

Police Aviation News

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Issue 298

February 2021



**HENSOLDT EO/IR TO GERMANY
LA DRONE OPERATOR GUILTY
HOUSTON TURN BACK ON MD
CAPITAL RETURNS TO SERVICE
VACCINES - CAP IN HAND**

EDITORIAL

I need to apologise to my international readers – by far the greater section of the readership – for what follows.

Again, we have an issue carrying far too much information on police aviation in the United Kingdom. It continues to go through death throes that seem never ending. The Death Star in Star Wars, a far larger entity, only took minutes to implode. NPAS has so far taken nine years, there is lots of smoke, but the flames are not yet visible.

Still, I hope that I can find you some better and more varied international news to accompany the usual convulsions from my home county in Yorkshire. At least it shows that they like to valiantly hold out when under siege, regardless of the casualties.

There is no sign currently that the pandemic is going away, the latest trends show that new strains of the virus are exacting a massive toll on the health of every nation. I would not expect any change in this before mid-year and even that may be wishful thinking.

Even in Britain where the government has taken a calculated risk on the various vaccines the programme is going to take ages to turn the nation's health around and as a result International air travel is going to remain in the doldrums. It has been claimed that air travel has been depressed to a level similar to the 1980s overnight. That will continue to exact a massive toll on some household names in events well into summer. You can have an event but having no audience is suicidal.

In many ways the facts place an ever-larger focus on both social media and magazines as a means of getting important sales and support stories out into the public domain. Who thought of putting an aerospace magazine on-line? Perhaps I should pose the question in another manner - are there any aerospace magazines that are not now on-line? Even though *Police Aviation News* has been on-line only for over 20 years (something of a record in itself) it was not my idea, it was simply force of circumstance. The first five years was a progression of print mail outs, Fax and text e-mail and then Officer Todd Jaeger a pilot with the San Diego Police Department Air Support Unit, then the Webmaster of the new Airborne Law Enforcement Association web site, invited me to try out publishing at *alea.org* using the PDF. The rest they say is history. So, although most of the words were, and continue to be, British it was truly an international effort. I am glad that the rest of the industry joined us – even if it took a pandemic to precipitate it.

Bryn Elliott

New helicopter project in the pipeline?

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COVER: It has been said recently that the worlds airports have been plunged back in the traffic levels of the 1980s by the ongoing Coronavirus.

I took this opportunity to dig into the archives and leaf through a set of images taken by the Metropolitan Police Force in around 1983 to illustrate the point.

The camera ship was one of the Bell 222As that the Lippitts Hill based unit was flying at the time—port cabin door window removed and camera thrust into the slipstream pointing rearwards. True enough the airport—London Heathrow—is not that busy! Others in the sequence of about 30 images include a BAC Concorde waiting to take off. Those were the days. I wonder when they will return! ©MPS

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LAW ENFORCEMENT

BRAZIL

Noted on flight test at the AgustaWestland Philadelphia Co. manufacturers plant in Pennsylvania USA on January 7 was a Leonardo AW119 bearing the marks of the Brazil Policia Civile. The intended registration for the dark grey aircraft appears to be PR-JPO but it was being tested as N695SH.

CAYMAN ISLANDS

COAST GUARD: On January 11 the first sixteen recruits of the Cayman Islands Coast Guard started training. Although very much a ground based frontline team destined to uphold maritime law and protect the shores of the islands, they are another element in the advancement of the emergency services roles pioneered and now undertaken by the two Airbus Helicopters H145. The United Kingdom Government is fully committed to supporting the CICG on their well-funded journey upholding the safety of the islands.

GERMANY

BERLIN: Last month PAN carried an item on the Bell 525 mock-up being inspected by a German politician Burkhard Dregger, not Dreher as I gave last month. In the article PAN gave a slightly skewed explanation of the police air support set up in the city.

Since November 2003 Berlin has owned a half share in a H135 of the Federal Police fleet. The former federal minister of the interior, Otto Schily, signed a specific contract with Berlin. The "squadron" consists of three police officers and is formally part of the water police of Berlin. The Helicopter is always operating the legal tasks of Berlin and the Federal Police from the base in Blumberg. Although nominally a Berlin aircraft, from time to time the crew is wholly supplied from the ranks of the Federal Police.

The two Brandenburg helicopters are only hosted by the Federal Police Blumberg, there is no formal co-operation, neither with the Federal police or with Berlin Police. Unlike the Berlin arrangement, these are separate airframes and have a different colour scheme and equipment standard. [TH]

THURINGER: On January 12 it was announced that Hensoldt had signed an important EO/IR sensor contract with the Polizei-Hubschrauberstaffel Thüringen based at Flughafen Erfurt in central Germany.

Martin Kress, Head of Airborne Sensors & Missile Warning Systems at Hensoldt Optronics stated that a turnkey solution will see the police aircraft equipped with the Argos II EO/IR sensor by November 2021.

The Argos II system is designed for installation on helicopters, fixed-wing aircraft and unmanned aerial vehicles (UAV) for surveillance missions. The stabilised system is composed of a number of sensors and electronics in a single interchangeable unit. These include a high-definition (HD) MWIR thermal imaging camera with continuous zoom and a unique HD multispectral TV zoom camera. A SWIR spotter camera

provides additional multispectral capabilities, especially under harsh conditions with low visibility. The near-infrared (NIR) laser pointer improves the system's operational efficiency. The system can also be equipped with a dual-wavelength, high-power, low-divergence laser designator/distance detector (LDR). The LDR has selectable target designation and eye-safe range finding modes and also includes a training mode.

Hensoldt Optronics has contracted Intercopter GmbH in Taufkirchen for the integration. Together with its subsidiary Advanced Aerospace Developments GmbH, Intercopter is carrying out the development of the supplementary type certificate (STC), the production of the integration kit, the helicopter integration, the flight tests and the certification of the ARGOS II on the two EC145 (BK117-C2) helicopters of the Thuringian State Police. The oldest has been in service since 2007.

In addition to the Thuringia State Police, the German Federal Police has also recently started using the Argos II from HENSOLDT in its helicopters. Hensoldt's Airborne Service Centre in Oberkochen takes care of the long-term and sustainable maintenance of the Argos for its customers.

Ed: Hensoldt is based in Germany and South Africa. The company is a pioneer of technology and innovation in the field of defence and security electronics, with more than 150 years of heritage through predecessor companies such as Carl Zeiss, Airbus, Dornier, Messerschmitt and Telefunken. Based in Taufkirchen near Munich, Germany, the company is a leading strategic player in the field of sensor solutions for defence and non-defence applications. Hensoldt South Africa comprises two South African entities GEW Technologies and Optronics (Pty) Ltd. under one brand. www.hensoldt.net The company undertaking the integration, Intercopter, is an EASA Part 145 and Part 21/G maintenance and production organisation and it operates maintenance stations in Taufkirchen, Emden, Borkum, Helgoland and Norden-Norddeich



UNITED KINGDOM

NPAS: Part of the new forward plan for NPAS is said to include several changes to the operating hours of some NPAS air bases. North Weald, Manchester and Birmingham are staying at 24hrs, Almondsbury (Bristol), St Athan, Redhill and Newcastle will be on 20hrs, Benson, Bournemouth (Hurn), Carr Gate, Exeter and Husbands Bosworth will be set to operate a single 12-hour shift. That shift will be 1500-0300 and therefore very antisocial.

Unexpectedly it seems that the P68R fixed wing will be going 24-hour, a development that is far removed from the 'single aircraft' information available to me last month. During last month the Doncaster unit pushed three aircraft out on the apron—the first time three apparently whole airframes had been publicly displayed together, albeit by social media. The accompanying text made it clear that only one aircraft was operational, the others were being used for training. Crew availability continues to be hampering operational expansion.



Exeter being reduced to 12hrs has two other elements to it. The base is giving up its EC145 and taking up operating only an EC135, a type they tended to use only when their 145 was in for maintenance. The change in aircraft type means that they will be unable to undertake work in the Isles of Scilly. Reaching the islands off the tip of Cornwall was the prime reason that Devon & Cornwall police bought the EC145,

its longer legs. In 1998 Devon & Cornwall went to great financial lengths to source and pay for an earlier BK117C G-D CPA at a time when other forces were making do with lesser types. They even sourced long-range tanks, so range was considered important. When they replaced it with the EC145 G-D CPB ten years later the range requirement remained very important and costly to acquire. There is no way that Devon & Cornwall Police contemplated let alone agreed to this massive downgrade in their air support capability when they signed up for NPAS. Nothing in the requirement has changed – only the management in Wakefield could see this as progress.

The Exeter EC145 is going to London. In the past the aircraft served on a temporary basis in London when the EC145s there were suffering from availability issues. Clearly, they have not improved so the answer is apparently to make the move permanent, giving London four EC145s. The systems in the Exeter airframe are significantly different to the former Metropolitan Police models which does not bode well for efficiency, but work has been done across the NPAS fleet to enhance interoperability, including downlinking. Where the London originals have Wescam MX-15 EO/IR sensors the Exeter machine has a FLIR.



It is an ancient illustration, dating back some 40 years, but it does clearly show the difference between the sizes of the Metropolitan Police District [in red] when superimposed on the Devon & Cornwall Constabulary area. Both areas identified the EC145 as the ideal helicopter [MPS]

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On Linked-In the Emergency Services Network announced that the first two aircraft have been tested to determine their suitability for the future Aircraft Communication System (ACS) and they passed. The two aircraft models which have achieved official approval are the AW169 and the Bell 429. The work was achieved with the cooperation of LSA Electromagnetics Limited, Wiltshire Air Ambulance, Heliwork Services, EASA and Specialist Aviation Services.

Ed: It was perhaps unfortunate that they chose to illustrate the item using an image of an MD900, a type not yet approved but all is not as it may seem. I understand that the work actually equates to the acceptability of 'carry on' radio equipment not the final integrated product.

The renewal of the maintenance contract for the helicopters, currently held by Airbus Helicopters at Oxford, is due for consideration shortly. I understand that Airbus will be challenged in the bidding war this time around. The maintenance of the fixed wing fleet is a separate contract undertaken by Gama Aviation.

Ed: Perhaps at this point I should belatedly point out that I believe that the problems in Wakefield are almost wholly management related. The officers at the front line are either new and know little of the politics of police air support or long-standing survivors who continue to undertake the delivery of the best service they can with the tools presented to them. Those among the latter group that could take no more management interference have left – and the departures of a few of them have featured in past editions of PAN. The departures brought along an increased back office cost in recruitment and training of replacement TFOs and pilots.

Increasing the tools available to the frontline officers are getting less and less reliable through age and as a result the crews often have no aircraft to fly. No aircraft means a reduced service. When NPAS withdrew the fleet of MD Explorer's it was on the basis that they would be quickly replaced by up to six fixed wing that would range across the country as a standing patrol. That never happened in either timescale or capability. Again, the front-line officers will make it work but with insufficient pilots, trained TFOs and aircraft in service the plan often becomes 'mission impossible' for them too. From many sources it is clear that there are a lot of intelligent wounded soldiers out there that have suffered at the hands of NPAS.



The problem is not new. Back in 2010 when this all started with the Hampshire Police air support fixed wing being shut down in the preparations for what became NPAS, PAN corresponded with a John Apter who was the representative of the local branch of the Police Federation of England and Wales (the police Union). He was fairly dismissive of the looming problem. Well Mr Apter, having had something of a career in Federation work, is now the National Chair of the Police Federation and I am informed that these protectors of the welfare of rank-and-file officers have been prominent in their lack of support for those battling against NPAS. The words recently expressed to me were somewhat more lurid.

It seems that the position taken by the Police Federation in 2010 has been consistent. Ten years ago Metin Enver of the National Police Federation stated that they '... don't have a specific position statement on this issue.'

They did however believe that it will be '... hugely unfortunate if any planned changes will result in a poorer service for some parts of the country.'

That turned out to be an understatement but one they have failed to act upon in ten years. Plenty of time chaps its only your members that are at risk.

Whatever little money there was in the NPAS system at launch has now gone and it would appear that when, if, NPAS goes a new funding stream will need to be found.

The complete lack of action in relation to the three years old HMICFRS report is strange. I get that this inspection service "independently inspects police forces and fire & rescue services in the public interest" and is therefore potentially less able to make a real difference but recent reports by them on bad management and behaviour in the police services it inspects have seen Chief Constables quickly losing their jobs, Prime Ministers calling out Mayors and Crime Commissioners and major changes resulting. The reaction to the report on NPAS has been nothing, zero, zilch. Not only have the management team survived until now but no remedial action reports have been unearthed and even the Strategic Board minutes quickly dispensed with even mentioning that there had even been a report. Perhaps some important people are in the Catholic Guild or the Masons.

Last month's article – although it was very much a fishing exercise – has brought forth numerous additional items of information from new sources. Suffice to say that pretty much everything I surmised was con-

firmed by others. There is some additional detail – including that the vehicle and bowser combination appears to have been flawed from the start. The towing unit was not up to the task of pulling the bowser and fortunately there is not much snow! If true, the question needs to be asked about who bought the fleet without the simple expedient of testing it? If you have an organisation that is short on cash you do not need to even buy new, and you certainly do not need to be buying the wrong product. We have been here before in relation to buying expensive giant hangars when a corner of an existing one alongside a portable building will do. Let us not mention the fixed wing that is too small, too slow and was not already FIKI capable.



There are so many examples of “what were they thinking?” The now quite well-off air ambulance fraternity provide good examples. They created entities that worked within their often-meagre start-up income. An elderly leased aircraft housed in the corner of an existing hangar (or often none) alongside a ‘not new’ portable building was a start position. Today most have financial surplus, new aircraft they own, new base buildings and fast cars. In one instance at Bristol, Great West are the landlords for the NPAS aircraft. It is ironic that most of the UK air ambulances are seeking to provide a 24/7 service while NPAS is cutting back on its own.

