and allow deployment of forces to interdict terrorists or specialist squads.

The agreement covers the use of the 11-seat aircraft, fuel and pilotage and places more pressure on calls for the creation of a more permanent air-support division.

The helicopter might give the police a head start in SAR situations and reduce the inevitable delay and cost in seeking the help of the Indian Air Force or Navy which inevitably attract high charges from the military operators.

Shortly after the contract was announced the Chips an Aviation Helicopter Services based in Kochi, Kerala was declaring that they had offered helicopters for the state government at a lower rate. [mathrubhumi]



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NPAS: This month sees the resurrection of UK police fixed wing operations with the launch of the long awaited, much discussed, P68 aircraft.

Last month the new North Weald base briefly hosted one of the new Vulcanair P68R aircraft, G-POLX, as they move forward towards operational introduction in the New Year. Whether the visit was part of crew training and mission proving or an operational flight building up to the promised Operational Flights from January remains unknown.

Several rumours suggest that the answer to the future of NPAS is contained in a closed cover report out there for comment. The source of the text I understand is the team from Cambridgeshire. As I have not seen any of this report it would be churlish to second guess it but it looks like 2020 may therefore see (yet more) changes in how the operation runs itself. All a bit late now no matter what they do. Those knowl-edgeable individual operations serving the people before 2014 are wrecked and will be difficult to rebuild if indeed that is the tenet of the secret report. Difficult, not impossible, but only if the right people take charge.

I understand that, despite the major work involved, the former Merseyside EC135T2 G-XMII/Norwegian Police is to be converted as G-POLU. It will be the last EC135T2 upgrade undertaken by Babcock. Ed: There is a bitter irony here in that this helicopter was the first to be withdrawn from UK police use as a gesture by one of the main architects of the disaster that is NPAS – Bernard Hogan-Howe. Baron Hogan-Howe QPM and, heaven help us, Knight of the Realm. The former South Yorkshire police officer who in his time headed both Merseyside Police [Liverpool] and was the head of London's Metropolitan Police as Commissioner of Police of the Metropolis from 2011 until he retired on a juicy pension in 2017. Yorkshire seems to be a recurring theme.



POLICE SCOTLAND: Scotland is very short on air support options. When policing in the country was unified they acquired a single EC135T2 helicopter based in the west in Glasgow. It was overworked trying to serve areas beyond its original brief. The acquisition of a fixed wing aircraft to ease the workload was explored, but ultimately dropped. This left the onerous pressure on the single helicopter

In recent months drones have been used to cut the number of Police Scotland helicopter call-outs, after safety concerns were raised. Since they were rolled out the number of missions having dropped.

The Scottish Police Authority states that deployment decisions were made for operational, not financial, reasons, and drones have reduced the need for helicopters. Police helicopter use has fallen



in the past year, figures obtained by a Freedom of Information request show that last year the aircraft have been dispatched on average 133 times per month, down from 153 per month in 2018.



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UNITED STATES

ARIZONA: An injured hiker, 74, who spun in a stretcher 175 times when she was airlifted by a City of Phoenix Police helicopter is suing the City for \$2M because of head and spinal injuries she suffered.

On June 4 Katalin Metro, 74, was airlifted off of Piestewa Peak and while strapped to a stretcher mid-air was spun violently out of control. The **c**laim alleges Katalin specifically said she did not want to be flown off the trail but the incident resulted in her suffering swelling and bruising to bilateral eyes, blood in her external auditory canals and soft tissue swelling over parts of the skull. The couple say they've paid nearly \$300,000 in medical fees following accident.

NEBRASKA: Regular readers may recall the two air accidents that Omaha Police Department had last year. The background to these is that in the moment of their localised glory - they were supposedly hosting the prestigious APSCON last summer – they managed to bracket the event by having an accident before and after the event. Not particularly good promotion.

Now there is a push for more leadership within the flight team. An outside agency recently inspected the Air Support Unit, or Able-1 and recommended hiring a chief pilot. In the wake of the crashes Police Chief Todd Schmaderer requested the new chief pilot position but declined to expand on the thinking behind it.

The accidents in April and August left the unit with one operational airframe and as a result the unit was placed in a safety stand down while an outside consultant, Oliver Enterprises, was hired to do a complete inspection of the air support unit. Oliver found that there was a lack of an experienced aviator in a command leadership position. The full content of the report is being denied to local media so only a summary is available, it turned out that even the local politicians had not seen it ether.

As for the proposal to hire a chief pilot, the council will hear public comment

Tuesday and could make a decision by the end of the year [KETV]

Ed: I note that at least one local politician was worried about the lack of transparency. It is the media again asking questions that no-one wants to answer or be accountable for. This resonates with stuff much closer to the editorial home of PAN. No obvious aviation consultancy entity trading as Oliver Enterprises has been identified.

NEW MEXICO: The Albuquerque Police have taken on charge a new H125 helicopter N125PD to replace Air 1 its eighteen years old Eurocopter EC120B Colibri N120PD, below.

The older helicopter was severely challenged by the altitude and summer temperatures in New Mexico and its systems were out of date. Increasingly its age was telling on availability.

As long ago as December 2006 it was realised that the EC120 was the wrong airframe for the job, but it had replaced several venerable Bell OH-58s in 2002 so it was a vast improvement at the time it was introduced. The \$1.5M craft was found to be unsuitable for the city's high elevation and summer heat, officials told the *Albuquerque Journal*. They were not the first US unit to realise that they were expecting too much of their new purchase. The *Journal* reported that the 120 could fly only 30 minutes at a time during average summer months. The city had sought a helicopter that was quieter than two old ones because residents complained about the noise. When the Air 1 debuted in 2001, police officials said it was a state-of-the-art craft that could stay in the air for over 3 hours without refuelling but that performance rarely happened. Thirteen years later the error has been addressed.





With the new aircraft the unit will be able to offer a broader availability without the restrictions of the heat or the temperatures and the density altitudes. The new helicopter cost \$5.5M, has a state-of-the-art FLIR 380HD camera, GPS system and can link up to APD's real-time crime centre to communicate with officers on the ground. APD is still deciding what to do with its old helicopter.

Ed: Read the specification. How many times have police units across the world made that mistake? Far too many. So often I have noted police units complaining that their new airframe simply cannot carry role equipment and seven officers as well as offer more than minimal fuel.

If APD can afford to keep it, the EC120 will probably best kept as the maintenance back-up. With Airbus having dropped the type from its line-up quite recently values are depressed and may remain so for a long time. It will undoubtedly be worth more avoiding the financing of stand-in airframe than it might bring in a sale.

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AIR AMBULANCE

QUEENSLAND: The Queensland Government is requesting proposals for the future Provision of Air Ambulance Services in the state.

Health Support Queensland and the Aeromedical Retrieval and Disaster Management Branch, Prevention Division, Department of Health are inviting interested parties to attend an Industry Engagement Session to discuss opportunities for the upcoming Air Ambulance Services Invitation to Offer services for Cairns & Far North Queensland; Mount Isa & North West Region; The Central West; South West & Darling Downs; Townsville; Mackay Whitsunday Region; Rockhampton; Gladstone; Wide Bay Burnett and South East Queensland

One-hour briefing sessions will be held with interested parties next month on February 3, 4 and 6, 2020 at the Aeromedical Retrieval and Disaster Management Branch, Level 7, 33 Charlotte Street, Brisbane Queensland 4000. Potential attendees need to pre-register by the afternoon of January 17 to <u>medi-calservices-sps@health.qld.gov.au</u>. [Rotorcraft Asia]

CANADA

ONTARIO: Fox Flight Air Ambulance, a Canadian company based in Toronto Ontario and specialising in international medical repatriation, recently welcomed a third Lear 40XR to its fleet of specially configured air ambulances. This aircraft has been custom fitted for dedicated aeromedical operation. It joins two other Lear 40XRs that were added to the fleet in April of 2019. Company president David Fox says the addition of the third Lear 40XR completes the company's planned overhaul of its equipment. The taller and wider cabin in the 40XR makes it easier for the medical crew to load and unload the patient and provide in-flight care.

