

# Police Aviation News

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## INTO THE NIGHT

*EAST ANGLIA LAUNCH 24/7*



**UK NPAS turn to industry  
for their future operations**

# EDITORIAL

In early June West Yorkshire Police finally threw in the towel and declared that they were to relinquish operating the National Police Air Service in England and Wales. The announcement was made by the newly elected Mayor of West Yorkshire, and former soap actress, Tracy Brabin. The writing had been on the wall a long time, but it seems it took a strong character actor to bring it about. It was long overdue.

Blame? Yes, there have been lots of suggestions where blame might lie, but it seems that it was simply a case of a failure of those in overall charge to take effective control that was the main cause for the long-drawn-out death of the project. It is difficult to point at one person for blame, it can be spread across the genders, there have been men and women, Home Secretary's, Chief Constables, PCC's and a whole host of others that have played a part in not putting sense and money where it needed to be, to make NPAS work. It was left to Ms Brabin, the new owner of the problem, she declared enough time had been wasted.

It would be interesting to know who wrote the press release script for her. Certainly, I have no expectation that Ms Brabin would be able to instantly understand the problem that has taken a decade to fester. No one in Wakefield has had a clue for years so why now? Her announcement speaks of a different way of operating the service. Is that not what they have been striving to do from the start?

Heads should roll of course, but they are unlikely to. Who is to blame that they have not already seen fit to remove from the operation? It leaves them with ever fewer characters with an in depth knowledge of aviation and how they might get it right; it also makes the organisation even more top heavy than they were. If the normal processes apply we can expect to see that promotions are on the way for the former leaders of NPAS. It all comes across as an ego trip for the former Police and Crime Commissioner and senior police people, a path to the next rank, or two. And even as they put up the shutters there is no real NPAS plan, they decided to let industry work that out for itself. How typical.

Dismantling something that was built up over a long period in less than a year is probably impossible. Even if it was ultimately flawed, NPAS was planned over years and commissioned over even more years. The new arrangement cannot just take weeks. Shambles will beget shambles, there is no plan, and no certainty industry will take up this poisoned chalice, then who will this mess be returned to? All that was in place before is gone, sacked, disillusioned, moved on and even the structures sold off. To the as yet unidentified new operator are to be consigned a collection of worn-out helicopters, a handful of relatively new but unloved fixed wing and some large hangars.

Regardless of the outcome, everything about NPAS is scheduled to remain in limbo for the best part of a year. Decision making ceased long before the towel was thrown in.

*Bryn Elliott*

# LAW ENFORCEMENT

## ***“The Networking Continues”***

**INTERNATIONAL:** On June 7 the PAvCon series of police aviation conferences stepped into a new era with the holding of *PAvCon Europe 2021 Virtual*.

For the brand that has been serving police aviation since 2009 this was a new venture and strongly supported by the Frederick, USA, based *Airborne Public Safety Association [APSA]*. For all concerned this was new territory brought about by the continued global travel restrictions.

The audience was truly international and many virtual attendees, including a significant presence from the USA, were obliged to undertake their viewing at very unsocial hours. That goes for the APSA technical support team and advisors who ran the event. Over 106 were signed up for the event and throughout a steady number around 45 from 24 countries were listening in and participating with questions and pertinent comments. Some of those signed up made use of the after-event streaming service.

**COVER IMAGE:** From the start of July the East Anglia Air Ambulance has commenced 24/7 Night Flying. The gap between 1:30 am and 7am where there has been no helicopter emergency medical service (HEMS) coverage in the region will now be closed, as EAAA becomes the first air ambulance in the East of England to fly 24 hours a

#ay. Image for EAAA by Chris Taylor Photography

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There were five topics, and they came from a variety of locations. A two-nation presentation on IR Airborne Tactics necessarily came from a hotel that allowed the presenters from Belgium and the Netherlands to “meet in the middle.” The video rich UAV Tactics and Operations also came from the Netherlands and that was followed by Psychometrics and Aviation Safety from the middle of England. Safety remained the subject for the only presentation from the USA. The final presentation from Spain was Rescue Missions with the Wrong Type of Helicopter.