NPAS started with an existing owned fleet [that also could so easily have included fixed wing] and they frittered it all away on useless control rooms and flashy new hangars. Meanwhile, not being able to maintain what they had they were off looking at multi-million-pound Hermes drones they could never afford to operate even if they had them as gifts.

They treated their switched on professional human legacy, the people who had been there and done the work of air support for years as throwaway items. Many police officers and trained pilots were bullied and driven away from the industry or simply rejected or discarded because they had the temerity to think alternative thoughts. Potentially worse than that in a professional sense, some individuals were rejected simply because they were from a particular police force and therefore deemed not worthy to work with, or for, West Yorkshire Police.

NATIONAL POLICE CHIEFS COUNCIL: Unlike NPAS the NPCC publishes most of its minutes in a timely manner [the last lot were from last July] but obviously they look at aviation less often and the subject matter is not focussed.

Last January the National Aviation Programme team presented the NPCC with options that have been touched on in previous issues of PAN. There are two main options: a standalone police air service model, much as today, and one requiring a link up with a commercial partner delivered regionally and using a single national provider. The former is probably the most challenged now as the money is even shorter than it was when NPAS started.

At the January meeting the Chiefs all agreed that a standalone police service model is no longer financially sustainable. Nothing is likely to have changed except that 12 months have passed.

Readers will recall the story last spring where the National Aviation Programme approached industry for feedback on the commercial partner model [see PAN April 2020 page 5]. In short it is fair to say that a significant part of industry is interested. Industry, either the manufacturers or their agents, would provide and manage new aircraft in a similar model to that operating in Scotland.

The previously mentioned interest in London City Airport as a Forward operating base (FOB) was aired at the meeting a year ago. At the time it was not seen as viable. The London police [MPS] were smarting from a 21% increase in the budget they were expected to pay NPAS. They were arguing over the cost for 2020/21 of around £9.6M. The MPS were to work with NPAS and the NPCC Aviation Programme over the next three months to develop a detailed proposal for the regional delivery of aviation support to London in line with the recommendations where the provision of aircraft etc sit with an external provider which might be EITHER a third-party commercial provider or NPAS. It seems clear nothing has advanced on that.



Editor: The seemingly thankless process being undertaken by the National Aviation Programme team has been subject of a great deal of criticism from those in the business but their room to manoeuvre is strictly limited in that, financially, the real options are very few. NPAS has spent the loose change and sold off the jewels [if by any stretch of the imagination you can consider an MD902 a jewel].

A number of Chiefs commented on the positive work and the clarity provided by their report last January. Chiefs discussed the regional structure approach and overall agreed the current model is not adequately governed (by NPAS). The future options, as understood a year ago, appeared to be wedded to working with industry. It will be expensive, and the police will end up owning nothing but the bases they already own. They may get some value out of the old airframes and dated role equipment, but it will be a short-term windfall. It may be no different to the PFI involved in the UK SAR programme so it can work. A further meeting on aviation was held in May (the minutes are not being made available), in July the matter was deferred to the September meeting, the minutes of which are awaited.

A year on nothing bar rumour is in the public domain. NPCC/ACPO set in motion this mess so it is for them to clear it up. While everyone in the NPAS hierarchy has the blood of U.K. air support on their hands, the NPCC is mending what they caused in the first place - the chief conspirator went off to the House of Lords with a fat pension, the others retired.

Nine years ago, NPCC/ACPO did not know what they were doing but they focussed on saving money at all costs, interviewed the only team that was volunteering to run a national scheme and, despite the fact that neither party knew what they were doing they got the job! Self-imposed pain but a lot of innocent casualties along the way.

From being the much sought out World leaders in air support in 2008, the UK quickly reached the bottom of the pile by 2014. It has got steadily worse ever since. Thankfully, much of Europe took on board the old 2008 model and learned many lessons.

The last issue of PAN was deliberately sent to politicians and persons with likely influence. So far none of them has shown any interest. Nothing new there then.

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UNITED STATES

CALIFORNIA: A Los Angeles man pleaded guilty on January 14 to a misdemeanour count after his drone crashed into a police helicopter, prompting an emergency landing, federal prosecutors said. It's believed to be the first criminal conviction for unsafe operation of an unmanned aircraft in the USA.

Andrew Rene Hernandez, 22, of Hollywood, pleaded guilty to the single count in a plea agreement, he flew the drone just after midnight on Sept. 18 because he was curious after hearing a police helicopter and sirens. The police helicopter with two officers inside was flying after a reported burglary at a nearby pharmacy, the documents say. The pilot saw the drone and tried to avoid it, but it hit the bottom of the helicopter. The chopper made an emergency landing at an airport.

Hernandez faces up to a year in prison when he is due to reappear in court for sentence on April 12. The plea agreement includes mitigation of the maximum sentence in federal sentencing guidelines.

Ed: Meanwhile in Chile on January 23 a military Bell 206B3 collided with a small DJI drone. In this instance it hit the windshield and shattered it. Injury was caused to an occupant [not the pilot]. One more step towards a fatality.

TEXAS: After many years of being steadfast operators of the MD helicopter the Houston Police Department has bowed to the inevitable and purchased a different helicopter type. Their choice was an Airbus Helicopters H125.

Houston Mayor Sylvester Turner and Houston Police Chief Art Acevedo held a ceremony at the unit base on January 27 to dedicate the department's newest helicopter to 35-years old officer Jason Knox who was tragically killed in a helicopter accident in May last year. He was the first officer of the HPD air unit to die in an accident and his immediate family were present.

The new H125 incorporates Officer Knox's badge number of 2374 into its registration number, which is N2374F. All aircraft end their assigned numbers with the F. Where the existing fleet is blue the new airframe is now black and white so the H125 features a vintage HPD blue stripe as a nod to Knox's passion for the department's history.



From the Facebook page of Councilman Mike Knox

The acquisition of the H125 is a first for a unit that currently uses six MD 500E helicopters- mostly as patrol aircraft. One Bell 412 helicopter (which can be used for search and rescue operations) and three Sikorsky S-300C/Schweizer 269C training helicopters.

The H125 Airbus, purchased from Davenport Aviation, Inc., in Ohio was funded through a \$7.5M Texas Department of Public Safety grant. It is equipped with the Trakka search-light and a FLIR 580 EO/IR sensor turret.

Among those attending the dedication event were Keira Knox, the widow of officer Knox, a TFO with the unit, and his father and mother Mike and Helen Knox. Mike is now a local councilman but formerly an officer with the police department. [Chronicle/HPD/MikeKnox/Airbus]



Chief Art Acevedo, Mike Knox and Mayor Sylvester Turner at the ceremony [Chronicle]



©Bell

Early last month Bell Textron Inc., delivered a \$4.5M Bell 505 N505FW to the Fort Worth Police Department. Bell executives and city officials celebrated this delivery at the police department's hangar at Meacham Airport to mark a 70-year relationship between Bell and Fort Worth.

The city approved the purchase in January 2020, using crime control and prevention district funding. That was before the fund received additional scrutiny later in the year, for being used for equipment purchases, and was refocused toward more community-based policing efforts.

The Fort Worth Police Department currently operates two Bell 206 Jet Ranger aircraft; the addition of the Bell 505 will provide exceptional performance that is part of the Jet Ranger legacy and, for a short period at least, will give the unit three operational airframes. When the oldest 206 N206FW, now 27-years old, is due for major work it will be disposed of.

There is a strong local connection between Bell and Fort Worth. In 1951, Lawrence D. Bell broke ground in Fort Worth on Bell Aircraft Corporation's helicopter division, to be called Bell Helicopter. More than 70 years later, Bell has completed several consolidation and modernisation efforts as well as establishing new facilities in Fort Worth to support advanced manufacturing and Bell's Commercial Business operations. With more than 4,200 employees, Bell continues to positively bring long-term economic growth and jobs to North Texas.

The Bell 505 was introduced in 2014 and certified by the FAA in 2017. There are now more than 300 Bell 505s operating in more than 55 countries on six continents, surpassing 50,000 total fleet flight hours. With

a speed of 125 knots (232 km/h) and useful load of 1,500 pounds (680 kg), the Bell 505 is designed to be easy to fly while providing significant value to the operator and best-in-class cabin visibility. The customer-driven design of the aircraft places safety, performance and affordability at the forefront, blending proven systems with advanced technology and a sleek, modern design.

Chief Ed Kraus, who is retiring later this year, said the department will have to look at different funding opportunities for the next helicopter purchase, which is expected within the next few years to replace N911FW a model from 2006. [Bell/FWPD/Media]

AIR AMBULANCE CANADA

STARS: Airbus Helicopters Canada has delivered two new twin-engine H145 helicopters to STARS, a physician driven non-profit helicopter air ambulance organization serving Western Canada, continuing the company's multi-year fleet renewal programme for nine new helicopters. The four remaining helicopters to be delivered will arrive in the new five-bladed configuration, beginning later this year.

STARS' H145 helicopters, fitted with helicopter emergency medical service (HEMS) interiors, will support STARS in providing a safe, rapid, highly specialized emergency medical transport for the critically ill and injured, many of which are located in rural areas.



EUROPE

DRF: The Europe wide air ambulance and rescue organisation DRF Luftrettung is expanding its fleet with additional Airbus H145 helicopters featuring the five main rotor blades.

DRF technicians have started work on the first five of these helicopters to be delivered this year, for deployment at one of the air rescues bases. The work in the DRF maintenance hangar at the Karlsruhe / Baden-Baden Airport (FKB) will take approximately one month, followed by test flights and training of the crew, before the aircraft is expected to start its mission of saving lives in April.

The five-bladed rotor system reduces the weight of the airframe and offers higher performance. The crews can take up to 150 kilogrammes (330 pounds) more useful load on board. This enables better responses to spontaneous requirements at the scene of the mission, such as taking additional medical personnel on board. If required, the air rescue helicopters can also accommodate additional fuel, and thus fly even longer sorties.

In addition to the new rotor, the H145 with a five-bladed rotor also has another technical innovation, with Wi-Fi integrated into the cockpit, through which the pilots can import important data directly from a tablet to the on-board computer.

Other changes planned for the airframes prior to service entry include the fitting of additional equipment at the maintenance hangar. This includes fitting the patient stretcher, mountings for syringe pumps and the seats for the medical personnel and certifying the weather radar.

In the coming months DRF will become the first Airbus customer worldwide to jointly carry out retrofitting of an existing aircraft with five rotor blades. The retrofit requires working out the method with Airbus but when complete it will involve all of the existing H145 helicopters. In the future DRF expect to offer retrofitting to external customers if spare capacity is available.

RUSSIA

NATIONAL AIR AMBULANCE SERVICE: Quite some time ago PAN was carrying a story of the success of Russian helicopter manufacturers in selling 150 helicopters into their HEMS operation. It may not have been a lie exactly, but it seems that it was a bit short of the truth.

In a new press release issued in late January it was announced that PSB Leasing and the National Air

Ambulance Service have signed an agreement to purchase 66 Kazan helicopters for 28 billion roubles. The contract signature was said to have been inked on January 20, but even now we cannot be sure. Ansat helicopters will account for a significant part: 37 aircraft will be leased under a 15-year deal. Kazan Helicopters have built around 30 Ansat models, 17 of which are used by Russian Helicopter Systems, which is a rival of the NAAS. The remaining airframes under the contract are 29 Mi-8MTV-1. Deliveries should start this summer.

This 'contract signature' should be evaluated against a background of the first attempt to purchase an air ambulance aircraft in 2018. Rostec's subsidiary Russian Helicopters, the National Air Ambulance Service and Aviacapital-Service signed contracts to supply 150 ambulance helicopters at the September 2018 MAKS Hydroaviasalon exhibition in the city of Zhukovsky. According to that deal NAAS was to get 104 Ansat helicopters and 46 Mi-8AMT. None of that became a reality. [PAN 270 October 2018/ realnoevremya]

UNITED KINGDOM

CAPITAL: After 25-years of operation, last summer Capital Air Ambulance based at Exeter Airport ceased trading overnight. Its existing contracts were passed to others with its Channel Islands operation a Beechcraft aircraft and staff passing to Gama Aviation. Other aircraft were disposed of and it appeared we would never hear about the company again.

Last month, Centreline AV Limited, a Pula Aviation Services Limited (PASL) business, announced they had acquired the trading name and key assets of Capital Air Ambulance from the Rigby Group. The deal sees Centreline acquiring two King Air 200 series aircraft, ground ambulances and a significant suite of specialist medical equipment as part of PASL's strategy for growth where significant synergies with existing operational activities can come into play. The new operation has set up at the existing Centreline FBO facility at Bristol Airport.





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Capital will be working with organisations including the Care Quality Commission (CQC), European Aero-Medical Institute (EURAMI) and International Assistance Group (IAG) to maintain the industry accreditations that will continue to differentiate its air ambulance service from most other stretcher equipped UK aircraft operators. Also joining the PASL Group are Malcolm and Lisa Humphries, the founders of Capital Air Ambulance, who bring extensive experience in air ambulance markets, with Lisa assuming the role of Head of Medical Services to oversee Capital's commercial and customer relation activities. [PASL]

DEVON: Devon Air Ambulance, the UK charity funded helicopter emergency service, is the co-recipient of a COVID-19 Response Award, at the recent Institute of Collaborative Working (ICW) Awards, along with Babcock Aviation Onshore. Devon operates an H135 and an H145.

The award given was in recognition of the work undertaken by DAA and Babcock in relation to the fit of custom-built barrier technologies, which separate the pilot from the cockpit treatment area on board DAA's air ambulances and other projects, including bespoke PPE protective visors for crew helmets.

DAA has revealed its mission statistics for 2020, which shows the response of the medical emergency service in Devon, even during a pandemic and continuing lockdown periods. Throughout the year the charity has been tasked to attend over 1500 incidents across Devon and were, on many occasions, also called to assist in other neighbouring counties. Of those missions, 590 were to help patients with medical emergencies (those suffering with a medical condition) and 912 trauma-related incidents (accidents and injuries caused by slips, trips, falls, burns and collisions to name just a few). Crews assisted 607 male and 261 female patients, plus 68 children who also needed their expert care.