In addition to improving the repatriation experience for patients, companions and crews, the impetus to move to the Lear 40XR was also driven by the ongoing maintenance demands of older aircraft.

The latest Fox Flight air ambulance will operate under the tail designation C-FEMT, which stands for "emergency medical transfer." It joins C-FEMF (emergency medical flight) and C-FEMC (emergency medical care) to round out the fleet.

NETHERLANDS

ANWB: During the Amsterdam Drone Week Avy, established in the Netherlands, launched their lifesaving drone. The Avy drone flies autonomously has one hour flight time and can cover up to 70 kilometres. The aircraft will be used, amongst other things, in the Medical Drone Service pilot project. The Medical Drone Service will investigate safe and reliable transport of cooled blood products and medicines between blood banks and hospitals over the next three years.



The Avy is a VTOL fixed wing drone that can cover relatively long distances. Medical Drone Service is a cooperative initiative between ANWB Medical Air Assistance (Dutch Air Ambulance) and PostNL (Dutch Postal and Parcel service) together with medical partners Erasmus MC and Sanquin, and technology partners KPN and Avy and will trial delivering blood, medicines and diagnostic samples to patients and care locations. The aim is to investigate what contribution drones will make in supplying care at the right place and the right time.

In October 2018 the Royal Dutch Touring Club ANWB signed a framework contract with Airbus Helicop-

ters for the delivery of six H135s. In late September the first H135 of the initial batch of three H135s has was delivered to ANWB straight from the Airbus Helicopters factory in Donauwörth to the ANWB Medical Air Assistance maintenance facility at Lelystad Airport where it was outfitted with a new medical interior from Bucher Leichtbau AG. It includes a new and more ergonomic stretcher system compared to the classic factory scheme that ANWB has in its EC135 fleet.

The cockpit has a Helionix avionics suite with three Multi Function Displays. It also has a new Garmin GTN750 touchscreen GPS system. A rear view camera is an option that also is installed to aid the pilot with landing in confined areas. In addition the cockpit is readied for the use of night vision goggles in the future.

The H135 is equipped with two Pratt & Whitney Canada PW206B3 engines. The airframe also has Medium height skids to get enough ground clearance during outfield landings. Finally prior to delivery to its first operational posting it also received ANWB markings and new High visibility marking that comply with the latest Dutch CAA regulations.

The first operational posting of the H135 PH-DOC started on December 10th at the Groningen UMC Medical Centre in the Northern part of The Netherlands. The new H135s will replace the older EC135s that ANWB currently has in its fleet. [Frank Mink & Patrick Dirksen Tristar Aviation Images]



NORWAY

BABCOCK: With nearly half its air ambulance fleet grounded because of "technical difficulties," criticism has been levelled at new air ambulance operator Babcock. Preparedness was at a critically minimum level in Northern Norway and doctors were ringing alarms from within one of the worlds best health systems. Norway is larger than the United Kingdom but with a relatively small population of slightly over 5.3 million living in rugged territory winter communications on land are very difficult and air transport is important. The air ambulance service is critical in such a vast and sparsely developed area.

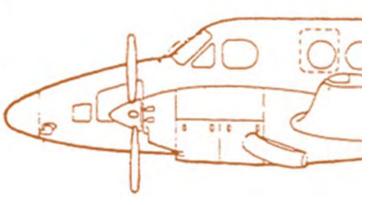
Complaints against Babcock have been harsh but some commentators have suggested that the root of the trouble lies in the fact of the change-over to Babcock rather than the inadequacy of the service being offered.

The air ambulance is a nationwide service and assists nearly 20,000 patients every year. Hospitals undertake medical responsibility and provide doctors and nurses to the aircraft as well as boat and road ambulances. The air service has 13 ambulance helicopters in 12 bases and 9 ambulance planes in 7 bases on call 24/7. The helicopters are primarily assigned to ambulance operations but also undertake SAR. Equally, RNoAF 330 squadron the SAR operation undertake some ambulance assignments for the air ambulance service.

Norwegian company Lufttransport AS had operated the service since 1955 but lost their near monopoly in a tender process to Swedish-British Babcock Air Ambulance in 2018. The six-year contract is worth around \notin 250 million and is extendable.

The change related to price with the Lufttransport bid said to be better quality but more expensive compared to Babcock. One perceived feature was that the pilots were among the highest paid in the industry and some saw the change as a threat. Many reported sick even before the change-over took place to indicate their displeasure.

On 1 July 2019, Babcock took over operations of the air ambulances from bases located in Ålesund, Alta, Bodø, Brønnøysund Kirkenes, Tromsø and at Gardermoen/Oslo. Over 90 pilots from Lufttransport had transferred to Babcock and they signed up to a new contract. But problems started with the new aircraft some months later.



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The long and detailed article in High North News was originally published in Norwegian and has been translated by HNN. If this is your field it is well worth a read. You can link to it at https://www.highnorthnews.com/en/criticism-campaign-and-politics-north-norwegian-air-ambulance-services

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UNITED KINGDOM

CORNWALL: The Cornwall Air Ambulance AW169 helicopter G-CRWL was delivered to PAS on the afternoon of December 15. She is painted in a similar scheme to that of the Essex & Herts AW169 helicopter G-HHEM.

Ten days later Leonardo announced the delivery as the 100th AW169, setting a major milestone since its EASA Certification in the summer of 2015 for the first all new helicopter in the light intermediate category in decades. The aircraft was handed over to Specialist Aviation Services/Cornwall Air Ambulance during an official ceremony at Leonardo's plant in Vergiate (Varese - Italy) on 12 December 2019.

The delivery marks the first Leonardo helicopter to enter Cornwall Air Ambulance's fleet; the AW169 will be operated by Specialist Aviation Services and adds another end user to six AW169 EMS customers in the UK. In a few month's time, the helicopter will be conducting EMS operations throughout the South West of England. Meanwhile it will undergo a bespoke installation of an aeromedical interior in the hands of the team at Specialist Aviation Services. The helicopter is a key platform for EMS missions due to its enhanced safety characteristics. Its main and tail rotors have high clearance which enables safe passenger and crew transportation. Also, the AW169 has large sliding doors which allow easy patient entry and egress.

In addition, the AW169's auxiliary power unit mode ensures the continued operation of the environmental control systems, radios and medical devices when the rotors are stopped. The large cabin can accommodate two stretchers as well a full suite of the most advanced life support equipment.

The AW169 is in operations around the world in all continents, with over 220 units sold to nearly 90 customers in more than 30 countries. [MJ/Leonardo]



DEVON: The operation, currently flying two of its own EC135 helicopters, has an Airbus Helicopters H145 on order for delivery later this year.



LINCOLNSHIRE & NOTTINGHAMSHIRE: Planning permission for a brand-new base and Headquarters for the LNAA has been granted by North Kesteven District Council. The Charity's new future -proof home will be based adjacent to RAF Waddington on the A15 Sleaford Road and close to their current operating base.

The new Headquarters will see Charity staff, crew and helicopter all based under one roof; the facility will include a helicopter take-off and landing pad for both day and night operations as the Charity moves to full 24/7 coverage early next year.