Thank you to the presenters Harald Brink, Luc Stremersch, Haiko Kroeze, David Howell, Bryan Smith and Joseba Mendizabal, the APSA support team Dan Schwarzbach and Don Roby, and the Chairman, John Osmond.

For many of us it was a new experience – talking to an inert monitor while sitting in your home office takes some getting used to – but it was a weird kind of fun making mistakes together. I suspect that this will not be the last of its kind, but we hope to be back to normal next year in Austria.

There have been lots of good reports on the PAVCon Europe format. A number of the comments focused on the ‘all in one day format.’ The six hours in one day is particularly attractive to air operations faced with a limited funding stream.

Specifically, the air unit of the Irish Garda commented favourably on the ease of access to the programme and its watch later format. The Garda Síochána has 14,000 sworn members serving a population of just over 5 million. Although Ireland is significantly smaller than the UK that still means that the people and the Garda are thinly spread. The logistics of simply finding new staff for the air unit based in the east of the country are significant. Not everyone is interested in joining and many potential volunteers live too far away. If there is a staff shortage in a small unit, being able to spare individuals to take off 3-4 days to attend even the best of events is near impossible.

The problem is international, the Irish Garda may have been at the front of the comments relating to PAVCon Europe Virtual but PAN is aware of similar comments feeding into the APSA HQ in Frederick, Maryland. APSA has also been obliged to go virtual and numerous financially pressed air operations are plugging into the live and recorded events and classes. The Pandemic has brought to the forefront, the need to perhaps provide both options into the future.

Thank you to the four industry sponsors of the event, your part helped make the format possible. They were *Bell*, *NAASCO*, *Leonardo* and *Priority One Air Rescue*. In addition thanks are extended to other aviation publication that promoted the event including *Air Med & Rescue*.



At the moment the USA is throwing off the shackles created by COVID 19 and opening up so that this year the APSCON will take place. The event is important as it is – like PAVCon – a chance to press flesh and Network with other units and nations with alternative views. The number of nations able to make that connection this year will be severely restricted by travel restrictions. Even a virtual event helps but face to face does matter. Where APSA take running the virtual programme as well as the “on the road” events will be worth watching. Don Roby who steered us through this event is getting quite slick at the process having learned all the pitfalls months ago! Thank you Don and thank you APSA.



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## INTERNATIONAL

Often technology defeats policing. Too complex and difficult to understand, all too often police chiefs buy into the latest gizmo because they think they ought to. How often have there been critical reports on performance and capability. Systems that have been bought that have underperformed and resulted in people being sent to prison because the system got the facts wrong? Just occasionally they get it right and it looks good for everyone.

The US Federal Bureau of Investigation (FBI), the Dutch National Police (Politie), and the Swedish Police Authority (Polisen), in cooperation with the US Drug Enforcement Administration (DEA) and 16 other countries have carried out with the support of Europol one of the largest and most sophisticated law enforcement operations to date in the fight against encrypted criminal activities.

Over the last two years, the US Federal Bureau of Investigation have worked with the Australian Federal Police, to develop and covertly operate an encrypted device company, called ANOM, which grew to service more than 12 000 encrypted devices to over 300 criminal syndicates operating in more than 100 countries. Criminal networks have a huge demand for encrypted communication platforms to facilitate their criminal activities. Occasionally they lost an existing system and were obliged to look for a replacement. ANOM had been created and appeared to have been serving elements of the criminal fraternity safely and securely for some time when the wider criminal elements took up with it.

The new platform targeted global organised crime, drug trafficking, and money laundering organisations, and offered an encrypted device with features sought by the organised crime networks. The law enforcement agencies exploited the intelligence from the 27 million messages obtained and reviewed them over 18 months while ANOM's criminal users discussed their criminal activities.

The operation is one of the most sophisticated law enforcement operations to date and led to the identification of a wide range of criminal operations using the encrypted system.