July was DAA's busiest month of the year and Sunday their busiest day of the week. This is thought to be due to many people taking time out for their favourite hobbies and pastimes at the weekend, as well as those carrying out home improvement plans that don't always go as smoothly as intended. Two of the



most common sporting groups they were tasked to were equestrian related (38) and cyclists (29).

Critical Care cars introduced by DAA in February 2020, have made a significant contribution to the service in responding to 406 incidents. They provide a backup service with similar equipment levels during the times the helicopters are unavailable through weather or mechanical issues. Last month an additional car was acquired.

Night landing sites have also proved invaluable in the past year as 207 missions took place during the hours of darkness. The charity now has over 160 landing sites situated throughout the county which provide a safe place to land away from unseen obstacles, enabling the pilot to bring a life-saving service into the heart of those communities up until 2am. A community landing site is developed and part-funded by the local community, and could be located on a green, field, sports pitch or playing field.

Like most air ambulances in the United Kingdom, DAA is a charity and is not Government funded or part of the National Health Service. The DAA medical team conveyed 184 patients by air in 2020, but also accompanied 271 patients on their journey to hospital in a land ambulance so they could continue to observe, monitor and treat them with the enhanced care they needed until their arrival at hospital. [DAAAT]

KENT, SURREY, SUSSEX: The air ambulance charity serving the south eastern counties of Kent, Surrey and Sussex (KSS) remains committed to maintaining a 24/7 service.

Thanks to the rapid response from the team at Maidstone and Tunbridge Wells NHS Trust, South East Coast Ambulance Service NHS Foundation Trust (SECAmb) and Medway NHS Foundation Trust, KSS has been able to secure vaccinations for its frontline team members. KSS is extremely grateful for this fantastic example of charity and NHS working in partnership in support of each other and the community.

MIDLAND: Plans for a new multi-million-pound air ambulance headquarters at Cosford, announced last year, have been given planning approval.

The facility will allow the Midlands Air Ambulance Charity to base two helicopters at Cosford alongside offices, improved training provision and outdoor events spaces for fundraising activities. It will allow all departments to be co-located on one site for the first time.

Plans submitted to Shropshire Council in November have now been approved by planning officers who agreed that the exceptional circumstances justified taking the land, to the north of Neachley Lane, out of the green belt.

The charity currently has one helicopter based within the security area on the airfield at RAF Cosford, along with two others based at the Strensham M5 Motorway Services in Worcestershire and Tatenhill near Burton on Trent in Staffordshire. The completion of the new headquarters would see the Tatenhill aircraft, located about 30 miles to the east, relocated to Cosford. The Strensham base about 50 miles south will remain.



THAMES VALLEY: This year the TVAA is celebrating its 21st anniversary and has dedicated the milestone to its former patients and families. In April 1999, the Automobile Association (AA) helped to set out the country's first national air ambulance association, following a £14M donation to fund seven helicopters across the UK. In December, the first helicopter, the Agusta A109E Power, arrived, which was painted yellow with AA livery.

In 2002, the Thames Valley and Chiltern Air Ambulance Trust became fully funded by the communities of Berkshire, Buckinghamshire, and Oxfordshire. In 2007, TVAA relocated from its original home at White Waltham Airfield, moving to RAF Benson as its new operating base. 2008 was a big year for TVAA, as it reached 10,000 missions in the summer. 2013 took TVAA to new heights in terms of medical practice and delivery, as its HEMS Crew Course was introduced, the first course of its kind delivered to HEMS crews in the region.

In 2014, TVAA became the first ambulance to carry a portable blood analysis (I-Stat) machine on board, and the second air ambulance to carry blood. 2015 was the year the charity purchased its current helicopter, the G-TVAL, optimised for operating at night. TVAA also launched its first road emergency response vehicle in the autumn, allowing it to dispatch two crews per shift and reach locations unsuitable for the helicopter.

In October 2018, TVAA began operation as an independent healthcare provider. In 2020 TVAA became the first air ambulance to receive an overall 'Outstanding' rating from the Care Quality Commission.

UNITED STATES

FLORIDA: AirCARE1, a long range, fixed wing jet air ambulance company, has opened its third base of operations in Melbourne, Florida. Melbourne is strategically located in the middle of the Space Coast on the Eastern seaboard. Having a LearJet 35 located on the Eastern seaboard will allow AirCARE1 to provide quick and easy access for patients in the Eastern part of the United States, Mexico, Central and South America as well as the Caribbean. AirCARE1 is headquartered in Albuquerque, New Mexico with additional bases in the Phoenix, Arizona and the new Melbourne location.

AirCARE1 is the only provider on the East Coast to be dually accredited by both CAMTS and EURAMI; two of the leading accreditation organizations in the air ambulance industry. Dual accreditations are a rarity in the air ambulance industry and demonstrate AirCARE1's commitment to the highest standards of patient care. [AirCARE]

IOWA: Late in December the Waterloo City Council unanimously decided that an air ambulance company will be granted a five-year lease at the Waterloo Regional Airport.

The company, Air Methods Corporation, will have an office and crew base near the airport's fifth hangar on the west side of the airfield. The company will be able to store its helicopter inside the fifth hangar during bad weather. The airport is responsible for snow and ice control in the winter as well as grass maintenance in warmer months.

The lease, effective from January 1 through to December 31, 2025, has a first-year annual rent amount totalling \$2,400. Rent will be paid monthly at a rate of \$200 and will increase each year of the agreement by \$25 per month to a peak of \$300 per month if the air ambulance company extends the agreement. The forward planning in the agreement allows Air Methods to sign three five-year extensions of the lease.

Until the summer of 2019 the Air Methods operation at Waterloo Regional was located in two suites at the passenger terminal building. That arrangement cost more than the hangar based one. [Waterloo-Cedar Falls Courier]



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MINNESOTA: The Civil Air Patrol – the volunteer element of the USAF – has been flying vaccine supplies and vaccinators into some of the more inaccessible locations in often snow-covered parts of Michigan, Minnesota and Wisconsin.

Since December the Defense Coordinating Element at FEMA’s Region V office has been arranging the transport of the Covid-19 vaccine by air on behalf of the Indian Health Service—a Department of Health and Human Services agency responsible for health care, covering roughly 2.6 million American Indians and Alaska Natives, belonging to 574 recognized tribes in 37 states.

The Coast Guard for Air Station Traverse City in Michigan transported the first round of the vaccine, and the CAP was selected to transport the second round—100 pounds of cargo and two passengers from the IHS office in Bemidji to several locations using a Gippsland GA8 Airvan.

The vaccine delivery chain is a major logistics challenge. Airlines ply their trade at some 300 airports in the country, but it is left to other operators – including the CAP – to move the precious cargo into the other 5,000 or so public-use airports. The two vaccines approved in the USA are Pfizer-BioNTech and Moderna, both which have to be kept in cold storage, although they also have a short shelf life, in a fridge, once taken out of storage. To meet those storage requirements the need to get it closer to the areas of need quickly is paramount. Some of the later vaccines used internationally are far less demanding but aircraft and remote locations have a clear synergy.

The task is far from straightforward—especially when you factor in the vagaries of winter weather in the North Central US. Once the vaccine was loaded into the freezer containers required for its safe conduct, the pilots had a 12-hour window in which to get the vaccine to

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the clinic at the other end of the flight. Any delay might require the coolers to be reconditioned.

The air support operation is limited. So far all of the airborne transport missions were done for the Indian Health Service, part of our Department of Health and Human Services, and what CAP have been doing is flying the Pfizer vaccine with US Public Health Service Officers that are pharmacists with strict schedules and plans to complete the transportation and administration of the vaccine inside one twelve-hour period to prevent spoilage of the vaccine.

They have not been transporting it in 'dry ice' via air. The timescales were such that some flights were scrubbed and delayed due to weather to avoid spoilage.

CAP is also supporting some ground transportation where that is needed, and even with that CAP are not transporting dry ice in the cabin of vehicles. They require them to either transport it in a truck with a separate passenger compartment or using a trailer; to date they have been using trucks.

The flight pictured took place in early January. The crew transported 100 pounds of vaccine to Bemidji, Minnesota, aboard a CAP Gippsland GA-8 Airvan. The trip proceeded to hopscotch from one airport to the other. [CAP/Desmarais/Instagram/AC]

NORTH CAROLINA: North Carolina-based fractional provider *Jet It* has partnered with *Be The Match* to help the medical non-profit organization's volunteer blood stem cell donors travel via Jet It's Honda Jet fleet to locations where blood cancer patients are being treated. While the charity typically provides airline tickets if necessary, to transport the urgently needed donors, during the Covid-19 pandemic—which has seen reduced commercial airline schedules, as well as the need to protect the health of donors—it has come to lean more on private aviation to fulfil its needs.

The Greensboro, North Carolina-based Jet It operates the world's largest fleet of Honda Jets. As its business models are based on a certain number of days of aircraft usage per ownership share, Jet It owners can gift days toward Be The Match donor flights. Jet It will pick up the remaining costs of these flights, including fuel and aircraft repositioning, as part of its philanthropy efforts, which have raised nearly \$600,000 since 2018.

OHIO: From the start of this month Mercy Health will introduce a consolidated Life Flight Network to handle its air and ground transportation services. The Bluffton Airport is home to one of the four Mercy Health Life Flight bases involved in the new network. Other bases include a mobile ICU base, plus air bases in Wauseon and Sandusky.

The Life Flight Network will combine and coordinate existing air services of Life Flight, which provides medical transportation services, including critical care transport, with ground medical transportation services provided by LACP and LifeStar.

The Bluffton base includes five paramedics, five nurses, four pilots and one helicopter maintenance technician. They operate a Leonardo A109E Power helicopter covering an area extending to the Ohio-Indiana state line to the west, southern Wood County to the north, the Marion area to the east, and the Shelby county area to the south. In 2019 there were 406 operations from Bluffton plus nineteen ground transports. In addition to the helicopter, the base operates a jeep for use in inclement weather.

Once fully operational the Mercy Health – Life Flight Network will consist of five multi-engine helicopters, five mobile ICU units as well as 28 ambulances and 12 ambulettes. The initial service area will cover more than 11,500 square miles throughout northwest Ohio, west central Ohio and southeast Michigan.



ON-LINE NEWS
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OREGON: Life Flight Network an air ambulance operation more closely associated with the Leonardo A119 is now operating Bell 429s which entered service recently.

The Bell light twin helicopters were ordered late in 2019, an investment amounting to \$34M, and arrived with the operator late last year, with the official in-service announcement being made early in January.

The four Bell 429s – including N429LF and N430LF – represent a significant investment in the air ambulance fleet and pilot training programme. As the most technologically advanced civilian EMS helicopter in the Pacific Northwest, the Bell 429 can fly in the challenging weather conditions common to the area. It also features the largest cabin of any civilian EMS helicopter in the region with more room for patient care, and high-visibility exterior lighting for safer patient boarding at night. In addition to the Bells, Life Flight Network also announced that it has brought online a Frasca flight simulator after a year of development to augment its rigorous training.

Ed: The current Life Flight fleet includes Leonardo A109 and A109 as well as Airbus Helicopters EC135s.



FIRE

CONAIR: Canadian aerial firefighting specialist Conair Group has emerged is the purchaser of eleven Bombardier Q400 turboprops formerly operated by UK regional carrier FlyBe. FlyBe went into liquidation in March last year, an early victim of the pandemic.

The aircraft had been the subject of a sale arranged through Skyworld Aviation, an aircraft marketing organisation with offices in the UK and Canada. They had been appointed to market the aircraft – built between 2007 and 2009 – in August last year.

Skyworld were selling on behalf of HEH Hamburger EmissionsHaus, the aircraft are currently located in SAMCO's storage facilities and will be delivered to their new owner throughout 2021, the first was due to be delivered in January. The aircraft are technically managed by Fintech Aviation Services who will oversee delivery.

Conair Group says that they will be converted to Q400AT air tankers and join its firefighting fleet of 70 aircraft – which includes such types as the BAE Systems Avro RJ85 and Convair 580.



SEARCH & RESCUE



PHILIPPINES

ARMED FORCES: The MVP Group of Companies donated an MBB/Bolkow BO105M helicopter and several other logistic support items to the Armed Forces of the Philippines to help in the country’s rescue and relief operations. MVP Group chairman billionaire Mr. Manny V. Pangilinan led the ceremonial turnover of a helicopter from Pacific Global One, the aviation group of the MVP Group, after the elderly helicopter had been assessed and accepted by AFP pilots.



Other items that were turned over were rescue boats and trucks from Metro Pacific Investments Foundation, PLDT-Smart Foundation, One Meralco Foundation and MetroPac Movers Inc.

The helicopter was delivered to Camp General Emilio Aguinaldo in Quezon City on January 7, 2021 by Captain Garic Garcia of the Philippine Coast Guard. For use by the Army “Hiraya” Regiment the Bolkow is now marked as Army 203 but the origin of the airframe is obscure.



SOUTH KOREA

Just before the Christmas break, Sikorsky announced – but only on Twitter – that they will deliver a new S-92 to the Republic of Korea’s National 119 Rescue Headquarters. This aircraft will support firefighting and search & rescue missions. No time scale was given but given that Sikorsky only seems to have delivered one new S92 to the civil market in 2020, any news for them is good news.

National 119 Rescue currently operates three Airbus EC225 helicopters.



UNITED KINGDOM MIGRANTS

These are some new, interesting figures, which indicate that the total number of migrants who attempted to enter the UK in small boats in 2020 was some 15,000 of which almost 8,500 (8,428) were successful.

If reports on the very harsh conditions for migrants in and around Calais, France, are in anyway true it is surprising that there have not been more risking their lives to cross the Channel in small boats. There have been days when the weather seemed perfect, but there were no reports of crossings. There again there are days that mainland Europe has far worse weather when England is enjoying calm conditions.