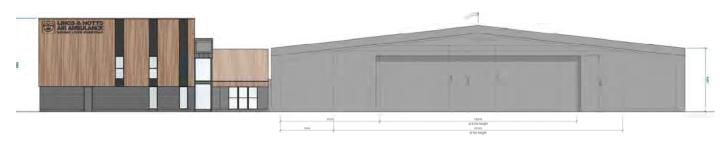
With the Charity's operations and offices currently based on separate sites, the move will allow for closer working between staff and crew, whilst providing a facility for visitors, former patients, volunteers and benefactors to visit the Charity and support their fundraising efforts. The air ambulance helicopter currently operates from the RAF station, whilst the Charity has offices at Bracebridge Heath in Lincoln and Colwick in Nottingham.

The brand-new Headquarters and airbase will have its own purpose-built hangar with space to enable onsite engineering, along with housing for the Charity's Critical Care Car with direct access onto the road network for faster response time. Enhanced crew training facilities will also be available at the new base, which will help clinicians to develop their skills further and prepare for the incidents they respond to.

To support the funding of their new home, the Charity recently received an award of £1.82M from the Department of Health and Social Care, a proportion of £10M set aside by the UK government to help support UK air ambulance charities with capital projects.

Karen Jobling, Chief Executive Officer at the Lincs & Notts Air Ambulance, said: "This brand-new Headquarters for the Lincs & Notts Air Ambulance is something that the Charity has envisaged for quite some time, so we're delighted to have been given the go ahead for this wonderful project. "Our new base will give us security of tenure, as well as the space and facility to further develop our lifesaving service. As we celebrate our 25th Anniversary this year, it's fitting that we are laying the foundations for the next 25 years to ensure we can continue to provide pre-hospital critical care to our patients."

The charity is looking to move into its new home in winter next year, with construction beginning in the first few months of 2020. The North Kesteven DC planning reference is 19/1083/FUL





January 2020

SCOTLAND: Noted in the Babcock Glass hangar at Staverton last month was an unmarked EC135 helicopter painted in the blue, green, & yellow colours of the Scottish Charity Air Ambulance (SCAA). Scotland has an National Health Service financed air ambulance service with a mix of H145 helicopters and King Air fixed wing. In addition to those aircraft a charity air ambulance was set up in Perth, initially with a BO105 but more recently with an EC135. The airframe now at Staverton will set up an additional base for the charity.

This additional EC135T2 helicopter for the SCAA will join their current EC135T2 G-SCAA in due course to be based in Aberdeen. Although unmarked, this machine is the former Midland Air Ambulance airframe G -EMAA. [MJ]

WILTSHIRE: Now back flying its own Bell 429, the charity has enhanced the blood products it can give to critically injured or unwell people by carrying plasma.

The charity is now carrying two units of plasma onboard and this will be used with two units of O negative blood (packed red blood cells).

Wiltshire Air Ambulance has been carrying packed red blood cells on its helicopter and Rapid Response Vehicles (cars) since August 2015 and to date 72 patients have been given pre-hospital blood transfusions by its critical care paramedics and doctors.

The packed red blood cells help carry oxygen around the body and replaces blood lost by patients, while plasma contains essential clotting factors to help stop bleeding.

The plasma carried by Wiltshire Air Ambulance, called LyoPlas, is freeze dried and is in powder form in a glass vial. It is mixed with water to form a yellow liquid before it is given intravenously.



January 2020



Ben Abbott, critical care paramedic and operations officer at Wiltshire Air Ambulance, said: "We believe the addition of plasma will make a significant difference to the care of patients who require emergency pre-hospital blood transfusions and improve their chances of reaching hospital alive in order for them to receive further emergency treatment.

www.wiltshireairambulance.co.uk

Wiltshire Air Ambulance paramedics Emma Thompson (left) and Paul Rock with blood products including LyoPlas.

UNITED STATES

NATIONAL: The State of Wyoming, continues to be a prime mover in the industry wide issue of air ambulance provision and financial acceptability.

Wyoming is a state in the mountain region of the Western United States. The state is the 10th largest by area, and with around 580,000 residents the least populous, the second most sparsely populated state in the USA. But there people still get ill and getting them to medical care is more likely to require air transport than in some regions. At 97,914 square miles, it is 9th largest US state and larger than the United Kingdom [94,000 sq. mls.].

The state is working on a plan to have the federal government cover air ambulance transportation through Medicaid for all state residents, regardless of income. This would eliminate surprise billing of patients, reduce the cost of service, and increase price transparency for consumers.

The proposal would have Wyoming treat the air ambulance industry like a managed public utility. The state would issue competitive bids on a network of air ambulance providers and support them through "periodic flat payments, similar to a gym membership," the proposal states. Providers would additionally fund the system with insurance and individual memberships.

The proposed Medicaid funding will be retroactive, patients would not have to be in the programme beforehand. Some 3,500 air ambulance missions, costing Medicaid an additional \$45.6M annually, are required so it is not something a charity air ambulance could take up. Currently, some 10% of Wyoming residents are enrolled in Medicaid.

The air ambulance providers remain dead set against the proposal and are countering with proposals that are based on more freedom. Rather than a flat fee they believe that the insurance companies should negotiate in good faith. The Wyoming proposals are anti-free-market and a deterrent to the participation of private companies. Losing operators would quickly degrade the flexibility of the system.

The Association of Air Medical Services (AAMS), a non-profit trade association that represents over 90% of the air ambulance industry in the United States, has been working with Members of Congress to develop legislation that would create transparency in the industry and take patients out of the middle, as well as collect data for proper reimbursement. They see proposed legislation that will have a devastating impact on the air ambulance community. Data and research are wanting. AAMS strongly opposes the Senate Health, Education, Labor, and Pensions (HELP) Committee's new proposal to impose arbitrary price controls on air medical services. The proposal would substantially degrade the ability to deliver air medical services across the U.S.A., and would be especially harmful for rural Americans who depend on air ambulances to transport them to definitive care at hospitals and trauma centres.

With nearly 60 US air medical bases closing or relocating last year there is clear evidence of difficulties in the industry.



January 2020

ARKANSAS: Two Air Evac Lifeteam bases in Arkansas have closed after a federal appeals court upheld the dismissal of the company's lawsuit seeking higher rates for medical flights. The Arkansas Democrat-Gazette reported the company could not maintain the bases in Morrilton and Paragould, since the reimbursements for a trip do not come close to covering the actual cost of a flight. The federal appeals court upheld the dismissal of the lawsuit on grounds that the company didn't have standing to sue under federal law and that the medical companies' reimbursement practices did not violate the Deceptive Practices Act.

FIRE SOUTH KOREA

FOREST SERVICE: Erickson Incorporated announced the delivery of K8 to the Korean Forest Service (KFS), completing the delivery of their 2019, two aircraft order. This brings KFS operational fleet up to six examples of the S-64 Air Crane® helicopters. KFS and Erickson share nearly a 20-year relationship, with developing a model firefighting and emergency response program complete with by-the-hour maintenance services, pilot training, and delivery of remanufactured aircraft. The S-64 is well-known in Korea with a strong reputation for being the best firefighting aircraft available.



In 2001, KFS was the first foreign government to purchase S-64 helicopters from Erickson. Due to their success with the aircraft, KFS continues to modify and upgrade its fleet with the addition of K8, incorporating the latest modifications, including composite main rotor blades and glass cockpit. KFS continues to be a leader in aerial firefighting, utilizing the most robust aircraft, for the toughest job.