The finale of the sting operation was a series of raids and arrests over a few days in 16 countries. As a result of some 700 house searches there were 800 arrests and the seizure of over \$48M in various currencies, 38 tons of drugs (cocaine, cannabis and synthetic), 250 firearms and 55 vehicles.

The following countries participated in the international coalition: Australia, Austria, Canada, Denmark, Estonia, Finland, Germany, Hungary, Lithuania, New Zealand, the Netherlands, Norway, Sweden, the United Kingdom incl. Scotland, and the United States. [Border Security Report]

## SPAIN

**CATALAN:** The Department of the Interior in Barcelona has awarded a contract to Eliance Helicopter Global Services, S. L. in Sabadell, Barcelona to supply helicopters to the policia de la Generalitat-Mozos de Escuadra.

The Mossos d'Esquadra are a police force of the Spanish state placed under the authority of the Generalitat de Catalunya, within the territory of the autonomous community of Catalonia, and in accordance with the principles of the Spanish constitution and all legal provisions therefrom derived, such as the Statute of Autonomy of Catalonia and the laws therefrom derived.

In the recent past they have operated examples of the Airbus AS355N and EC135

## UKRAINE

**POLICE:** Deliveries of eight five-blade H145 helicopters to the Ukraine Police have started, with aircraft 03 arriving on June 17 and aircraft 04 on June 22. A further six are due, sources suggest that the original delivery dates have slipped, possibly due to the pandemic. The original pair of four-blade H145s have been in the Ukraine for some months and have been used for pilot training and familiarisation of the roles they will be assigned. This includes the Air Ambulance Technology GmbH medical fit. [Parapex Media]



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## UNITED KINGDOM

**NATIONAL:** As the International G7 meeting in Cornwall opened NPAS quietly announced to its staff members that they would be giving up operating national police air operations in one year's time.

It was some days later – on June 17 - that the news was officially released by the office of the Mayor of West Yorkshire, Tracy Brabin. After her election in May the helicopters and maintenance contracts passed to the mayor from the West Yorkshire's Police and Crime Commissioner.

Ms Brabin said that the "conflicting pressures of diminishing resources, new technology and the ever-changing requirements of policing in England and Wales have become too great to dismiss".

Her rightly made and bold decision followed a personal meeting with the Minister of State for Policing and Crime Kit Malthouse, where the service's future was discussed.

The Mayor of West Yorkshire said:

"With my election I have assumed the Police and Crime Commissioner responsibilities as Lead Local Policing Body for the National Police Air Service.

"At times, leadership of NPAS has been a herculean effort by all involved and I pay tribute to all the staff who do a great job day-in-day out in providing this specialist key service for policing and our communities.

"Since the outset, when NPAS was first established under a West Yorkshire lead force model on behalf of policing in England and Wales, it has always been anticipated that there would be a change in the way that the service is delivered, and over the last few years there has been much work and time spent on reviewing the governance and leadership of police aviation.

"Progress has been slow due to a number of reasons, and I believe now is the right time to take stock of the situation and look towards a different way of operating the service.

"Although NPAS is a unique national collaboration with a strong brand and has evolved over many years during difficult times in delivering a truly 24/7 borderless service, the conflicting pressures of diminishing resources, new technology and the ever-changing requirements of policing in England & Wales nearly 10 years on have become too great to dismiss.

"It is against this backdrop that I have now provided the required 12 months' notice, to cease the current role that West Yorkshire plays as the lead local policing body.

"I know there is already an emerging consensus among Police and Crime Commissioners (PCCs) for a new delivery model to be established and this is a view that I also share.

"If this is to be achieved, however, the Home Office must also play a key role in helping to jointly secure a

sustainable solution for the future of police air support in tandem with any proposed governance changes.

“While we arrive at a position where we can hand over to a new delivery model and structure, West Yorkshire Police will continue to deliver NPAS to the same high standards in supporting policing and helping to keep our communities safe throughout England & Wales.”