It has been reported that Denmark have now set a target of zero applications from asylum seekers to protect 'social cohesion'. According to the same report there were 1,547 applications for asylum in Denmark in 2020. In the same year, in the UK there were 32,423 applications! [AC]



The processes leading to the finalisation of the next UK SAR contract were due to commence late last month. The next phase, clarification, is deadlined in early March 2021.

The HAI ROTOR Magazine Photo Contest.

A new category this year called, "Helping Hands and Helicopters During COVID-19" and is designed to document how the COVID-19 pandemic was affecting those in the vertical take-off and landing (VTOL) industry, including frontline workers.

This category winning image was taken by Sylwia Tylkowska Zawiercie, Poland



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INDUSTRY

FLIR Inc., has entered into a definitive agreement to be acquired by **Teledyne Technologies**. Teledyne is a manufacturer and supplier of sophisticated instrumentation, digital imaging products and software, aerospace and defence electronics, and engineered systems.

They will offer a uniquely complementary end-to-end portfolio of sensory technologies for all key domains and applications across a well-balanced, global customer base. By joining Teledyne, FLIR believe they will be better positioned to meet evolving needs.

The transaction is expected to complete in the middle of 2021. Until that time both entities will operate separately - business as usual.

FLIR Inc. has received contract awards worth more than \$23M from **US Customs and Border Protection** to deliver improved capabilities for ground and air surveillance. The contracts relate to ground and road vehicle-based systems and drones designed to improve air and ground surveillance capabilities using advanced thermal imaging and drone technology. Included are the next-generation FLIR LVSS™ (Lightweight Vehicle Surveillance System) for CBP's Mobile Surveillance Capability (MSC) program and delivery of FLIR SkyRaider™ drone tether kits, FLIR StormCaster™ -T sensor payloads, and other technology for CBP's Low Altitude Autonomous Safety and Situational Awareness for Officers (LASO) program. The LASO contract has a base value of \$545,000 and was awarded from a competitive General Solicitation under authority of the Department of Homeland Security's Commercial Solutions Opening Pilot Program.

The FLIR SkyRaider tether kit is a modular, highly transportable system that will enhance CBP's existing SkyRaider fleet by providing persistent mission support. The tether can deliver power to aircraft and payloads for flights lasting up to 24 hours. The StormCaster-T features a FLIR Boson™ thermal camera for powerful object detection, recognition and identification day or night, with maximum range and time-on-station. Its continuous zoom lens enables long distance surveillance and reconnaissance while providing clear, actionable imagery.



Israel-based **Urban Aeronautics** has announced that it will provide four of its CityHawk vertical take-off and landing (VTOL) aircraft to Hatzolah Air, an American-based company that provides emergency medical service (EMS) applications. The news follows an initial MoU in August 2020 to develop, produce, and market the CityHawk aircraft and now Hatzolah Air will become the official sales representative and distribution channel worldwide.

CityHawk is a twin-engine VTOL with no external wings or rotors, making it able to fly to - and land at - most locations for emergency assistance. As per the initial MoU, the aircraft will be available to use in 3-5 years after Urban Aeronautics' engineers work with Hatzolah's team to tailor the CityHawk to their specific requirements. These include accommodation for a pilot, a patient and companion, two EMS personnel, and a suite of life support equipment.

Bassetlaw District Council located in and around Retford, Nottinghamshire has a local planning proposal under discussion that will affect **Gamston Airport**. The airport is currently the home of several businesses including DEA Aviation an international border security ISR operator. They fly a mix of Diamond DA-42 and DA-62 aircraft on border security flights across Europe. They also operate a Beech E90 N211SG.



Diamond DA-62 operated by DEA at Gamston in 2018 ©PAR

The airport is one of two garden village sites named by the Bassetlaw District Council draft local plan which is expected to receive final approval in March. The council says, "The amount of land available at Gamston Airport allows for the creation of a sustainable and stand-alone new settlement. "It is currently a small scale, commercial enterprise which serves the needs of local businesses. Whilst development of the site would result in a loss of airport related employment, the new village would provide opportunities for new employment." The draft plan goes on to write-off the airport: "Gamston Airport is relatively free from any significant constraints and also benefits from being classified as previously developed land (brownfield) due to its current use as an airport". "The present use of the site is considered to be an inefficient use of land which could otherwise be developed for a use which is in much need, and a use which would ultimately provide greater long term social and economic benefits to the local and wider District and economy through the creation of a sustainable settlement." If the plan is approved, then the airport will be in danger of closing later this year. [ABN]

Aviation Industry Corp of China (AVIC) the leading aircraft maker, is developing a new type of multifunctional helicopter for civilian use. Design work for the AC332 has been finished, the State-owned aviation conglomerate announced in Tianjin last month, with the first prototype scheduled to be built and make its debut flight next year.

Test flights for airworthiness certification will begin in 2023 and conclude in 2025, with deliveries the same year.

The AC332 is an advanced dual-engine helicopter with a single rotor, skid landing gear and shell-shaped rear door designed by Li Shengwei. The helicopter, with a capacity of 10 passengers, can be used in various scenarios including emergency rescue, law enforcement, as well for high-altitude and offshore operations.

Ed: The majority of the Western aviation industry shies away from employing the fan in tail [Airbus] Fenestron in their designs and it is noteworthy that China continues to employ them.



The Chinese and Russians have entered into a joint design partnership to produce an all-new very-high-altitude, heavy-lift helicopter. The requested maximum speed is set at 186 miles per hour with a range out to 390 miles. More importantly, engineers have been given the challenge of designing the aircraft with a service ceiling up to 18,696 feet (5,700 meters) capable of reaching the highest points of the rugged Chinese countryside. Gross weight is estimated at 84,200 pounds with possible seating for some sixty passengers. At present, this rotorcraft would be dimensionally smaller than the mammoth Russian Mil Mi-26 "Halo" heavy hauler but larger (and twice as heavy) as the American Boeing CH-47F "Chinook" tandem rotor system of the U.S. military. The Mi-26 is currently the largest helicopter in service anywhere in the world with operators in Russia, India and the Ukraine (among others).

AviCopter of China is heading the Chinese side of the development with the project name being "Advanced Heavy Lifter" (HAL) and its in-service designation becoming "AC332" (formally the "AC3X2"). An early design effort was showcased in September 2015 during the China Helicopter Exposition in Tianjin. The AHL effort is being largely funded by China.

Pilatus has delivered the 100th PC-24 since the type started entering service in 2018. The PC-24 is now present on every continent, flying innumerable missions every day: providing medevac flights in Australia and the USA. The 100th airframe is now in use as a business aircraft with its new owner, Jetfly Aviation. Jetfly has operated Pilatus aircraft for over 20 years and now runs a Pilatus fleet of 51 aircraft – the largest in Europe.

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S.A.F.E. Structure Designs has announced the order for custom maintenance stands for the New Mexico State Police. The Safety-First stands allow technicians SAFE access to all areas of their EC145 aircraft. The stands are equipped with the latest features including a seamless fit to the aircraft with zero gaps, enhanced safety handrails, and exact working heights to increase comfort and efficiency. The stands are light weight and easy to move around and allow maintenance access to the aircraft on both a dolly and on the ground. The EC145 stands provide a large work platform for added safety and will be used for servicing the engines, transmission and rotor head. The stands will be custom painted black and gold to match the aircraft and will be delivered in April 2020.

The departure of the United Kingdom from the European Union has altered the manner in which UK tenders and contracts are announced.

All new UK procurement opportunities which were launched after 31 December 2020, have been required to publish notices relating to those procurements on the new UK Find a Tender Service (FTS). Notices will no longer be published on **Tenders Electronic Daily** (TED)/OJEU though a residue remain.

The Crown Commercial Service held market engagement sessions during January 2021 with suppliers interested in potentially bidding for the framework agreement and resulting call off contracts.

Aviation photographer Mark Mennie of Calgary, Alberta, Canada took this year's Grand Prize in the 2021 **ROTOR Magazine Photo Contest**. Mennie shot this photo under medical direction in April 2020 to illustrate the new standards for personal protective equipment (PPE) that had been recently implemented to safely transport critically ill patients with COVID-19.

Unfortunately due to the cancellation of the Heli-Expo this and the other images will not get the exposure they might once have enjoyed. A selection of the other winners appear on page 20 and on the back page of this edition.



Bell Textron Inc. has announced the Supplemental Type Certificate (STC) for the Installation of QuantiFLY™, a new aircraft communication unit (ACU) powered by Truth Data, offering a low-cost, lightweight, and fully automatic flight data monitoring (FDM) solution currently available for the Bell 407GX and Bell 429. Bell developed the system with Appareo and FDM analytics to enable operators to affordably use the data to be actionable and drive safety.

The device utilizes cellular (4G LTE / 3G GSM) on the ground data transmission to offboard aircraft flight parameter and maintenance data via cloud for processing and analytics. Bell worked with Microsoft to build on its Azure cloud infrastructure to route data securely around the world, the data is then uploaded to Bell's Mission Link, an innovative off-board data platform that delivers intuitive analysis to customers. Bell collaborated with Truth Data, a proven leader in rotorcraft flight data monitoring, to provide a scalable flight data analysis platform and benchmarking capabilities to better identify safety issues and reduce operator risks. Coupled with QuantiFLY™, this provides a completely automatic FDM service. Network regulatory and certifications include Verizon Network, Vodafone, CE, IC, FCC, RCM.

Eye In The Sky – Flight Data Recorder - achieves New Zealand Civil Aviation certification. The Eye In The Sky has become the first to achieve an AML STC (Approved Model List – Supplemental Type Certificate) in New Zealand. This is a single STC that can be used across multiple helicopter types; initially the helicopters listed are EC130, AS350 and R44 with further aircraft types being added this year.

Utilising New Zealand Manufacturers, the Eye in the Sky is the most cost-effective fully certified.

Aviation Flight Data Recorder available. The small yet powerful device is an all-in-one unit consisting of a forward-facing HD camera mounted within the aircraft cabin, the device records a 160-degree HD image of the pilot control inputs, the view out the front window and importantly, flight data captured from the instrument cluster.



It will record speed, altitude and GPS position as well as pitch, roll and yaw data to aid the flight review process. Three audio channels capture pilot & radio, passenger and ambient cockpit audio. All data is securely stored on an SD card within a tamper proof housing, capturing 22 hours of the aircrafts latest video, audio and flight data..

All Nippon Helicopter's (ANH) H160 has performed its first flight test, a 95-minute flight at the Marseille Provence Airport. This successful maiden flight paves the way for the aircraft's entry into service in Japan. ANH deploys a helicopter fleet comprising six AS365s and five H135s for electronic news gathering for the TV stations across Japan. This H160 will replace one of its AS365s.

The H160 was granted its type certificate by the European Union Aviation Safety Agency (EASA) in July 2020, with the certification from the Japan Civil Aviation Bureau (JCAB) expected in early 2021. Upon delivery of the helicopter, specialised equipment installation and customisation will be performed at Airbus Helicopters' Kobe facility, before its entry into service.



H160 ©Airbus Helicopters

Airbus Helicopters has started in-flight tests on board its Flightlab, a platform-agnostic flying laboratory exclusively dedicated to maturing new technologies. Airbus Helicopters' Flightlab provides an agile and efficient test bed to quickly test technologies that could later equip Airbus' current helicopter range, and even more disruptive ones for future fixed-wing aircraft or (e)VTOL platforms.

Airbus Helicopters intends to pursue the testing of hybrid and electric propulsion technologies with its Flightlab demonstrator, as well as exploring autonomy, and other technologies aimed at reducing helicopter sound levels or improving maintenance and flight safety.

Flight tests started last April when the demonstrator was used to measure helicopter sound levels in urban areas and to particularly study how buildings may affect people's perception. First results show that buildings play an important role in masking or amplifying sound levels and these studies will be instrumental when the time comes for sound modelling and regulation setting, especially for Urban Air Mobility (UAM) initiatives. Testing was pursued in December to evaluate the Rotor Strike Alerting System (RSAS) aimed at alerting crews about the imminent risk of collision with the main and tail rotors.



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Tests this year will include an image-detection solution with cameras to enable low altitude navigation, the viability of a dedicated Health and Usage Monitoring System (HUMS) for light helicopters, and an Engine Back-up System, which will provide emergency electric power in the event of a turbine failure. Testing on the Flightlab will continue in 2022 in order to evaluate a new ergonomic design of intuitive pilot flight controls intended to further reduce pilot workload, which could be applicable to traditional helicopters as well as other VTOL formulas such as UAM.

Airbus already has several Flightlabs such as the A340 MSN1, used to assess the feasibility of introducing laminar flow wing technology on a large airliner, and the A350 Airspace Explorer used to evaluate connected cabin technologies in flight.

In 2020, **Airbus Helicopters** logged 289 gross orders (net: 268) in a challenging market heavily impacted by the economic consequences of the COVID-19 pandemic, reinforcing the company's position on the civil and parapublic market. Additionally, the company delivered 300 rotorcraft worldwide despite the pandemic travel restrictions, resulting in a stable 48% share of the civil and parapublic market and thus allowing Airbus Helicopters to maintain its market-leading position thanks to its wide range of competitive products designed to enable customers to perform a multitude of missions.

The **Bucher Group**, the specialist for Emergency Medical Systems, has announced its new rescue equipment H135 AC67 flex is now EASA certified on all variants of the H135 helicopter.

The further development of the AC67 equipment, which has been successfully in use for many years, has now been implemented by Bucher engineers resulting in the new AC67 flex. Up until recently, only dedicated HEMS operators have been able to benefit from the high-quality Bucher HEMS kits. Now, customers such as police, transport companies or military operators will have the opportunity to convert their H135 helicopter into a fully functional rescue helicopter within about 30 minutes by using the AC67 flex-kit. Mission profiles are now available for almost every HEMS application, from primary, secondary to disaster missions with dual stretcher.

The short installation time of about 30 minutes was made possible by the proven quick release system from Bucher Leichtbau. The HEMS-kit can be installed and removed quickly and safely without tools and with just a few hand movements.