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UNITED STATES

CALIFORNIA: The Californian state has received delivery of three new S-70i FIREHAWK helicopters from Sikorsky and United Rotorcraft . The deliveries to the Department of Forestry and Fire Protection (CAL FIRE), the Los Angeles County Fire Department (LACoFD), and the City of San Diego Fire-Rescue Department.

Configured by United Rotorcraft with a newly designed 1,000-gallon water tank attached to the belly of the aircraft; an extended landing gear to accommodate the tank; a retractable snorkel that can refill the tank in less than one minute; and a rescue hoist, the Firehawk helicopters will allow fire crews to attack wildfires, transport up to 12 ground firefighters to the fire line, and rescue firefighters and civilians when in need.

LACoFD has operated three S-70A model Firehawks since 2001. During the ensuing 19 years, the county has pioneered and perfected the tactics needed to suffocate wildfires in their early stage when a fire is most vulnerable, while working in close coordination with other aircraft and with firefighting crews on the ground. The county's new S-70i FIREHAWK aircraft is the first of two — more powerful and faster than the S-70A model — that LACoFD is adding to its fleet.

United Rotorcraft contracted with KAWAK Aviation Technologies (Bend, Oregon) to design and manufacture the water tank to new specifications based on input from LACoFD. Among other equipment on each aircraft are a 600 lb. external rescue hoist, a 9,000 lb. cargo hook with load cell system, forward recognition lights and a high intensity searchlight. Avionics installations include tactical communications and navigation systems.

SEARCH & RESCUE

COAST GUARD: In late November, India's Defence Acquisition Council reapproved the procurement of fourteen shore based twin-engine heavy helicopters for the Indian Coast Guard (ICG). The tender had been withdrawn last year following nine extensions and a graft case.

The ICG will use the helicopters to prevent maritime terrorism, infiltration of terrorists by sea routes, and to conduct SAR operations within India's EEZ along the nation's 7,500km coastline.

Although the requirement is termed as immediate it may be up to 12 months before an open tender will be issued to replace the primary helicopter in service – the locally manufactured Hindustan Aeronautics Limited Chetak based on the venerable Sud Alouette III. The Chetak does not have sufficient range but will continue to undertake SAR and training.

The likely contenders for the contract are said to be the Kamov Ka-31, Airbus Helicopters H225 and Sikorsky S-92. Only when the winning contender is in service will the ICG get to operate a helicopter shown to be required in the wake of the enquiry into the shortcomings highlighted during the Mumbai terrorist attack in 2008. The perpetrators had entered Indian territory on a fishing boat.

Contending OEMs are required to sign integrity pacts with each new tender, Leonardo continues to be barred from selling to India. [Shephard]







IRELAND

Ireland has ordered a pair of Airbus Defence and Space (DS) C295 transport aircraft in a €220 million contract for aircraft that will be configured for maritime patrol operations and will replace two earlier CN235MP Persuader that have been flown since December 1994 [image above].

The procurement, announced by the General Officer Commanding Irish Air Corps Brigadier General Rory O'Connor on 13 December, will see the country adopt the larger and more capable CN295 in place of the two CN235MP Persuader that have been flown since December 1994. The current aircraft are used primarily for surveillance, but can also carry out transport, search-and-rescue (SAR), air ambulance, and parachute tasks. The aircraft are unarmed, and are operated by No. 1 Operations Wing, 101 Squadron based at Casement Aerodrome, near Dublin.

The new C295s will be fitted with Airbus' Fully Integrated Tactical System (FITS), an Ireland-specific mission sensor suite, and Collins Aerospace Pro Line Fusion avionics. It is assumed that the new aircraft will have a similar role profile.

NETHERLANDS

SEARCH & RESCUE: The provision of these Search and Rescue services (SAR) is an international obligation for countries. But there is disquiet within the government whether the service in is functioning efficiently.

Minister Cora van Nieuwenhuizen has launched an investigation into the functioning of the Coast Guard helicopters and their ability to undertake the task. The tender for the services was let by Rijkswaterstaat in 2014, but the following year there was disquiet expressed about the regulations governing the service.

The winning operator, the Flemish company NHV, turned out not to meet all the tender requirements. There was a crewing shortfall and no EO/IR camera even though that was mandated in the tender.

NEW ZEALAND

WAIKATO: The final flight of a Bell 222 VH-HZQ operating as a rescue helicopter for the Philips Search and Rescue Trust took place on November 28, 2019. The machine had been in service for 30 years and had accrued nearly 10,000 hours of life-saving service to the region.





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The pioneering introduction of the type as a single pilot IFR helicopter flying in New Zealand, the Bell 222 managed arguably one of the most complex and challenging forms of helicopter flying. The Bell's first flight for the Waikato Westpac Rescue Helicopter was January 15th 1995. Over that time, the Bell transported 8,000 patients in the area of the Waikato Tertiary ICU and NBU.

The technology and navigation demand of today's rescue operations can no longer be fulfilled by the Bell 222. The Waikato Westpac Rescue Helicopter base will welcome a second member of fleet, another BK117, increasing the busy Waikato site's capability by becoming a twin helicopter base. The Waikato Westpac Rescue Helicopter operates as a charity and relies on support from sponsors and community donations.



INDUSTRY

The first flight of a fully electric commercial aircraft took place early last month around Vancouver, Canada. It lasted just 15 minutes.

The plane was a 62-year-old, six-passenger DHC Beaver seaplane that had been retrofitted with an electric motor. It was designed by Australian engineering firm MagniX and tested in partnership with Harbour Air, the world's largest seaplane airline. **Harbour Air** says it plans to electrify its entire fleet by 2022, depending on whether it can secure the necessary safety and regulatory approvals. The aircraft can only fly about 100 miles (160 kilometres) for now, but that's sufficient for the sort of short-hop journeys the airline needs.



Although the technology for small electric aircraft (those carrying around five passengers) has advanced, transporting 50 people or more represents a much bigger challenge, requiring far more power. That relies on a significant breakthrough in battery technology. For now, a switch to hybrid planes looks more feasible.

Over the other side of the Atlantic Rolls-Royce is working with **Cranfield University** on a project to convert a twin-engine piston BN-2 Islander aircraft to hybrid electric power. The piston engines will be replaced by electric motors with a Rolls-Royce 250 turbine engine providing a power generator to maintain electric power.

Project Fresson has received a grant of £9M to design, manufacture and integrate a hybrid-electric propulsion system into a 9-seat Britten-Norman aircraft, which is typically used on short flights such as islandhopping routes.

The grant is provided through the ATI Programme: a partnership of the Aerospace Technology Institute the Department for Business, Energy and Industry Strategy and Innovate UK to maintain and grow the UK's position in civil aerospace design and manufacture.

The Project Fresson team includes Rolls-Royce, who will be supplying the power management system; the Denis Ferranti Group, supplying the electric motors; Delta Motorsport, providing battery packs; WMG (University of Warwick), who will perform battery testing and characterisation, and Britten Equipment Manufacturer) providing the baseline aircraft and aircraft data/design support. Cranfield University will be re-



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Following the demonstrator project the modification will be submitted to EASA to obtain a Supplemental Type Certificate. This will then be made available in the global market, allowing the current operators of the 400+ B-N Islanders to convert their aircraft reducing operating costs and their carbon footprint.

Leonardo and Diamond Aircraft Industries are expanding their collaboration to integrate Leonardo's Gabbiano Ultra-Light TS-80 radar onto the Diamond DA62 MSA (Mission Surveillance Aircraft). The radar will be integrated into Leonardo's on-board ATOS (Airborne Tactical Observation and Surveillance) mission system, boosting the surveillance range of the platform, widening the range of missions it can perform and expanding its market potential. The Integration is expected to be complete by early 2020 and the Gabbiano Ultra-Light TS-80 equipped platform is available for order now.