On Jun 23, again without fanfare, West Yorkshire Police posted a prior information tender notice document requesting the “Provision of Police Aviation Services including a Fleet Replacement Programme”.

The eight-page initial document places the whole problem they had been grappling with for years at the feet of industry. The closing deadline for industry to register their interest by July 6, no rush then.

The plan, as far as it extends, is to acquire aircraft for London and perhaps seven others for the rest of the country. The latter is a massive cut in resources across the country and will see yet more bases closed. There is no mention of the four fixed wing P68R in the text. That the existing fleet is additional to the ‘seven’ can be assumed but it is not clearly stated.

The initial tender document can be read at: - [Provision of Police Aviation Services](#)

*Editor: What kind of madness is this? The decision was apparently made by the Strategic Board at a recent meeting. It is doubtful that the disparate group of thirty or so members could make such a decision. It would be a first for them, they have decided nothing significant in years. The final decision certainly lies with Tracey Brabin – she is the only new person on the scene with an apparent strength of character to do anything even if it is nothing.*

*With less than 49 weeks of the ‘year’ remaining – it is remarkable how soon the days, weeks and months click off – just who might they be thinking will run the wreck? Who will provide the AOC for elderly aircraft that will need to be individually signed over to a new owner? Who will finance this fleet of perhaps ten airframes (and when)?*

*If UK police aviation is to survive, perhaps it will indeed be industry attracted by thoughts of lucrative contracts, but it is going to cost a great deal and there is no certainty that the market will want to be saddled with an underfunded mess mired in meddling civil servants who do not know what they are doing.*

*The whole premise of NPAS was to save money, handing the problem to industry will not in any way meet that aim. This will undoubtedly cost far more than the original pre-NPAS budget that supplied 30 airframes. Faced with a post-pandemic economy the UK government may simply not be able to meet the price required for revitalising police aviation.*

*Perhaps it will revert to the Home Office? Well, there used to be a Home Office Advisor to the Home Office, and I have known a few in my time. They had a reasonable amount of expertise and clout to give a clear direction of travel to a pliable police aviation management. Fifteen years ago, the late Max Kenworthy was a fierce character who was his own man. The last in the line was Ollie Dismore but the NPJA dismantled the post a long time before NPAS got started, so there was a needless and destructive void there before he took up a similar post as an employee of West Yorkshire Police (where the corporate thought processes ensured he was not his own man).*

*How about the National Police Chiefs Council (NPCC) – they put forward the idea of NPAS and continue to have a senior rank assigned to overseeing police aviation. Unfortunately, none of them have any experience, it is just a paper chase title, not someone able to hold an AOC.*

*Then there is the group they set up who were looking into air support rescue ideas for the NPCC. They asked industry how interested they were in taking over last year. That group of experts in police air operations was dismantled, their ideas mostly rejected by a police service that is only good enough to say no to every potential idea. Put a name forward and six people will veto them – the main negative being that they are associated with the wrong force or organisation no matter if they could do the job. It is not supposed to be a popularity contest, this is supposed to be real life – as long as there is expertise.*

*Most of the background negativity of NPAS has been inter-force rivalry. West Yorkshire against the rest. I have mentioned before about the dismantling of perfectly adequate original facilities at the cost of spending the money that might have bought aircraft.*

*Another illustration of inter-force rivalry? I understand that part of the reason that The Met did not get of-*



EC145 ©Commin



EC135 ©Commin



P68R ©Commin

ferred lead on NPAS was that the forces surrounding London would not countenance it. In the case of Essex Police this unfathomable bias dates back to the Met arresting the Chief Constable of Southend on Sea Police. And that force was incorporated into Essex in 1969! Of those in service today, no one actually remembers the reason why, it is just there. History.

We are clearly facing a Doomsday Option. The Met look after themselves and no-one takes over the rest. So, we can only hope that industry will be interested in running NPAS as well as London (that will probably be a separate element in the tender document) and that the government can afford the price. I guess London will work for industry if the police can stop interfering long enough for them to get going. It may be an interesting journey for a journalist, but it is unlikely to be positive for those directly involved in UK police aviation.