Global business aviation services provider **Gama Aviation** has acquired Jet East Aviation from East Coast Aviation in a \$7.7M cash deal that will significantly expand Gama's existing U.S. MRO operations, the Farnborough, U.K.-based company announced in mid-January. The deal—which includes an additional \$1M in deferred cash payable over two years and assumption of \$3.2M in Jet East debt—creates an MRO operation with 400 employees, more than 90 AOG technicians positioned across the country, coverage of 65 cities with heavy business aviation traffic, and more than 10-line stations and heavy scheduled maintenance facilities.

Ed: This is not core airborne emergency services news but the company, Gama, has important interests and aspirations in the market.

When is it a ship and when is it a plane is a question that has been on the fringes of the next product launch for decades. Older readers may recall a number of water surface skimmers produced by the Russians in the 1950s, some looked promising but many looked like they had been designed by a dyslexic committee. Like the airship they never amounted to a commercial success. Now in the USA two companies have got together to develop the principle commercially as an unmanned transport.

The Flying Ship Company and LogistiWerx have signed a Memorandum of Agreement (MOA) providing for Flying Ship ground effect vessels to use LogistiWerx's logistics solution to support the supply chain from shipper to receiver economically.

The Flying Ship Company is developing patent-pending ground effect vessels that will fly just over the water, will be ten times faster than boats, cost just one quarter to operate than planes, provide tens of thousands of additional access points and reduce CO₂ emissions by 50%. They call it the Ekranoplan. <https://flyingship.co/>



A file image of a typical ground effect craft [illustrative only]



In response to the Macondo Incident in 2010 (The Deepwater Horizon oil spill in the Gulf of Mexico on the BP-operated Macondo rig) it was decided through the establishment of the Global Industry Response Group and the creation of the **Oil Spill Response Joint Industry Project**, that future industry requirements for aerial dispersant application should be reviewed. The industry needed to consider new aviation platforms, with a range of capabilities to support its global needs and operations for a faster response. A technical report published recommended a number of aircraft, but the Boeing 727-200 was highlighted as the most suitable aircraft due to its high transit speed, generous payload, extensive range, three-engine operation and configuration. This is the type operated by Oil Spill Response Limited (OSRL)/2ExCel Aviation at Doncaster, UK.

Trials were put in place to gain further information regarding droplet size, swath coverage and dosage rate of the spray at various speeds and flow rates. Trial Imber 1 was conducted in Scotland in 2017 followed by a subsequent Trial Imber II in England during 2018. Both trials achieved the set objectives and in 2019 following the installation of a new Flight in known icing compliant spray boom and nozzles, the decision was made to instigate Trial Imber III, in May 2020.

Unfortunately, the COVID 19 pandemic prevented the planned trial going ahead on schedule and it had to be rescheduled for a new location. The typical option of spraying over the sea or on a beach/range were discounted and eyes were redirected to a large airfield where the prevailing wind was acceptable.

With a prevailing northerly wind and Cymyran bay to the south, RAF Valley seemed ideal. Contact was made and the team at Valley were positive and supportive.

The trial was in two halves, the first was to fly at a speed simulating a heavier weight aircraft for six spray runs at 150ft, spraying water through TERSUS at 1,200 litres per minute. The second half was to fly six spray runs at a lower speed (150kts) still at 150ft but this time spraying at 1,000 litres per minute. OSRL would set out a line perpendicular to the aircraft heading and deploy water sensitive cards at set intervals to "catch" the spray to record the size and coverage of the water droplets.

Valley is a busy weekday airfield; trials were set for weekends but delayed by weather issues. The aircraft were deployed from Doncaster Sheffield Airport thirty minutes before arrival at RAF Valley. After a single dry run a series of 12 wet runs was flown, with each resulting the ground staff setting up new cards, encompassing some 90 minutes overhead. The excellent planning and incredibly accurate flying by the crew ensured that there were no aborted runs, and all of the objectives were achieved.

After the aircraft had departed, the ground team broke down the trial equipment and painstakingly photographed each water sensitive card before returning to base to start the in-depth data analysis. [extracted from <https://www.2excelaviation.com/special-missions-completes-research-flights-for-osrl/>]





©James Lloyds 2017

Under a £15M deal struck between the airport managers and two local councils, the **Staverton or Gloucestershire Airport** is to be refurbished.

The airport has been at the centre of airborne emergency services aviation for around thirty years now – being the base for Specialist Aviation Services (Police Aviation Services, Medial Aviation Services) and the Babcock Group (formerly Bond Aviation).

The airport infrastructure is now dated; the runways are said to be 25-years beyond their design life and two of them have been closed since 2019 as they are unusable. The airport has three paved runways, known as the main runway, cross-winds runway and the north-south runway. The plan is to close one runway and revamp two to become "fit for purpose" The £15m figure, which could be reduced depending on the upcoming tendering process, will pay for resurfacing the runway, improving draining, installation of new energy efficient LED lighting as well as making sure the runway continues to meet Civil Aviation Authority guidelines.

Gloucester City and Cheltenham Borough Councils, which jointly own the airport as an arms-length company, gave the all-clear to pay £7.5M each. They will in return get a usable airport and share in the proceeds of the existing Meteor Business Park.

Once the work is completed, which Gloucestershire Airport Limited says it hopes by the end of 2021, the airport will hand the Meteor Business Park to the two local authorities to help pay for council services. The annual rental income of £650,000 will be shared equally between the councils. A new business park will be built, called the Cheltenham Gloucester Exchange. [Gloslive/MJ]

CENTUM has announced that Lifeseeker, its life-saving technology, has been certified for line fit on Airbus H145 helicopters. Lifeseeker uses signals from a missing person's mobile phone to guide search and rescue (SAR) teams to the right place quickly. It helps make SAR missions more effective and efficient, saving lives and optimising operational costs.

Lifeseeker turns the phone into a beacon. It creates its own network to triangulate the exact location of the missing person's phone, making it independent from mobile phone networks. Importantly, it does not rely upon line of sight, meaning it is effective in all weathers and all terrains, night and day, even if the missing person is hidden by trees, or even buried in snow or rubble.

Lifeseeker can also be used to communicate with the missing person to assess any immediate medical needs, the best place to pick them up and so on. However, Lifeseeker does not rely on the missing person taking any action.

Héctor Estévez, CEO of CENTUM, said, "Everyone has a mobile phone which now means we all have a rescue beacon. As soon as we find the phone, we find the person. We know the technology works because it is already helping save lives in Europe.

"The Covid pandemic has made us all appreciate nature and the outdoors more than ever. And being in the mountains is one of the few activities we can do in the current circumstances. What we've heard from search and rescue teams is that more people than ever are heading to the mountains and that will only increase as skiing opens up. Now really is the time to review the available technology to ensure every SAR team has what it needs to be as successful as possible."



Airbus managed the certification process to the highest industry standards. Lifeseeker is now available for SAR teams around the world on the H145 platform, and the Type Certificate is available from Airbus for further installations.

The Lifeseeker airborne hardware is enclosed in a small 15kg unit, measuring 360mm x 240mm x 171mm. Combined with CENTUM's proprietary algorithm, the system provides highly accurate geolocation. The user interface is very straightforward to operate and Lifeseeker can be operated using either a PC or a tablet.

A miniaturized version of the hardware can also be used in drones, for shorter range missions.

When the US Society of Auto Engineers released their J3027 guidance regarding ground ambulance-based patient litters, it left many air ambulance operators and crews with problems. Crews were no longer able to quickly transfer a litter from the aircraft to the ground vehicle, instead they were obliged to transfer the patient from the helicopter's stretcher to the ground vehicle's stretcher, costing time and potentially complicating the patients condition. In seeking an answer to this local problem Metro Aviation have announced they have an STC answer to the problem. The Stryker **Performance-LOAD Manual Cot Fastener** for BK117 C2/D2 models. The fastener meets crash safety recommendations for SAE J3027 and provides guidance for loading and unloading to improve efficiencies. With this system, crews can now carry the same Stryker litters approved for ground transport and eliminate the need to move patients from ground litter to flight litter during transport.

Boston Medflight is the launch customer for the system, and worked closely with Metro Aviation during its development.

Metro is currently producing 25 systems to be available during the first quarter of 2021. The installation is similar to Metro Aviation's long-standing litter retention plate and can be installed in the field.



Stryker Cot in land ambulance ©Metro Aviation

ACCIDENTS AND INCIDENTS

31 December 2020 Sikorsky S-70 helicopter A Gendarmerie/Jandarma helicopter's tail hit a lighting pole when it was trying to get into a parking position at an Istanbul airport, Turkey. The accident took place at the Sabiha Gökçen Airport and the emergency services were dispatched to the scene following the accident. No casualties were reported. [Hurriyet Daily News]

2 January 2021 Airbus Helicopter AS350B3 ZS-HJN Operated by SANParks on law enforcement and security missions in the Table Mountain National Park and surrounding areas. The recently delivered helicopter was severely damaged after losing control during take-off from Cape Town International Airport. The airframe ended up on its side with all rotors smashed. The pilot who was flying alone during the incident only suffered minor injuries and received medical attention. [Cape Town etc]

2 January 2021 Bombardier LearJet 31A PP-BBV. Air ambulance of Brasil Vida Taxi Aereo. The Lear-Jet suffered a runway excursion after landing on runway 03 at Diamantina Airport, Brazil. It went down a gully and came to a halt upright and largely intact. The aircraft was departing to operate an ambulance flight to pick up a Covid-19 patient. [ASN]

14 January 2021 Eurocopter EC135P3 PH-TTR. Air ambulance of ANWB Medical Air Assistance, Netherlands. suffered a bird strike near the Noorderplassen Almere when returning from a cancelled scramble near highway A6 in Lelystad. The bird penetrated the left-hand lower cockpit windscreen, and the pilot declared a pan-call and diverted to Amsterdam Heliport for a safe landing [ASN]

21 January 2021 Bell 430 ZT-RRT Air ambulance of Netcare 911 operated by National Airways Corporation, South Africa. "Netcare 1" crashed in open grassland near the N3 road between Ladysmith and Colenso, KwaZulu-Natal. During the accident sequence a main rotor blade hit the vertical stabilizer and the tailboom separated. All five occupants (pilot and four medical personnel) died and the helicopter was destroyed by a post crash fire. Witnesses claimed the helicopter broke apart in mid-air. Those who died were Dr Kgopotso Rudolph Mononyane, an anaesthetist, Dr Curnick Siyabonga (Sia) Mahlangu, a cardiothoracic surgeon, Mpho Xaba, a specialist theatre nurse for cardiothoracic and transplant, all from Netcare Milpark Hospital, Sinjin Joshua Farrance, an advanced life support paramedic at Netcare 911, and the pilot of the helicopter, Mark Stoxreiter, who worked for National Airways Corporation. The healthcare work-

ers were part of an ECMO (extra-corporeal membrane oxygenation) team, on their way to try to save a patient in Hillcrest. [ASN/Imansi24]

28 January 2021 MD Helicopters MD520 N. Prince Georges County Police Department. On patrol when a warning light illuminated, made a precautionary landing at Hillcrest Heights, 3700 block of Branch Avenue in Temple Hill, Maryland, USA [Twitter]

SAFETY

APSA Expect to bring back live Safety Seminars from February.

Hosted by the St. Johns County Sheriff's Office, APSA's first safety seminar in 2021 is scheduled for February 23-25 in St. Augustine, FL. This event will take place at the World Golf Village Renaissance St. Augustine Resort, and a group rate \$133 per night with discount code APSA is available until February 8. The second 2021 safety seminar is scheduled for May 11-13 in Hunt Valley, MD, at the Delta Baltimore Hunt Valley. A group rate of \$129 per night is available until April 27, 2021 and can be accessed via the APSA website.

APSA safety seminars cover a wide range of topics through classes, roundtable discussions and a mini tradeshow. Registration for both of these events is included in your APSA annual Individual Membership dues as a member benefit; a nominal fee for non-members applies.

Survival Systems USA, Inc. will conduct Water Egress & Survival Training in conjunction with both of these events pending sufficient registration. Classroom instruction will be followed by practical application in the hotel pool. Registration for this training is handled directly by SSUSA. Full information is on our website.

SPEAK TO ME

Getting the message across – particularly between air-to-ground – has been a long-standing problem for the airborne emergency services. If it is not the technology, it is the multitude of players involved.

For some years now the airborne emergency services in the United Kingdom have been talking to each other reasonably well via a digital system call Airwave. That system links 43 police forces, numerous ambulance services, fire brigades and a whole range of other organisations. In the air police, ambulance and Coastguard can talk together with relative ease.



When brought into service the Airwave system promised much but never delivered on all of its promises—or at least at an acceptable price — and is in any case now past its best. The replacement will be the cellular Emergency Services Network (ESN). It is late but it will only be accepted when it works, then Airwave can be consigned to the history books. Importantly, the system is being developed centrally for all operators rather than in a fragmented manner.

It is not just Britain that seeks good quality communications, and however the final system works out it is fair to say that there will be a national system that interlinks all of the emergency services even if some flaws emerge. Contrast that with the situation in the United States where there is virtually no national effort to allow the services to speak to each other with ease, single states have multiple agencies and each of those agencies obliged to seek its own solution to both create an acceptable communications system with no central guidance. There is local cooperation but beyond that market forces prevail.

Just to remind those that have not heard the numbers before. There are estimated to be 17,000 separate law enforcement agencies in the US, and that does not even consider ambulance and fire agencies. Eleven states are bigger than the whole UK, Texas is almost three times the size of the UK, while sunny California is almost twice as big. It is estimated that there are over 500 police agencies in the state. Many agencies may be able to talk to each other under a local arrangement but stray too far and that ability is lost.

In the second week of January the P68R fixed wing operation based in Doncaster tweeted a message and image from the aircraft. "NPAS 82 our first live tweet on transit back from Carlisle following Transmitting Portable Electronic Devices (TPED) certification allowing the use of 3/4G mobile devices across the P68 fleet." The transmission was of data, something that the industry is fairly comfortable with. The struggle everywhere is getting seamless speech transmission. Data can repair itself if interrupted but the immediacy of speech cannot.