As noted in the recent shows report edition of PAN, UK Gentex authorised Alpha helmet distributor, **Key Survival Equipment Ltd**, has announced the company has now been awarded a new contract by the Police and Crime Commissioner for West Yorkshire the lead body for the National Police Air Service (NPAS) to provide Alpha helmet maintenance, provision and support to all NPAS rotary and fixed wing flight crew. Key Survival will provide support services focusing on maintenance and through life care of NPAS fleet of Gentex Alpha helmets and headsets.

Kopter continues to expand the performance and flight envelope of the SH09 Prototype 3 (P3), while simultaneously increasing flight test activities in the flight test centre located at Pozzallo, Sicily. P3 has now completed a full year of flight tests covering a wide range of adaptations and improvements all focused on delivering performance and enhancing safety.

The result of this progressive flight test campaign with P3 has allowed Kopter to freeze the design of the SH09, which will flow into the Pre-Series 4 (PS4) aircraft scheduled for assembly by mid-2020. The final lines and features of the SH09 will be revealed at Heli-Expo through a series of 3D animations. Kopter's Heli-Expo display will consist of a full-scale mock-up of the helicopter in its seven-seat "transport" configuration featuring a modular layout, which has been designed and manufactured in cooperation with Metro Aviation, based in Shreveport, Louisiana. Metro Aviation and Kopter have collaborated on various interior designs over the past two years.

Textron is laying off 875 people including some in its aviation division and closing some facilities just before Christmas as part of a restructuring plan outlined in a Securities and Exchange Commission filing on



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Thursday. The company announced on Thursday that it would lay off an unspecified number of salaried employees but refused to offer details. The Wichita Eagle uncovered the SEC filing that shows the length and breadth of the restructuring but doesn't name the facilities that will be shuttered. The filing says the plan will "improve overall operating efficiency through headcount reductions, facility consolidations and other actions."

The filing covers all of Textron's divisions but layoffs appear to be concentrated in the aviation division. The exact number of positions affected in the aviation division isn't specified. "The headcount reductions include business support and administrative functions within both segments," the filing reads. "At Textron Aviation, the headcount reductions are primarily related to engineering positions, reflecting completion of the Longitude certification activities and reduced requirements for ongoing development programs." Textron says it will cost between \$65 million and \$80 million in severance and facility closure costs to accomplish the restructuring. [Wichita Eagle]

The **Twin Otter Guardian 400** special mission aircraft. Continues its World Demonstration Tour. The manufacturers, Viking Air Limited of Victoria, British Columbia, is now offering Ideas at Sea's wide area optical radar payload as optional equipment. Viking and Ideas at Sea will immediately commence sensor integration with a view to presenting their optical radar options to customers in early 2020. Ideas at Sea will be working with Viking's integrator and principal tour partner, Airborne Technologies of Austria, to house the Visual Detection and Ranging (ViDAR) payload and create day/night 180-degree wide area surveillance options for operators of Viking's Guardian 400.

The ViDAR software system, supplied by Sentient Vision Systems, is a wide area optical search system consisting of high-resolution sensors coupled with onboard automation software capable of detecting small objects over significant areas, allowing operators to map vast swaths of ocean in real time and dramatically extend aircraft coverage during Search & Rescue missions.



ViDAR works autonomously to find objects on the water's surface and send a thumbnail image and location coordinates back to the Guardian's CarteNav AIMS mission system. The AIMS mission system software then processes the imagery and data from the sensors to enhance situational awareness and provide geo-referenced local operating pictures that enable the operator to initiate a slew to the object with the Hensoldt Argos EO/IR imaging turret.

The Guardian 400 demonstrator aircraft will also be available for public viewing and demonstrations at the 2020 Singapore Airshow in February and the 2020 CANSEC Canadian Defence & Security Show in Ottawa during May. For more information on the World Tour, visit <u>www.guardian400worldtour.com</u>

Safran Helicopter Engines has received EASA (European Aviation Safety Agency) Type Certification for its Aneto-1K engine, as fitted to the Leonardo AW189K. Intended for super-medium and heavy helicop-

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ters, the Aneto family produces between 2,500 and 3,000 shp. The 1K is rated at 2,500 shp and its first flight in the AW189K took place in March 2017.

Christian Caneilles, VP Heavy Helicopter Engines Program, said: "Certification represents a major milestone for the Aneto program, which will deliver best-in-class solutions for super medium and heavy helicopters. It reflects the excellent performance demonstrated by the engine during its development phase. After an intensive and rigorous test campaign of more than 5,000 hours, on the ground and in-flight, the Aneto-1K is now ready to support AW189K entry-into-service."

The Aneto family offers an exceptional power-to-volume ratio, it delivers 25% more thermal power (over existing similarly-rated engines), resulting in increased mission capabilities.

ESG Elektroniksystem- und Logistik-GmbH has been contracted by the Federal Office of Bundeswehr Equipment, Information Technology and In-Service Support (BAAINBw) to provide the future "Standard Fliegerhelm Hubschrauber-Besatzung (SFH) / Standard helicopter-Crew helmet". This will gradually replace the pilot's helmet previously used by the German Armed Forces and used in various configurations with a standard, state-of-the-art pilot's helmet including the necessary accessories (pilot's helmet system). The new SFH system is to be used worldwide in different climate categories and under different environmental conditions by aircraft crew members in the Bundeswehr military helicopters that have been introduced and are in the process of being introduced.



Adaptation to other helicopter types of the Bundeswehr (e.g. hired helicopters and possibly also to future helicopters) can also be made possible by ESG in principle. <u>www.esg.de</u>



Last month **Enstrom Helicopter Corporation** celebrated its 60th anniversary. From humble beginnings in the woods of northern Michigan, Enstrom has produced more than 1300 aircraft operated in over 50 countries around the world.

Rudy Enstrom was a mining engineer in Crystal Falls, MI who dreamed of building his own helicopter. He had never actually seen one in person, but he didn't let that stop him and throughout the 1940's and 1950's he constructed a number of prototypes in his garage, hovering them in a local quarry. Jack Christensen was a tool salesman from Menominee, MI, and called on Rudy's mine often. In the late 50's he had the idea of putting Enstrom's into production, and raised funds from local business-

men to start a company. The R.J. Enstrom Corporation was founded in December of 1959 with Christensen as CEO, and a 60 year legacy was born.

Rudy soon left the company, but not before an engineer named Alb Balaur was brought in to refine the design. Along with Paul Shultz and a handful of other talented engineers the dedicated team worked developed the F28. It was FAA certified in 1965 and found favour with fledgling law enforcers shortly afterwards.

The company continues to produce its popular turbocharged piston F28F and 280FX siblings, and the turbine 480B today. After having several owners in the intervening years Enstrom is now a wholly-owned subsidiary of Chongqing General Aviation Industry Group Co., Ltd. (CGAG) <u>www.enstromhelicopter.com</u>



Law enforcement and rescue services across the world are never likely to be operating the type, but the Russian Ministry of Emergency Situations is a likely operator.

As part of Russian Helicopters' program on upgrading the heavy Mi-26 helicopter for the Russian Aerospace Forces, in 2018 Rostvertol produced a prototype of the modernized Mi-26T2V helicopter. So far it has completed preliminary tests at

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the manufacturing facility, it is now moving on to start a joint state tests program which is to last throughout 2020.