Meanwhile there was the G7 to police. Perhaps fortunately it was not an event left to the police. The skies were full of aviation assets but at times most of them were not British owned. Indeed, the entourage brought by one person - President Biden - outnumbered the lot. The British Government, many ministers, the Head of State [Queen Elizabeth II, also by far the richest], the heir apparent [Charles] and his heir apparent and many others all turned up in far less resources [and at far less cost]. The London based EC145s G-MPSB and DCPB and a pair of RAF Puma helicopters were to hand for escort duties for the Biden Sikorsky helicopter at RAF Northolt near London, but other resources operated in the West Country.



True to type though there was a rigid air exclusion zone of the type associated with the needs of the US President but none of it related to the British contingent. It was all event related. Even the police drone presence appears to have been focussed on the detection and deterrence of rogue drones.

The main police aviation resource was a single example of the Vulcanair P.68R. The diminutive observation twin, G-POLW, callsign UKP154, was in the air on back-to-back five-hour sorties operating from the airport at Newquay (St. Mawgan) and flying at relatively low level along the length and breadth of Cornwall from Plymouth to Lands' End. This was operating as a surveillance tool while providing a visual deterrent.



Not so visible even in the clear blue skies over Cornwall were the military observation assets flying top cover in a more secret strategic role.

It would seem, from a security point of view, that everything went according to plan. The RAF provided a couple of Typhoon fighters, supported by an Airbus Voyager tanker. The fighters spent most of their time circling interminably offshore as they hooked up to the tanker to keep themselves in the air.

Other air assets included RAF Chinook's the HM Coastguard King Air patrol aircraft, together with AW189 SAR helicopters. The show biz elements were provided by the Red Arrows aerobatic team.

At sea, the 'ring of steel' was provided by the Royal Navy with no sign of a Border Force far too busy working out how to stop migrant traffic across the English Channel. The large aircraft carrier, HMS Prince of Wales made a brief appearance, but the main force consisted of the Type 23 frigate, HMS Northumberland with two River Class offshore patrol boats, HMS Tamar and HMS Tyne. The inner protective ring,







Rendezvous at RAF Northolt. The police EC145s meet with RAF Puma to escort President Biden to Cornwall. ©Twitter

more plastic (GRP) than steel, was provided by the Archer class patrol/training boats, HMS Blazer, with Exploit, Ranger and Smiter from the University Royal Navy Training Units at Southampton, Birmingham, Sussex and Oxford; all on station in St Ives Bay. Additional units included the local RNLI lifeboats and a police rigid inflatable.

The resources have now dispersed and no doubt some maintenance schedules are being massaged to get the over stretched resources back into a more normal availability schedule.

Social media images of the police only emerged after the event.

*Ed: None of this is public domain of course, it is based on flights noted and I have little doubt many sorties were missed by my intelligence. The NPAS helicopters were not all too evident, there were reports of them being in the area, but none specifically identified the usual London EC145s. Most of the day-to-day activities clearly fell to the fixed wing, these were better suited to the duration mission.*

*With NPAS having apparently already washed their hands of the job in hand the focus on undertaking the G7 task with the correct tool might be seen as something of a belated miracle. However, the resource remains hampered by not having enough pilots, running a P68R continuously over G7 for a week will use up both pilots and airframe hours. They probably spent the rest of the month playing catch up. Nothing unique about that. If it had been a Met Police helicopter operation the unit would also be stood down days before and after to achieve event availability.*



A bit of your own medicine perhaps? London police famously leave "I've met the Met" stickers wherever they go. A Cornish pasty seller has taken retribution! ©Twitter

# New helicopter project in the pipeline?

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LONDON: Even as NPAS were announcing that they were to give up air policing a letter was sent to the Metropolitan Police Commissioner, Cressida Dick, appealing for her to reconsider the decision to relocate police helicopters at Lippitts Hill. The letter was signed by the Leader of Council Cllr Chris Whitbread and chief executive Georgina Blakemore. on behalf of the residents of the Epping Forest District Council (EFDC) area.