With the ESN now running late in incorporating a cellular based system to replace the digital Airwave system other options are being proposed but we are assured that ESN still provides the best option. The airborne component remains one of the most challenging, the resolution of the problems presented by Airwave were a significant challenge and it might be assumed that picking up the cellular signal whilst at height will present a further series of challenges. As with Airwave, until the ground system is working it is difficult to quantify all of the problems with aerials and setting off multiple signals from many aerial towers. Rudimentary trials have been undertaken using a nontypical fixed wing and without the use of dedicated external aerials. The early trials were mostly about whether having LTE 4G antennae fitted to helicopters and fixed wing would cause unexpected issues.



Having a straight carry-on cellular telephone would seem the ideal, and some US aircraft appear to have such systems, but all is not as clear cut as it seems.

The USA, with all its different agencies, each with different needs produce a myriad of different solutions. PAN has been in contact with two operators that have aircraft with cellular phones in them, each has a different experience that underlines the difficulties faced when individual units are tasked with solving their own problems in a piecemeal manner. ESN may have its problems, but it will have a team dedicated to ironing out those issues rather than placing them at the feet of the unit head or chief engineer.

The first aircraft type is the Airbus Helicopters AS350B3s and the location is the rugged side of San Francisco Bay.

“... We have three systems installed in our aircraft. The DZMx unit is panel mounted and provides all crewmember/passenger cell and sat phone coverage through the audio control panel (PAC45A). It has a cell SIM card and an Iridium SIM card installed. The system automatically detects if it has cell coverage and uses it the appropriate system. It has external antennas for both. If it can't find cell coverage it uses Iridium sat instead. We can select it on the PAC45A the same as a radio. We can also use it to send/receive texts and group texts etc. It also provides constant secure GPS aircraft tracking information for our CalFire/USFS tracking requirements using the cell/sat system (although the USFS AFF.Gov fire aircraft tracking system is not configured to receive the cell signal, only sat signal). It also has Bluetooth, but we use the Bluetooth link in the PAC 45A audio control panel. With this we can link our own cell phones to the PAC45A and talk directly via our own personal cell phone (in your pocket or on a mount in normal operation as on the ground) via the audio system.



“We have access to our CAD system and the internet on board via the AeroComputers MMS that functions via a Cradlepoint router. This has 2 different SIM cards including ATT FirstNet and Verizon that help with signal reliability, choosing between the best signal. It has external cell antennas.

“Operationally the cell signals can have mixed reliability due to most cell system antennas being designed to be “ground” focused so as we increase altitude or enter remote hilly terrain the cell signal can be less reliable. I'd say anecdotally for our area we have about 80% coverage below 1,000' agl but that will vary depending on terrain.

“Operationally it is very useful for locating individuals who are lost/in distress but have a cell signal – day or night we can call the witness/victim directly from the helicopter and have them “vector” us to them when we reach a search area. Also, if we need to land and no police/fire are on scene we can talk directly to the witness/victim on scene and ensure they understand what is happening and what they should do/not do i.e., approach the helicopter. For flight medics it is useful contacting a medical specialist in flight if they need specialised advice or to provide a briefing. We also use it for communications or discrete clarifications that we may not wish to broadcast, even on an encrypted radio system. We would not use it as a primary communications system and certainly not plan to use it in a “critical incident” unless all else failed.

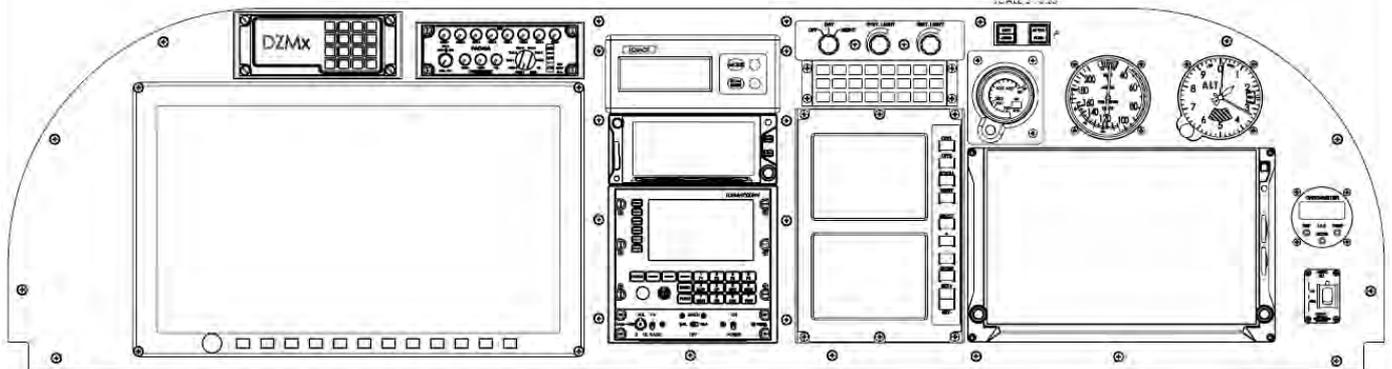
[Flight Communication System | DZMx | Blue Sky Network
https://www.ps-engineering.com/PAC45.html](https://www.ps-engineering.com/PAC45.html)
<https://cradlepoint.com/products/mobile/>

“The unit, which operates two AS350 aircraft, pay around \$450 a month based upon around 90 hours of flight time but by far most of that is for the GPS tracking service (so many cents per location/speed/alt “ping” every 2 minutes) which the UK doesn't need (or want I'm sure) -



FlightRadar24 will do the same for them over there without such vast wilderness areas. Cell voice/data charges would be the same as any ground-based cell phone and the Sat Phone costs us \$1.45 per minute to operate for voice. They are not much good for data. We don't use the Satcom a lot, maybe 20-30 minutes a month (rest is cell coverage). Depending on the "going rates" in UK I'd be surprised if the operating costs was much more than a couple hundred pounds a month – unless they go silly using it. Very nice to have on board though – a great tool that the crews love. 4G good for sending screen shots from camera/IR system direct to ground units/personnel below who don't have access to downlink....

"The Flight Cell DZMx display is in in front of the left seat TFO so he can make calls, text etc. via Sat or Cell when signal available. The PAC45A audio controller also enables the TFO to link his own cell phone too via Bluetooth so can use via helmet/headset. The TFO can also take screen shot of whatever is on the monitor and text/email to individuals or group via the CradlePoint Mobile Router (used for the mobile CAD/MDT system that can be displayed on the monitor) that has dual cell SIM cards – again cost is same as ground-based cell that has voice/data package (satellite is not considered to be good for data/images)."



The description is an American solution to an American problem of wide-open spaces and patchy cell phone reception when away from major roads and towns, and the unique requirement of the Forestry [USFS] people.

UK ESN relates to the terrestrial version – for which there is no business plan – and Cobham are trying to work alongside that to create a viable airborne interface and a dedicated aerial for police and HEMS. It is probably a good job there are no fire aircraft to further complicate the situation.

I understand that introducing the system to the UK SAR community comes with added complications. When, and if, there is a plan there may be an inkling on the likely costings. These estimates can then be sent to Sikorsky and Leonardo for them to estimate the costs of conversion and certification of the S-92 and AW189 to which will be added the contractor's costs [Bristow]. Similar problems may emerge for other contracted aircraft including those of Police Scotland.

The US solution may be using technology that is exceedingly expensive, but it is available off the shelf and in service with the operator. ESN may yet enter service in 2024, or 2025.



And for a completely different take on the issue – and perhaps one very much closer to the current UK experience in that it does not rely on satellite to fill in the gaps in service is from Clearwater, Florida. The Pinellas County Sheriff's Office unit operates an older AS350 helicopter and has a Cessna Caravan fixed wing operating over the relatively benign topography of southern Florida.

They report that they have a less than promising cell phone experience, that may be partly down to their reliance on 4G rather than having the Satphone option built in. They get "spotty reception" that just gets worse with altitude. They have been looking into something to boost the cell phone signal, especially in the Caravan. "The in-house IT and radio shop engineers said we couldn't because it violated FCC regulations. They said a cell booster at altitude would be able to connect to, or ping multiple towers at once because so many would be available within line of sight from an aircraft, and this would cause system issues for the carriers." A similar problem is found with most cell systems.



Hillsborough County Sheriff's Office, the next force west is currently working with a system that is sup-

posed to connect to just one tower and are looking to install it on their own Cessna Caravan for testing. It looks promising but now is the time for Pinellas CSO to sit back and await the results of the tests before looking to make it a budget item.

The PAN information request was forwarded to other US air units and two further responses included Palm Beach County who use Flightcell installed on the aircraft with an external antenna on the belly of the Bell 407 airframe. They say that above 1,000' AGL it is less efficient, even with the external mounted antennas. Another agency said they tried to install a similar system, but the FAA and FCC shut them down. FAA regs don't prohibit use of cell, as long as the operator determines it will not interfere with communication or navigation. It appears that the rules were written about analogue systems and they are still re-evaluating if the limits are still valid for 4G. So far there has been no clear answer from anyone who has a very reliable cell based system.

In the much smaller UK, there are more aerial towers to the square mile and the proposed ESN is destined to ride 'piggyback' on a commercial network - EE. All the issues experienced in Florida are being experienced in the UK. Fortunately, most of the UK fleet does not have a need to travel too fast as it looks as if any aircraft exceeding 300kmph faces the additional problem with the Doppler effect at low level, where the shift of flying to or from a tower can generate enough issues to cause the service to drop. A brisk tail wind can take you outside the spec. of the 4G network. Not a problem for the front-line police equipment of today but potentially one for operators of such as the Coastguard Beechcraft King Air.

It appears clear that cellular traffic is reasonably OK if its data, it is just the speech element that struggles time and time again. Put the equipment in an aircraft at altitude and move it quickly from cell tower to tower and that is a recipe for challenges. Data is easier than voice and is already flying in the U.K. on both air ambulance and police helicopters using non-aviation kit made by Terrafix.

The US responders to the broad question appear to agree to the principle that at this time they would not trust a cell based system as their primary control frequency – and yet that is the plan for ESN.

Thank you to both Sgt. Bill Proberts the Chief Pilot and UEO of the East Bay Parks Police air unit. Bill, a former Surrey police constable who defected Stateside to fly, and Bryan Smith the pilot with Pinellas County Sheriff's Office Flight Unit, St. Petersburg/Clearwater International Airport. Bryan is the Airborne Public Safety Association Safety Program Manager and both officers are regular presenters at the PAVCon Europe events. Thank you also to the other responding units.

UNMANNED

Last month the Federal Aviation Administration (FAA) approved the first fully automated commercial drone flights, giving a small firm the green light to operate drones without direct supervision by human controllers or manned piloting.

The FAA's decision mandates that the drones only operate in rural areas at heights under 400 feet, though it is still a watershed moment in efforts by farmers, miners and others to push for boosted commercial use of unmanned drones in their work.

The FAA had previously approved drones to inspect infrastructure like railroad tracks and pipelines. American Robotics Inc., based in Marlborough, Massachusetts, gained the new approval.

The Scout drones run by the company weigh under 20 pounds, fly on predetermined flight paths, can use technology to avoid birds and other aircraft.

AeroVironment Inc., a leader in unmanned aircraft systems, and Arcturus UAV, Inc., a privately held leading provider of Group 2 and 3 unmanned aircraft systems (UAS) and services, have entered into a definitive agreement under which AeroVironment will acquire Arcturus UAV for a total purchase price of \$405M, including \$355M in cash and \$50M in AeroVironment stock. The transaction was unanimously approved by the AeroVironment and Arcturus UAV Boards of Directors.

In Australia the Queensland Government has issued a tender for the provision of reconnaissance drones fitted with cameras for tracking and monitoring of heavy road vehicles.

The tender is on the QTenders website and has an expiry deadline of February 5, 2021. Details can be found at <https://qtenders.hpw.qld.gov.au/qtenders>

In 2020, the German air navigation service provider DFS Deutsche Flugsicherung GmbH, (DFS), a State-owned company logged fewer reports of interference caused by drones at airports in Germany than in previous years. More than half of these occurrences, however, led to traffic disruptions.

In total, 92 drone-related occurrences were reported in German airspace in 2020, which was lower than in previous years (2019: 125; 2018: 158). Proportionally, however, the volume of air traffic, which came in 56% below the previous year's level, declined more than the number of such occurrences. Consequently, even with reduced traffic volumes resulting from the pandemic, drones had a massive impact on flight op-

erations.

The majority of drone-related occurrences took place at Frankfurt Airport (24 reports), followed by Hamburg Airport (10) and Berlin Tegel Airport (8). With regard to the incidents at Frankfurt Airport, the police had grounds to believe that they were planned disruptive actions and initiated criminal proceedings against persons unknown. Under German law, unauthorised drone flights in the vicinity of airports are considered as dangerous interference in air traffic and are punishable with imprisonment for up to 10 years in Germany.

In 2020, DFS carried out a comprehensive study of drone detection systems. Between August and November, drone detection systems from six vendors were put to the test at the airports of Frankfurt and Munich. For 600 flights with various types of drones, DFS investigated the effective use of these drone detection systems at large-scale airports in live operations. The findings of this project, which is unique worldwide, will serve as the basis for a future tender for a drone detection system. Successful drone defence by regulatory and police authorities will only be possible with reliable drone detection. www.dfs.de

PEOPLE

In the wake of the old year, it emerged that the primary figure in current UK police aviation, Ollie Dismore, is leaving NPAS in his 9th year. It would appear that his role as Director of operations is now being sidelined by the management in Wakefield. The role is a “casualty of simply doing things differently, going forward.” He leaves in mid-February.

His replacement is expected to be the former Chief Pilot who became Head of Flight Operations, under the previous management. He is ten years younger and no longer flies.