The performance of the machine will be considerably improved and offers the ability to carry up to 20 tonnes of cargo. The rotorcraft has the modern NPK90-2V integrated avionics which ensures piloting during the day and at night, enabling the helicopter to fly the route in an automatic mode. The number of crew members of the modernised helicopter (five persons) remained unchanged.

In production for nearly 40years, over 300 have been built for service in a number of countries. In 1982 the original Mi-26 took the FAI world record for the greatest mass lifted by a helicopter to 2,000 metres (6,562 ft) - 56,768.8 kilograms (125,153.8 lb). The normal internal payload is around 20,000 kg cargo (44,090 lb), similar to the Chinook but it offers a greater internal capacity.



24

Tracker Network UK is the rebranded licensee British arm of the US Lo-Jack based in Irvine, California. For decades now law enforcement helicopters have been fitted with Lo-Jack/Tracker equipment which successfully detects missing and stolen motor vehicles and plant. The company prides itself as being the only stolen vehicle recovery system directly integrated with law enforcement and as far as the UK arm is concerned there were no issues evident.

Over the past two years the British arm of Lo-Jack/Tracker has been struggling to make adequate profits, with reports of falls in its net worth and assets and this has resulted in a transfer of control from mainly UK based directors to a group from California. Last year, of the forty-two people involved with the company in the past 20 years 38 have gone, leaving just four Americans. Pointedly, the four all come from California and three of those, including the CEO and CFO, from Irvine the base city for Lo-Jack.

Although the company reported consistent sales of over 27,000 units and had over 73,000 subscriptions in the year to 2019 they were reporting a £0.8M loss before tax [part of a cumulative £2.3M loss notified from 20171.

I am awaiting a comment from Lo-Jack in the USA, it is not a good time of year to ask anything, but it would appear that the UK arm of the equipment provider simply collapsed into debt and control reverted to the USA.

ACCIDENTS AND INCIDENTS

17 July 2019 Bell 429 N755SL. Air ambulance of Air St. Luke's, Boise, Idaho, USA. Operated by Idaho Helicopters Inc. In high winds the three crew were en-route to the Pioneer Mountains near Hailey, Idaho to retrieve two crew members that were left behind from a previous completed mission. The location was in mountainous terrain with steep inclines, loose rocks, scree, and boulders. After locating the two crew members, the pilot attempted to land on an up-slope. During approach, the pilot touched the skids down and could not complete the landing due to the excessively steep terrain, ground obstacles and high winds. Further landing attempts were abandoned due to deteriorating conditions, approaching darkness, and increasing high winds. An on-ground crew member waved off the pilot to abort the landing. The crew members were prepared with gear, and sheltered in place overnight. The pilot did not experience any changes in aircraft flight characteristics, vibration, controls, instrumentation, or performance. The aircraft was returned to base without incident. After landing, a post-flight inspection and walk around was conducted by the pilot and damage was noted to the bottom surfaces on two of the main rotor blades and upper wire strike system. The aircraft was taken out of service by the pilot and reported to operations. The following morning, arrangements were made to have another aircraft and the oncoming pilot pick up the two crew members. The crew members relocated to a meadow and secured an LZ. The pilot was able to locate the crew members and return them to base without further incident.

A review found that the pilot exceeded the aircraft's nose up-slope limit, resulting in two of the main rotor blades contacting the upper wire strike system. Other contributing factors identified were the loss of radio communications from the crew members due to lack of radio reception and limited battery life on the handheld radios. [Concern]

27 November 2019 Leonardo AW169 N307TC. Air Ambulance of Travis County STAR Flight. After dropping off the Dell Children Medical Center's (DCMC) NICU team at Seton Main Hospital, STAR Flight 2 (SF2) was repositioning back to DCMC at 2200hrs. As SF2 was approaching I-35 from the west, the PIC noted several red lights at his 11 o'clock. (Over 51st St.) PIC verbally called out the traffic to the flight nurse, and then realized it was not an aircraft, but a very large drone above the aircraft's 500'AGL height. PIC diverted slightly south, and landed at DCMC with no negative outcome. While on the DCMC helipad pilot and flight nurse watched the drone descend and travel south of 51st where it appeared to land. Took off from DCMC 5 minutes later and flew over the area SF2 saw the drone appear to land, but did not see an operator or drone anywhere in the area. PIC estimates a 1/4 mile separation between drone and SF2

aircraft when he saw the red lights. This was about 1/2 mile northwest of DCMC helipad 3XA6. [Concern]

1 December 2019 Eurocopter EC145 [BK117C2] F-ZBBP. Securite Civile, France [Dragon 30]. Aircraft operating in bad weather over flooding crashed in hilly area between Le Rove and Pennes-Mirabeau, Bouches-du-Rhone, south of Marseille airport killing all three persons, the pilot, Jean Garat, operator Michel Escalin, and of Norbert Savornin, first aid support to the helicopter service of fire and rescue service of the Bouches-du-Rhone.

7 December 2019 Bell UH-1H VH-OXI '229' Fire fighting aircraft owned by Touchdown Helicopters operating for the NSW Rural Fire Service. A helicopter working on the Jarrah Road Fire northeast of Newcastle, New South Wales, Australia undertook an emergency landing that proved hard and causing damage including the loss of the MRB. Firefighters on the ground were able to quickly put out a fire in the engine which spread to some grass around the helicopter. Paramedics treated the pilot at the scene for minor injuries but he did not need to be taken to a hospital. The privately owned helicopter was operating under a firefighting contract for the NSW Rural Fire Service. [ABC]



11 December 2019 Airbus Helicopters EC120 N. San Antonio Police Department, Texas. Made an emergency landing after a bird strike smashed the plexiglass screen. The helicopter landed without issue at San Antonio Christian Academy at Redland Road near Highway 281 on the North side. [Fox]

24 December 2019 Pilatus PC-12 N642SF. Air ambulance of Resolve Aviation with a pilot and two crew members from Medevac Alaska departed from New Stuyaok Airport en-route to Ted Stevens Anchorage International Airport in Anchorage, Alaska force landed gear up at frozen lake terrain while diverting to Koliganek Airport, Alaska. No one was injured. The pilot was unable to restart the engine, declared an emergency with Anchorage Center, tried to get into Koliganek but was unable to make it, made an emergency landing onto a frozen lakebed, gear up.

25 December 2019 Bell 407 N663SF Air Ambulance operated for Survival Flight crashed at Headland Municipal Airport in Alabama, USA. The pilot Doug Davis died in hospital after the accident which is thought to have been caused by his actions in overcoming a heart attack. The air ambulance overturned during landing. Three crewmembers, including Davis, were on board at the time of the crash, returning from a cancelled flight from Florida. The helicopter sustained substantial damage during a dynamic rollover subsequent to touchdown. No patients were on board, and the other two crewmembers were uninjured. [Media]

SAFETY

On December 4 a News copter over Los Angeles had a mid-air collision with an object believed to be a drone. The incident occurred around 7:15 p.m. but did not affect the helicopter's ability to fly.

Images subsequently posted showed significant damage to the right stabiliser (just forward of the tail rotor) including a small hole, a dent and scratches. The impact was initially thought to be a bird, but once on the ground it was determined it was most likely a drone that struck the 2004 Eurocopter AS350B2 N71HD. [Tweet/media]



On 22 November 2019 HealthNet Aeromedical Services, Inc., and its FAA Part 135 Certificate Holder put in place a safety stand-down after noting several post-heavy maintenance discrepancies in a short period of time on one aircraft.