The letter highlighted serious concerns and strong opposition regarding the proposed relocation of air-support helicopters from the current base with the National Police Air Service – NPAS – at North Weald Airfield. Plans have emerged for the Metropolitan Police to sever its ties with NPAS and return to a stand-alone facility in the heart of Epping Forest at Lippitts Hill, High Beach.

It is notable that the main objections put forward by the council relate to the environment and the effect on local residents of the return of the helicopters to their base. The base lies within the heart of Epping Forest, a sensitive and delicate natural environment and a conservation area. The delicate eco-system of Epping Forest including special and rare species, plants and fungi is particularly vulnerable to air pollution.

In contrast the NPAS base at North Weald is at a long-established airfield shared with other notable aviation operators including the Herts and Essex Air-Ambulance. The airfield is owned by EFDC, and they have worked in partnership with NPAS to support the construction of a brand-new helicopter facility. NPAS has a long lease with the Council and “will continue to provide air support for other police forces.”

While Lippitts Hill is sparsely populated a handful of new houses have been recently added close to the base and the letter points out that buyers may have believed that the helicopter operations had ceased with no reason to expect a return.

If a historic legacy did not exist, it is almost inconceivable that anyone would consider Lippitts Hill a suitable location for operations. If planning permission was required, EFDC, supported by the Corporation of London, environmental groups, other stakeholders and local residents would almost certainly turn any application down. The request then is on ethical grounds.

The full text of the letter can be read at: <https://www.eppingforestdc.gov.uk/re...-base-opposed/>

*Editor: Lippitts Hill a former 1939-46 anti-aircraft gun site and PoW camp was purchased by the Metropolitan Police for a range of training purposes in 1960. It first operated helicopters from there in 1967 and based others there continuously from 1976. The Air Support Unit was officially formed there from November 1980 and was opposed by a number of local groups in later years. They did not need planning permission to operate and have never rescinded their right to operate from there. The unit only joined NPAS under sufferance in 2015 and reluctantly left Lippitts Hill for North Weald in September 2019 even more reluctantly. Contracts signed with EFDC for the North Weald facility were signed by West Yorkshire Police. Meanwhile the Metropolitan Police have continued to operate and pay EFDC local taxes for Lippitts Hill. All these moves and opinions have been chronicled in Police Aviation News over the last 25 years.*

*More tellingly I believe that the blue unit sign at the gate of Lippitts Hill has never been removed in the intervening period.*

*The expensive facility at North Weald could be a base for the former Essex Police helicopter but it is way too big for one EC135T2.*

*EFDC may be placed in the unenviable position of taking someone (who?) to court to find a group responsible for the “25-year lease” debts of West Yorkshire Police.*



## UNITED STATES

**CALIFORNIA:** It seems that the competitiveness has gone out of the “pot” industry in California. Five years ago, voters approved sales for recreational use of the drug and police targeting of the growth of the crops all but ceased locally.

Now the California Legislature have been obliged to approve a \$100M plan to bolster California's legal marijuana industry, which struggles to compete with the large illicit pot market underway in back yards across the state.

Los Angeles will be the biggest beneficiary of the money, to be provided as grants to cities and counties to help cannabis businesses transition from provisional to regular licenses.

**MINNESOTA:** A new pipeline construction project in Minnesota – the Enbridge Line 3 tar sands pipeline - has led to many US citizens claiming and using their right to civil protest and disobedience. The project is all about diverting waters and it includes areas that are occupied by Native Americans which of course makes it much more abrasive than ‘normal’ protests.

On June 7, a gathering of some 500 people had reportedly taken over parts of the construction site linked arms and chained and locked themselves to construction plant and equipment in a pipeline pump station, north of Park Rapids, to protest. At another site, more than 1,000 people held a ceremony where the new pipeline will cross the Mississippi River, near its headwaters. It is not a protest that that has grown suddenly; local and state law enforcement, coordinating under the aegis of the Northern Lights Task Force, spent many hours preparing for it since late last year. It is fair to suggest that the protest has been received with a furious response by the authorities.