It is understood that six ‘management’ heads have rolled and just removing them has saved a significant sum, £500,000. Among the others to go has been Jenny Walker the Head of Communications & Marketing. Two others in her PR department will remain in post. [Linked In/PAR]

Ed: Ollie has been at the centre of NPAS from the beginning. A former ASW Sea King and Lynx pilot with the Royal Navy for 21 years, he left the RN in 1997 and became a jobbing pilot in industry flying, among other tasks the police mission. That was a story in itself. Over the years his status grew and in 2006 he slipped into the role of advisor to the police chiefs as the Home Office Aviation Advisor and National Police Aviation Advisor responsible for capital funding and the compilation of the 2009 National Police Air Operations Strategy, ultimately NPAS. There was insufficient funding for the still evolving NPAS to employ him so in 2010 he returned to industry and responsibility for the Eurocopter Group support to bidders for future UK helicopter search and rescue.

The creation of NPAS in 2012 saw him extracted from employment by a reluctant Eurocopter into the Director of Operations for NPAS as the only person with a deep technical and practical grounding in how to run police aviation.

There were mistakes made – the fixed wing for a start – but perhaps the mistakes were built upon knowledge rather than pure ignorance.

I believe it's fair to say that the original esteem he was held in by the [West Yorkshire] police did not survive all the changes in senior staff that have taken place in recent years. There are apparently those who do not have a solid aviation background who disregard any advice based on experience from any quarter. With the reported toxic atmosphere in Wakefield, I doubt whether he had been his own man for a very long time.

In recent years Ollie carried the title but from 2019 it has included the additional reference to his loan to the NPCC Aviation Programme or that of Drone operations. Effectively he has been ‘elsewhere’, and we can see that both the HMICFRS report and the NPCC plans have been pretty much ignored. It is pretty clear that the beleaguered management at Wakefield have been listening to no-one but themselves for the last couple of years. Indeed, with COVID-19 on the scene, the Strategic Board meetings have been very much a West Yorkshire enclave with few outsiders travelling to Wakefield.

Jenny Walker has been in post for 5 years. A Chartered Marketer and Fellow of the Chartered Institute of Marketing (CIM) with 20 years of experience of communications, marketing and media management she was undoubtedly over-qualified for the role. I understand that back in October 2015 she only expected it to be a temporary job. Neither she nor her team ever engaged to sell NPAS to arguably the main protagonist NPAS faced, PAN. Perhaps she was not allowed to.

Line of leadership

There has been an ongoing turmoil in in the upper echelons of the police involved with the setting up and running of NPAS, no wonder if the other ranks also a tendency had to be dysfunctional at times. Something to do with leadership.



The partial architect of the organisation was the police chiefs Aviation Lead Sir Bernard Hogan Howe, he took little part in the subsequent set up, the launch was left to his successor Chief Constable Alex Marshall in 2012 but he was already distracted in another direction - closing down Bramshill College and taking on the role of chief executive of the new national College of Policing. The launch and the announcement of his departure took place in the same month.

Ch. Superintendent Ian Whitehouse started off as the Designated Officer only to fall foul of his private life and he was obliged to retire much earlier than intended.

He was replaced by Ch. Superintendent Tyron Joyce who fell foul of staff complaints and was replaced by the current incumbent, Scott Bissett. Joyce's misdemeanours were reflected by the Chief Constable of Cheshire, Simon Byrne, who was the latest NPCC Lead on aviation. Allegations of 'bullying' seem to permeate the organisation. Both men went off in different directions, nominally under a cloud, but their careers survived. Byrne is currently the Chief of the Police Service of Northern Ireland.

Overall the past has demonstrated that the persons designated NPCC Aviation Lead rarely become anything more than vaguely knowledgeable on the subject before moving on to something else [including the House of Lords, suspension or retirement].

Even those that have "gone" continued to re-emerge - both Ian Whitehouse and Richard Watson who retired from being Director of Ground Operations [2012-2015] to sell cakes were taken on as consultants although neither has a deep knowledge of aircraft operations.

Honours

Midlands Air Ambulance Charity's former chairman, Brendan Connor from Solihull, has been named in the Queen's New Year's Honours List with the Order of the British Empire (OBE).

An OBE is presented to individuals in recognition of their contributions to the arts and sciences, work with charitable and welfare organisations, and public service outside the civil service.

His outstanding contribution to the community most notably included his chairmanship of Midlands Air Ambulance Charity, a position he held for seven years, until 2018. During his tenure the charity became independent from the NHS, purchased two new state of the art Eurocopter helicopters and raised over £10M annually to fund the service from its three airbases at RAF Cosford in Shropshire, Strensham in Worcestershire and Tatenhill in Staffordshire. Brendan Connor was previously deputy chairman of the RAF Museum and chairman of Coventry Schools Foundation. He is currently a serving magistrate on the Birmingham Bench, Deputy Lieutenant of the West Midlands, independent member of West Midlands Strategic Policing and Crime Board and a member of the Armed Forces Pay Review Board.

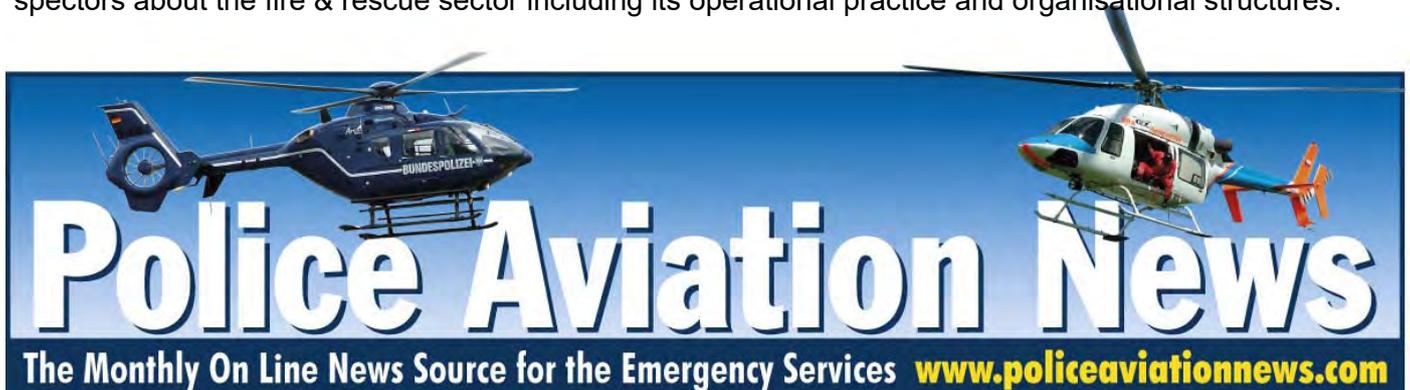


A co-founder of the Great Western Air Ambulance Service, Philip Cowburn, has been awarded a Member of the British Empire (MBE) in the New Year Honours. He also works as a consultant in emergency medicine for the South Western Ambulance Service and at Bristol hospitals.

The 53-year-old said the air ambulance service had gone from "strength to strength" since it was launched in 2007.

Job corner

Her Majesty's Inspectorate of Constabulary and Fire & Rescue Services (HMICFRS) is looking for a suitable person to apply to fill the post of Chief of Staff. The HMICFRS independently inspects police forces and fire & rescue services in the public interest. The fire & rescue services inspection will focus on the efficiency and effectiveness of fire & rescue services across England, as well as how well they look after their people. Applicants meeting the skill and qualification requirements for this position are invited to apply. A Chief of Staff is at the heart of the inspection programme, instrumental in supporting and advising the Inspectors about the fire & rescue sector including its operational practice and organisational structures.



LETTER TO THE EDITOR

Dear Editor,

First, sincere congratulations on your achievements as editor and publisher of Police Aviation News. Twenty-five years and 300 editions are something to be very proud of - very well done!

Setting aside the view of former police aviator David Howell who may have a personal point to make ('A view from the hangar', January 2021), many will agree that the National Police Air Service for England and Wales (NPAS) is no longer fit for purpose. The highly critical report by Her Majesty's Inspector of Constabulary, '*Planes, drones and helicopters*' published in November 2017, together with a great deal of anecdotal evidence, makes this blindingly obvious to even the most casual observer. The truth is that NPAS, when compared to other organisations that provide a similar air support service in the UK, was set to fail from the day it was formed in October 2012.

For example, the very successful air ambulance service in the UK is based on a territorial model, the same model that is used by the 43 police forces in England and Wales. Therefore, to superimpose a national police air support organisation, with one control room at Wakefield, on top of 43 individual police forces, each with its own control room, was never going to work, and it hasn't! The reduction in the number of aircraft and the number of bases from around 30 before NPAS was formed in 2012 to just 14 today simply compounds the problem. Response times are often so poor that the police officer on the ground, as well as his, or her chief constable, will arrive at the same conclusion; "*What's the point of air support if it's not there when you need it?*"

Another good example of an organisation that works well is Her Majesty's Coastguard which also adheres to the territorial model with 10 Regions, each with its own Operations Centre to coordinate the activity of 'local' SAR helicopters and 'local' RNLI lifeboats, as well as the 352 volunteer teams that make up the Coastguard Rescue Service.

With regard to the P68R, I must disagree with David Howell. In my view, heads should definitely roll for squandering very large amounts of public money, many thousands if not millions of pounds! First, who wrote the specification for a high wing aeroplane with piston engines and retractable landing gear, thus excluding some much more capable aircraft including the Diamond DA42 Guardian, now developed into the DA62 'Super Guardian', and the iconic BN Islander which has been upgraded with a 'glass cockpit' and more efficient 'scimitar' propellers; a British aircraft that has been in service for over 50 years and may still be in service for the next 50 years!

Yes, of course I'm biased, but the BN Islander that belonged to the former North East Air Support Unit and based at Teesside proved to be just as effective, as well as cheaper to run, as the helicopter based 'up the road' at Newcastle. The mantra, when I was the senior pilot at the Teesside base was, '*The same service, at half the price*'. In fact, these two aircraft, one helicopter and one fixed wing, were complimentary and provided the police officers on the ground, from the Scottish Border to the River Tees, with a 'Rolls Royce' service. At that time, the target time, to be on top of an incident in the urban conurbations of Newcastle, Gateshead, Sunderland and Teesside, was just 20 minutes, or less!

Moreover, there was only one aircraft in production with a high wing, piston engines and retractable landing gear when NPAS published their specification, apart from the diminutive Tecnam P2006T which was far too small. This aircraft was, surprise, surprise, the Vulcanair P68R! Who wrote the specification which was so very obviously based on just one aircraft and why were other aircraft, those with a very good track record as police aircraft, particularly the BN Islander, excluded? Also, how was it possible to specify an aircraft that must be capable of flight in known icing conditions, and then order an aircraft that didn't have this capability at the time the order was placed? This incurred yet more expense from the public purse and increases the call for some very close financial scrutiny of NPAS by an independent inspector.

The current hierarchy at NPAS are missing the point, more likely looking for an excuse, if they are now asking individual police forces if they would wish to continue to receive air support with the Vulcanair P68R, an aircraft which, according to the manufacturer's brochure, was designed for private use and pilot training. NPAS has failed, it's broken, and the Home Office should step in and close it down. Individual chief constables should then decide if they wish to have their own air support units and, most importantly, will the benefits justify the costs?

Some police forces may decide that some air support roles, particularly air to ground photography, can be provided with drones. Others may decide that the benefits of air support, speed, height and reach, do in fact justify the cost and they may then decide to cover these costs with a regional air support unit. Should this be the case then the former North East Air Support Unit with two aircraft, one fixed-wing and one helicopter, funded by the Home Office, Cleveland Police, Durham Constabulary and Northumbria Police provides the perfect 'oven ready' model. Fortunately, there are still some of us who can remember how it worked and, most importantly, how good it was!

Yours sincerely,

James A Cowan MBE
Squadron Leader
Royal Air Force (Ret' d)

MOVE ALONG THERE

It is difficult to know where to put all this eccentric NPAS stuff.

A few pages earlier I was reporting that Exeter (Devon & Cornwall of old) were losing their EC145 to London permanently and then even as I tried to take that in the UK Government announced that there is to be an International G7 Meeting to be held in the distant reaches of Cornwall! A pretty place Carbis Bay may be but the next stop west is the Atlantic Ocean and New York. The security may be a bit difficult with the open sea as a neighbour.

All the more reason to need a nice capable EC145 to cover the civil part of the security cordon! In fact, they will undoubtedly need to send two of them to the south west, perhaps with a back-up EC135 or two.

The policing operation to keep world leaders coming to Cornwall for this summer's G7 summit safe and secure will be "a massive challenge" but also an excellent opportunity to showcase the great work of Devon and Cornwall Police.

That's the view of Andy Berry, Chairman of Devon and Cornwall Police Federation, the body representing the thousands of officers charged with protecting Joe Biden, Boris Johnson, Angela Merkel and other world leaders - and their entourages/the world's media - when they come to Cornwall's Carbis Bay, a small coastal resort on the north side of Cornwall. That will still leave Exeter out in the cold, it is way beyond their reach. It appears that air activity may be based at Newquay Airport/RAF St. Mawgan.

Work is already well underway on the logistical challenge of accommodating and transporting the significant number of 'mutual aid' police officers from across the country who will be required to support officers from Devon and Cornwall to properly police the summit from 11 to 13 June. Numbers have not been released but it will be a similar mutual aid policing operation to when the previous meetings – then known as G8 – were held in the UK at Lough Erne, Co Fermanagh, in 2013, and Gleneagles in 2005.



Splish Splash

A police officer destroyed a £64,000 Aeryon SkyRanger R60 drone when he accidentally commanded it to fall from the sky into a pond.

The Sussex police officer, who has not been named, had launched the military grade drone to use its thermal imager to assist in a night-time missing person search.

An Air Accident Investigation Branch (AAIB) report has revealed that an icon he was unfamiliar with appeared on the screen of his tablet computer. The officer tried to erase the symbol with his stylus pen unaware that he was actually switching off the four electric motors.

The drone lost power and plunged 70 feet into a large pond at Maidenbower near Crawley, West Sussex on June 17 last year. No injuries were caused. The officer was suspended from flying and sent for retraining.