All aircraft were removed from service and quality assurance inspections were completed by mechanics and quality assurance personnel from outside the programme. This stand-down took the entire system of



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ten bases and twelve aircraft out of service. The first base to regain operational status did so in nine hours while the final base regained operational status in thirty-six hours. Upon completion of the inspections, of which there were no findings on 10 aircraft and corrections of any noted discrepancies on the other two, all aircraft were returned to full service with a report to all crew members discussing their base aircraft. Base visits were conducted by program and operator leadership to address concerns from crew members, pilots and base mechanics. During this safety stand-down, heavy maintenance facilities within the program suspended operations. This suspension continues and operational evaluation and internal process assessment will be conducted. The present goal is to begin heavy maintenance operations once again in one hundred twenty days.

Collectively the effort demonstrated the effectiveness of a true corporate safety culture which overrides business needs. [Concern]

The following guidelines and recommended practices for a helicopter pre-flight inspection, a final walk around, and a post-flight inspection were developed by the U.S. Helicopter Safety Team

(<u>www.USHST.org</u>) for the pilot community and all instructors. These are a dozen actions you should not forget.

No distractions are allowed during your pre-flight inspection.

Ensure that the rotor is clear and not tied down.

Ensure that both main and tail rotors are clear from people when turning one or the other even when you think you are alone.

Always check and secure the fuel cap(s). (And double check the fuel level.)

During adverse weather conditions, take extra precautions. Conduct a thorough walk-around, panel check, and cargo check and ensure that passenger doors are secured.

Use caution when stepping on aircraft surfaces, even ones with non-skid. Use two points of contact. Verify that all flight controls are in the correct position or setting before your start. (Especially the throttle setting.)

If you are interrupted during your pre-flight, start it from the beginning. (Yes, from the beginning.) If you are the pilot in command, properly brief your passengers. Don't let it be done only by ground operation personnel.

Ensure that passengers do not wear headgear. If they do, make sure it is secured.

Always conduct a final walk around after completion of the pre-flight inspection prior to getting into the aircraft. The pilot (or a trained crewmember) should always be the last person to get into the aircraft.

Conduct a post-flight inspection of the aircraft - look for fluids, panels etc.

This list is not all-inclusive. Each recommendation can be expanded per pilot preference. For the complete USHST report on inspection guidelines and best practices, find it here: <u>http://www.ushst.org/RISK-MANAGEMENT</u> Lack of professionalism and just plain complacency causes accidents and kills pilots. Going back to basics may sound elementary but re-focusing on these basic pre-flight tasks will help reduce helicopter accidents and save lives.



Beechcraft had a bad month for hull losses in December. In the space of three days four Beech King Air aircraft were involved in air incidents and three of them were destroyed. On December 16 a Beech 200 Super King Air was found by law enforcement in Belize. It had been set alight and destroyed, it is thought by drug runners. The next day a US Beech 300 King Air 350 was struck by a Socata TBM930 (N961GG) on the right-wing while taxiing for take-off at Visalia Municipal Airport, California, USA. This was followed by a 200 Super King Air being found to have been burned out on an illegal airstrip in Guatemala. This airframe was also likely to have been used for the transportation of narcotics. Finally, the next day a 1976 Beechcraft A100 King Air crashed in Venezuela. The King Air, registered YV1104, was destroyed when it crashed in a wooded area in adverse weather conditions while on approach to Aeropuerto Oscar Machado Zuloaga. The two pilots and seven passengers sustained fatal injuries.

As if that were not enough nine days later a liquid nitrogen explosion at a Textron Aviation plant near Wichita, Kansas, injured 11 people and potentially set back the introduction of the Sky Courier utility turbo-prop.

The explosion in a 3-inch liquid nitrogen gas line also damaged a storage tank, causing nitrogen gas to vent out of the building.

Damage was contained to Plant 3, a site for composite manufacturing and experimental aircraft fabrication including that of the Sky Courier.



UNMANNED

The US Justice Department has released an updated policy on the use of drones for investigations and other activities. The updated policy on the use of unmanned aircraft systems (UAS) lays out a framework for federal law enforcement to "safely and responsibly" use drones for things like crime scene investigations, SAR, and security.

Part of the updated UAS policy, which replaces a previous one from 2015, are requirements that the DOJ check drones and other UAS technology for cybersecurity risks and guard against "potential threats to the supply chain and DOJ's networks."

In October, the US Department of the Interior grounded its fleet of more than 800 drones over concerns about Chinese spying and cyberattacks. The fleet will remain grounded until a full review is completed. The UAS policy also outlines how law enforcement should balance the use of drones with privacy and civil liberties. It also places limits on data retention. The DOJ said generally data collected from drones that contains personally identifiable information cannot be kept for more than 180 days. [Cnet]

Frequentis and A1 Telekom Austria develop system to expose drone violations to public safety authorities as electronic identification rules are phased in

Drones provide an innovative and cost-effective way to deliver services but the potential for misuse or danger to other airspace users is cause for concern. Rules for compulsory registration and electronic identification are about to be phased in, in Europe, to ensure safe integration and the potential for intervention. Frequentis has partnered with A1 Telekom to create a powerful application for this purpose.

For drones to be used safely and responsibly Frequentis has begun trailing, a smart hook-on-device (HoD) for drones, which includes a special modem and a SIM (Subscriber Identity Module) with a unique identifier. This allows the drone to be recognised and monitored. The smart HoD includes an integrated GPS so the drone's position and point of departure are also known.

Compulsory drone registration and electronic identification will be phased in from 2020.

PEOPLE

Clifton Lombard has left his position in Design and Completions at Babcock International Group, Staverton Airport, effective December 1.

At the Midlands Air Ambulance Charity aircrew team leader and critical care paramedic, **Jim Hancox**, has been promoted to the position of assistant air operations manager.

Jim has over 17 years' experience with the ambulance service and has served with Midlands Air Ambulance Charity since 2006. Jim will support the charity's air operations manager, Ian Roberts, with a number of responsibilities in line with the charity's mission to offer advanced clinical care to those in critical need in the pre-hospital environment 365 days a year.





Wales Air Ambulance Charity Chief Executive **Angela Hughes**, has been awarded an OBE in the Queen's New Years Honours List for her committed leadership and determination towards the advancement of the only dedicated patient emergency air service in Wales.

Angela was the first WAA employee appointed by the Board of Trustees in 2002 and it was her responsibility to establish WAA as an all-Wales charity. Angela's first target was to raise £1 million for the charity's five-day, one-helicopter service based in Swansea. The service now has four helicopters covering Wales,

Sioux Lookout-based Critical Care Paramedic and Ornge Air Ambulance Base Manager **Ronald Laverty** has received the Emergency Medical Services Exemplary Service Award for 30 years of exemplary service to Ontario's patients.

This award was presented in a ceremony on November 28 at Queen's Park by Lieutenant General Richard Rohmer.

Laverty began his Paramedic career in 1988 as a volunteer ambulance attendant for Sioux Lookout Hospital. In 1989, he joined Voyageur Airways as a flight paramedic servicing Sioux Lookout and Ontario's far

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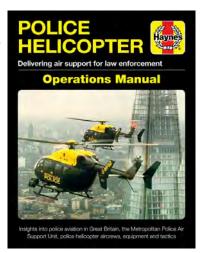
north. He became one of Ontario's first Critical Care Paramedics in 1991 and continued to serve the communities of North western Ontario as a CCP until becoming a Base Manager for the newly formed Ornge Air Ambulance service in 2009. Laverty continues to serve as Ornge's Base Manager in Sioux Lookout, along with providing training to many northern first nations communities throughout North western Ontario.

BOOKS

Regular readers will recall that *PAN* recently covered the publication of a new Haynes book based on air ambulances in the United Kingdom. Although primarily based on one operation flying a new AW169 in the south of England it does cover all of the industry. Sales of that title are reportedly going well.