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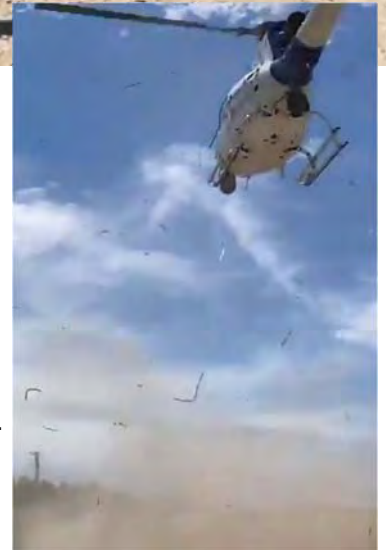
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A low-flying Department of Homeland Security H125 helicopter is seen above protesters demonstrating against the Enbridge Line 3 tar sands pipeline in Park Rapids, Minn., on June 7, 2021. The protesters secured to plant were said to be in the compound in the background ©Sydney Mosier



On June 7 a Department of Homeland Security Border Patrol H125 helicopter descended on the protest at low level and, apparently deliberately, used its downdraught to kick up swirling dry sand, dust and grit that showered demonstrators within an enclosed area. The enclosure is said to be where the protesters locked to machinery were. The assumption by the many onlookers was that it was a deliberate attempt to disperse the crowd and punish those inside the yard.



The action by the helicopter is perceived as a sign of how law enforcement in Minnesota will deploy more than a year's worth of training and preparations against what pipeline opponents have promised will be a summer of resistance. The tactic — which was criticized because of the extremely low flyover — suggests that the multiagency law enforcement coalition overseeing the police response is willing to bend safety standards in order to break up demonstrations.

Pipeline opponents state that neither the helicopter nor authorities on the ground were broadcasting instructions for the pipeline protesters to disperse. Authorities later claimed that the helicopter was being used to make an announcement for demonstrators to disperse, but the announcement was inaudible to many demonstration participants and was certainly not audible on the video footage of the incident posted on the web. Some other sources claimed to have heard unintelligible noises. Hours later other announcements were made and heard.

The task force said the debris was unintentional. It was due to the extremely dry conditions. As soon as helicopter crew realised what was happening, they left the area to ensure no further issues would be caused. Authorities arrested more than 100 people present at the direct-action protest.

In recent years, the tactic of disturbing protesters with low-flying helicopters has brought criticism. The most recent instances being in Washington, D.C., almost exactly a year ago, after George Floyd was killed by police officers in Minnesota, Army UH-72 Lakota helicopters were used to hover at low height. A subsequent review by the Pentagon concluded it was a misuse of military aircraft.

MONTANA: It was reported in December 2020 that Yellowstone County Sheriff in Billings, Montana acquired three military surplus Bell OH-58C helicopters under the Federal 1033 Surplus Program.

The first of the three was reported entering service in June 2021. All three are already 50 years old, with two of them having been ordered in 1970. It is expected that the two operational Bell's will be N311YC (70-15086) and N342YC (71-20667) with a third being used for spares retrieval. [Facebook]



# AIR AMBULANCE

## CANADA

BRITISH COLUMBIA: Ascent Helicopters Ltd., based in Parksville, BC has acquired an Airbus Helicopters H145. The operator serves clients across a variety of industries, including Utilities, Construction, Film and Television, Fire Suppression, Heli-Skiing, Air Ambulance, and Natural Resources.

Ascent is one of only a few Canadian companies that are Transport Canada approved to operate a hoisting program for work access. The existing fleet is based on variants of the Bell Huey (212 and 205A-1+++ ) and 206L4 with an MD902 serving for air ambulance transfer operations.

## FRANCE

AIR AMBULANCE: The SAF Group will be operating three more five-bladed H145s for emergency medical services (EMS) in France. These three aircraft will be based in Grenoble, Valence, and Montpellier. They will complement the three H145s already ordered by SAF in 2018 and 2020, the first of which was delivered recently and will be deployed for EMS missions in Belgium.