Ed: There is nothing so final for a drone than a watery end. When Merseyside lost their far cheaper craft in the River Mersey more than a decade ago the Superiors threw their hands in the air and cancelled the whole project. Are we perhaps in more enlightened times?

It is reported that as a result of this incident an officer is now employed full time to act as a trainer. A further example to show that the empire that is cheap air support via drones is a fallacy.

A sight not required.

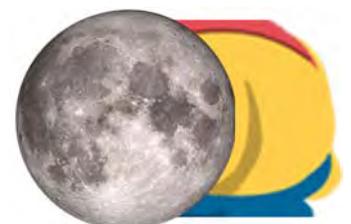
The narrow-minded US emergency services hierarchy are to the fore again. Hard on the heels of the penis flight plan in New York comes a story from Texas that is certainly the equal.

A firefighter who bared his buttocks and "mooned" a San Antonio Police Department Eurocopter EC120 Eagle earlier this year was suspended for 20 days after a disciplinary hearing.

Engineer Carthel T Williams was originally given an indefinite suspension in early November, but the punishment was later shortened as part of a signed release and settlement agreement with San Antonio Fire Department Chief Charles Hood.

The incident took place in late April last year while Williams was on-duty and in full uniform. Pictures were taken and later distributed to other people.

Williams was cited for violating SAFD rules pertaining to conduct and behaviour, negative public image and inappropriate behaviour.



Concorde it isn't.

Supersonic aircraft got a boost from the FAA last month. A new ruling will allow limited testing of Mach 1-plus aircraft over land. Until now US manufacturers were limited to testing over water.

The FAA ruling still prohibits unlimited supersonic flight over US soil, but it does open a path for exemptions for testing the experimental aircraft. The US agency is also hoping to prompt aviation authorities in other countries to move in a similar direction, so that transcontinental supersonic flight could become reality in the next eight years.

The new regulations, which specifically allow for noise testing, make it possible to monitor how well "boomless" cruise technology works over land. The aircraft manufacturers will need to apply for permission for each test.

Communication Perfect Storm

Certain police forces have this strange belief that because 'we are the police' we can simply do as they please and when they decide on something it will simply occur.

Unfortunately, those same organisations are the same ones that compound that with an attitude that the people 'on the shopfloor' don't need to know because they are not worthy of that information.

Those on the front line are then faced with questions from the public to which they do not have the answers. It is plain embarrassing to have to read material in the public domain [PAN] and then seek information from those in lofty eyries (the "Superiors") before belatedly answering a question that they should have known all the time.

If we once again go back to joining the dots on many of these issues you come back to leaders being poorly selected and are therefore ineffective as a consequence and until they see their own dysfunctions this will continue to happen.

The deserving poor

The Vulcan to the Sky Trust has launched yet another fundraising appeal, this time for £4M to help meet the total cost of a new hangar to house Vulcan B.2 G-VLCN/XH558 (grounded in 2015) & Canberra B.6 G-CTTS/WK163 and possibly a few other aircraft. The Trust is also currently in negotiation to secure a £2.4M mortgage to help build the hangar.

EVENTS ON THE MOVE

As readers are probably aware Police Aviation Research runs PAN and the **PAvCon Europe** police aviation conference. Already the 2020 PAvCon Europe has been cancelled and there are no plans in place to run a PAvCon 2021.

If the situation changes significantly, allowing reasonably free international travel, the decision will be reassessed and perhaps a short notice event put in place in a venue we have been to before – assuming that the selected venue can accommodate the event.

Until that time, and it will be at least 3 months, PAN expects that no events requiring an international audience will take place. It will however carry information and advertising [at no cost to the organisers] for any event they propose.

Personally, I do not expect anything to happen before June and will not be surprised if it is the autumn before stuff will begin to happen. I just hope I am wrong. The reports surrounding the supply of the COVID19 vaccine across Europe tend to suggest that the roll out of 'the jab' in some areas will stretch in 2022.

Responding to an increasing number of voices from across the vertical take-off and landing (VTOL) industry, Helicopter Association International (HAI) made the difficult decision to cancel **HAI HELI-EXPO 2021** on the day Joe Biden took office [January 20].

HAI will not reschedule this year's event. Instead, the association will redirect its efforts to producing HAI HELI-EXPO 2022, which will be held on March 7–10 in Dallas, Texas, a city that has traditionally been a hub of rotorcraft operations.

HAI HELI-EXPO® has long served as a venue where the international VTOL industry annually gathers—to connect, learn, and conduct \$2 billion in business. Only two weeks earlier ago they were blowing the trumpets and banging the drums about how they were going to run Heli-Expo this year come hell or high water.

It has been obvious since late last year that it is unlikely that anything international is going to work in the first quarter and based on the Paris Air Show cancellation decision [in the first week of December] that the first half of 2021 is debatable [at best]. We could yet have another ten months of this as far as international travel is concerned.

The people who cancelled Heli-Expo sit in the board rooms of Airbus, Bell, Robinson and Sikorsky not Virginia. They simply made the whole plan unworkable regardless of whether the washrooms were going to be expertly cleaned by the people in the Ernest N. Morial Convention Center.



On the same day the **Dubai Helishow** opened its doors to its biannual event. Except of course that they did not. The event was virtual, and yet late last year they too were stating that the event was to run normally. There is indeed a hunger for events, but they all need to reflect the new reality that is driven by the pandemic.

In mid-December, the people who operate the GA air show at Friedrichshafen and the European Rotors helicopter show in Cologne announced revised dates for the 2021 AERO Friedrichshafen event and others they hope to arrange.

After a one-year hiatus due to the coronavirus pandemic, the lead show for general aviation was set to be taking place from April 21 to 24, 2021, at the Friedrichshafen Exhibition Center, at Lake Constance.

In mid-December 2020, the AERO team was reporting very good international registration numbers, with some 60% of registered exhibitors coming from abroad. The e-flight-expo is expected to garner special attention in the coming year.

On January 21, the day after Heli-Expo blinked, they blinked too. They moved the April event to July 14 to July 17, 2021, in **Friedrichshafen**. That change may well make it difficult to fit in with the previously announced date for the AERO South Africa. It was given a date of July 8 to 10, 2021, at Wonderboom Airport in Pretoria—and currently where the most threatening strain of COVID19 is coming from.

Further information is available at: www.aero-expo.com ,

In mid-January the same people stated that they are to run an event in China. With **AERO ASIA Zhuhai**, the province of Guangdong will get a second aviation show besides Airshow China. AERO ASIA Zhuhai and Airshow China will take place in alternating years with the first AERO ASIA to be held on 28-31 October 2021 at Zhuhai International Airshow Center. This show is different from Airshow China in market positioning. Messe Friedrichshafen GmbH, Communication is at Neue Messe 1, 88046 Friedrichshafen, Germany +49 7541 708-307

The Heli-Expo and Elite styled events of the past have had a makeover during the COVID-19 downtime and have come out the other end slightly changed. Like all other events the changes are at best tentative. No-one really knows the future with some sources suggesting that the COVID-19 threat will last until the end of 2021.

The new face of the **UK Heli-Expo** will include the Private Flyer brand. Set for 14-15 May 2021 Private Flyer London will be found at the familiar venue of Wycombe Air Park, Buckinghamshire. The next in the series was the 4-5 June 2021 Private Flyer Leeds at Leeds East Airport (the former RAF Church Fenton). That date has been moved later in the calendar from an optimistic March. The third edition of Private Flyer will hopefully take place on 2-3 July 2021 as Private Flyer Dublin at Weston Airport, Dublin

Private Flyer UK/Elite Events are located at Palmers Barn, Station Road, Tring. The organisers team line up has changed with Alex Ayling now backed up by Roxana Ayling and Andrew Rainbird. Contact Roxana the Event Manager on +44 (0)203 740 6086 roxana@theeliteevents.com

Alex Ayling, Show Director explained; "In what has been a tough year for all events, we are trying to still navigate through and offer our customers and visitors some level of assurances for dates next year. What is clear from updates from the UK Government is that our original show dates for Leeds in March looked increasingly less likely.

London-based event **Helitech Expo** has changed its dates from March to May 26/27, 2021, remaining at the ExCel centre in London. Time will tell whether that date is also too soon.

Organisers Prysm Group have advised that the move is "due to ongoing restrictions on large scale business events and changing government guidelines".

However, industry observers believe that a further significant reason is the March dates were very badly thought out, less than two weeks ahead of subsequently cancelled HAI Heli-Expo in New Orleans. Both exhibitors and visitors alike would only likely visit one of two closely set events, and the potential up-side of the significantly larger Heli-Expo would much more likely lure anyone with the pandemic in mind. Travellers to Heli-Expo would still be in quarantine when Helitech opened.

Added to the move is that Prysm have also lowered their aspirations of the event and quietly renamed it from "Helitech World Expo" to a less aspirational "Helitech Expo." (HeliHub/PAR)

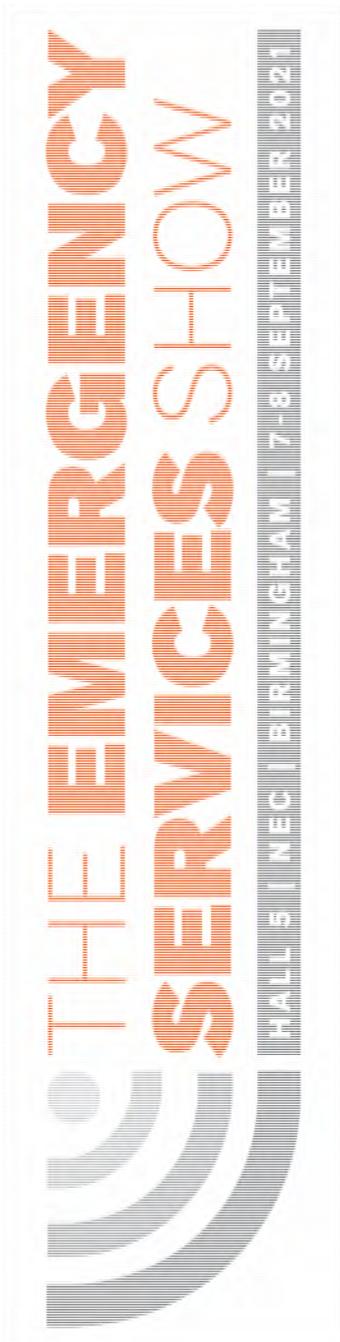
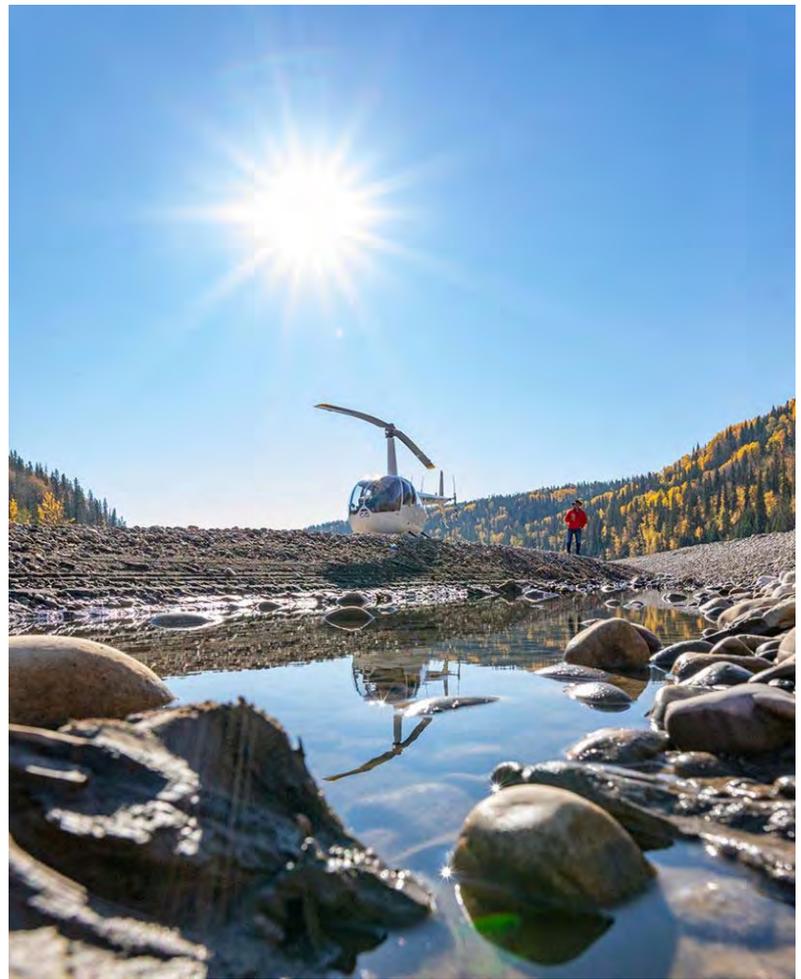
15-17 Jun '21. ROTORTECH 2021. Venue is the Royal International Convention Centre at the Showgrounds in Brisbane. Tel: +61 3 5282 0500 Email: expo@amda.com.au

www.rotortech.com.au

Ed: All in all the Events industry is in a mess and showing themselves up as not taking on board the signs of what may or may not be possible. There is clear evidence of indecisive management when faced with difficult conditions. Several events faced with pressure on their original dates simply moved the event a month later only to find that they had to move the event again. Who can blame them? These are unusual times. Notwithstanding that they need to get it right more often to save alienating their exhibitors.

Marilyn Grubb Grande Prairie, Alberta, Canada

On the way home from a helicopter ride in the Canadian Rockies to celebrate their 50th wedding anniversary, their pilot landed on a dry riverbed so Marilyn Grubb and her husband could share a champagne toast. But Marilyn took away more than just memories from that special day. [Caption by HAI Rotor]



Julien Botella Le Tholonet, France

Professional photographer Julien Botella captured this heavy-lift Eurocopter AS332—and a crew of linemen—at work performing cable repairs for Réseau de Transport d'Électricité (RTE), which owns and operates the French high-voltage transmission system. [Caption by HAI Rotor]