Coming soon is a similar book covering police helicopters and this time I expect a review copy in due course to fit in with an expected publication date in March this year. The book is apparently completed but no doubt still on the high seas after printing in the far east.

From preview pages so far released it is clear that the core of the book is centred on Metropolitan Police air operations both historical and recent past. Though some may quibble at that focus, it is where the beating heart of UK police aviation lies and has always been consistently best funded.









Books on UK police aviation are surprisingly few and this is therefore somewhat overdue.

I do have an inside line on some of the content and the author, former Inspector and Met UEO Richard Brandon, but until I am able to read the complete book I will reserve judgement for a full review.

The publishers have provided several page views of the book and, visually at least, it will no doubt provide a fitting postscript to the significant part Lippitts Hill played in police aviation from 1967.

POLICE HELICOPTER

Delivering air support for law enforcement







Since its bagining is 1921 when the Metropolities Pelice used on altitlic lying over the Epson Deity to manage traffic, police which in this UK lose wolved to become is key element of two inforcement in the 21st contary, with the Nacional Pelicia kit service NRMS brings all 40 forces together to deliver a borderises police aviation

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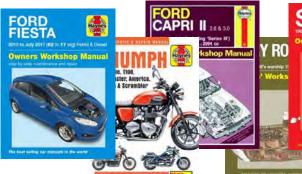
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Haynes were originally self-help vehicle repair manuals but the market moved and they reinvented themselves with the current run of 'How to' books



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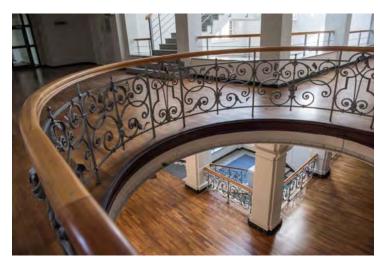


PAvCon FUTURE

Last month I was in Berlin, the guest of Vice President of the Bundespolizei Special Operations Command Thomas Helbig MA. The primary role was to see and assess the host venue for PAvCon Europe 2020 (Schöneberger Ufer 1, 10785 Berlin) and looking for suitable hotels.

It was a surprise to find that the building has only had a police role since 2017 it was built in Victorian times to serve the railway industry. Despite being on the edge of marshalling yards and next to a railway station 'Berlin' it survived the war, but the classic interior is modern and much changed of course.

Its design will set some challenges for how exhibitors are placed but it certainly will be different!







As for the hotels that might be suitable for PAvCon Europe attendees, there are plenty and many of them are close by. The team visited three of them and full details of the room rates on offer from these three will be published shortly in the Event Guide on the website <u>www.pavconeurope.eu</u>

The event hotel selected is the Grand Hyatt Berlin, located a short walk from the venue at Marlene-Dietrich-Platz 2, Berlin, 10785. <u>grandhyattberlin.com</u> This is a premium hotel with rates starting from €225.

There are two alternative hotels offered with a limited time PAvCon Discounted room rate, the first almost next door to the venue, is Grimm's Hotel, Potsdamer Platz. They are offering rooms around the €150 mark. <u>www.grimms-hotel.de</u>

The Holiday Inn Express Berlin City Centre located at Stresemannstraße 49, D-10963 Berlin is about the same distance away from the venue as the Hyatt – although in a different direction – and they are quoting rates from $\underline{\epsilon}$ 134 single.

All the hotels have quoted a breakfast inclusive rate available for a strictly limited period. There is a city tax payable on each but that will be waived for customers stating that the visit is for a business event. As ever you will need to know the detail so check out the Event Guide at the website when the first version goes on-line later this month. There are several elements that will take a few weeks to clarify so check in again later.

The Event Guide will be similar to previous years and will include an overview of the event, the services offered [IT, freight support and the hotels]. The booking forms will be seperately on-line and incorporated into the Event Guide. Payment for the event will offer a choice of on-line or invoice. The active floor plan for exhibitors will be a seperate document.

ALSO COMING SOON

Well perhaps we can forgive them for changing their name yet again! And I really do not hold with perpetual name changes, but if it works for them all well and good.

There is another new name in the marketing dictionary, but it should have familiar enough overtones. RotorTech UK is born out of AeroExpo UK to be held from June 11-13 at Wycombe Air Park next year and they want your business.

RotorTech UK (formerly Heli UK Expo and a few other iterations) is the Rotorcraft Owners & Operators event showcasing a wide range of technologies from the traditional helicopter and gyro to the latest in UAV innovation. Throughout the 3-day event Rotorcraft & UAV/Drone Manufacturers will have ample opportunity to demonstrate their equipment.

A free conference programme will support RotorTech UK with a range of interesting and relevant topics, covering everything from practical advice and insights to the latest industry developments.

The price of attending and exhibiting is keen – there is not a great deal of difference between the base costs of this event and those of PAvCon (in Berlin) – and the dates are similar so for smaller exhibitors with limited staff available it will be a choice to make. In fairness both events clash with Eurosatory, the international reference event for land and air Defence and Security exhibitions in Europe. It was created in its original form in 1967 and has never stopped evolving and never changed its name either. That is a tough cookie to contend with. So, will it be Wycombe Air Park, Berlin or the Paris Nord Villepinte Exhibition Centre in June 2020? There is only so much money available in the industry pot and clearly each event will want to be the one selected. In instances like this the consistency of the name can be a critical element. That is why last year's demise of the Helitech name was such a critical affair when it came to running an event under a different banner late last year.

For some there are fewer problems relating to identity. At the end of this month the world's helicopter professionals will be arriving in California for the next edition of the Helicopter Association International Heli-Expo. It is without doubt the place to be even if the perceived changes in the industry are less than earth shattering year on year.

The event is to be held between 28-30 January 2020 but actually cover several days either side of the exhibition with hundreds of education courses, seminars, workshops, and forums in and around the Anaheim Convention Center, 200 South Anaheim Boulevard, Anaheim, CA 92805 USA www.rotor.org



GRAND HYATT

Express



One of the co-located events is the 27 January 2020 APSA Rescue Summit 2020. It will again be held in conjunction with HELI-EXPO at the Anaheim Convention Center - Room 210AB.

Rescue Summit 2020 will include various presentations pertaining to helicopter rescue operations including topics such as hoisting, safety and critical incident & accident reviews. Lunch will be provided, and networking opportunities are scheduled throughout the day. Registration Cost for APSA Members is Complimentary (It is included in APSA Individual Membership). For Non-Members there is a fee of \$50. The Rescue Summit 2020 is for all who use VTOL aircraft in rescue operations.

The highlights are the fly-in of aircraft and the fly-out, in between simply getting around the vast halls is at best daunting. Set against that the Heli-Expo is the place to be if you want to meet the greatest and the best in rotary wing aviation. The recent news that the fourth AW609 tiltrotor, fully representative of the final production configuration, successfully performed its first flight at Leonardo's Philadelphia plant on December 23 may provide a clue but it is probably too close to the event. There will always be surprises even if not all of them are positive. The highlight may be the Salute to Excellence event but such things can be a matter of perception. I suspect that it may well be my personal highlight.

We can expect the major manufacturers to revisit the electric craft, but in truth there is no significant progress around that is likely to steal the show. Battery technology is getting better but not yet proceeding beyond the experimental.

Next month there may be slightly more to see when the far smaller and broader subject matter Singapore Air Show opens its doors on the Changi Exhibition centre. The island is set to be the site of the first viable electric air taxi but I will not be cancelling my Grab taxi contract any time soon.

SINGAPORE A I R S H O W