SAF is a key operator of EMS in France and Europe. This French company already operates 55 Airbus helicopters. SAF's fleet includes a Super Puma, H135s and H125s. The H145 will bring increased capabilities for the EMS missions.

## GERMANY

DRF: Announced in March of this year DRF Luftrettung has now put the world's first upgraded type H145 helicopter into operation at the base in Villingen-Schwenningen, Germany. This particular machine was retrospectively modified from four to five main rotor blades. Technicians from DRF Luftrettung, together with the manufacturer Airbus Helicopters, performed this first retrofit of a four-bladed H145 at the Airbus site in Donauwörth.



The airframe is refurbished overall and includes a change in the searchlight and medical equipment. The original 2018 airframe plate is now joined by a second one ©Michael Mau



## INDIA

**INTERNATIONAL AID:** Airbus has increased its response to the COVID-19 crisis in India, delivering more than 36 tonnes of additional medical equipment to the Indian Red Cross Society (IRCS) and deploying humanitarian flights to move supplies from abroad as well as within the country.

Airbus is delivering oxygen plants, ventilators, oxygen concentrators, BPAP breathing machines and mobile intensive care units (ICUs), further boosting its individual contribution to the global humanitarian effort to tackle the second wave of COVID-19 infection in India. An A350 test aircraft delivered a part of the consignment comprising oxygen concentrators and ventilators from Airbus' headquarters in Toulouse, France. The remaining materials are sourced from India.

The latest mission is Airbus' second tranche of support to the country. The Company has already contributed with funds to a consolidated response coordinated by the French embassy in India, which included the delivery of eight large oxygen generators, ventilators, electric syringe pumps, anti-bacterial filters and patient circuits as part of a 28-tonne consignment. Much of the equipment has been deployed, and it is helping save hundreds of lives across India.

The latest contribution from Airbus comprises two oxygen generator plants, 250 oxygen concentrators, 30 ventilators, 100 BPAP breathing machines and four ICUs-on-wheels. Airbus is working with the Indian government and the IRCS, the nodal agency for handling of international aid, to ensure the smooth deployment of the materials.

## SPAIN

**MADRID:** A full motion HEMS training simulator, the Simulhems, has been developed in Spain. The patented device based on the shape of an H145 helicopter shell is the latest iteration of the Simulhems. No details are yet available on production and availability of the full motion design. The intention is to launch it fully in September. Meanwhile there have been several leaked features via social media.

A similarly named but less sophisticated device was launched in Spain around eight years ago by INAER. Since then, INAER has been taken over by Babcock, and the latter is no longer closely associated with it. The new device was produced by Eliance a company located at Aeropuerto de Cuatro Vientos near Madrid and initially has only been marketed in a perfunctory manner using social media, the Eliance website not yet featuring it.

The new Eliance Simulhems is more sophisticated than the original and based on the outline of the H145. The interior dimensions mimic the Airbus type of which will allow the HEMS mission team to train efficiently in a safe and CRM-centred environment. The visual appearance of the exterior is arrived at using panels designed with the cooperation of Airbus Helicopters. The standard interior mimics the dimensions of the H145 but also has the ability to be downsized to that of the smaller cabin of the H135.

Both the new simulator and earlier version, which was put into operation in 2012, are designs by Dr Juan Sinisterro of Eliance. It is currently in use, being used to iron out the final design details of the medical role fit under Doctor José I Garrote.

[JIG]



Eliance LinkedIn

# RUSSIA

**BALTIC COAST:** Russian federal aviation regulator Rosaviatsia has withdrawn 35 aircraft from the operating certificate of operator SKOL. The state leasing firm GTLK claims that the carrier has failed to keep up payments for \$45M to cover its diverse fleet.

SKOL, based in Kaliningrad, a Russian province sandwiched between Poland and Lithuania along the Baltic Coast, offers a variety of aerial services including passenger and VIP transport, firefighting and medical evacuation, as well as humanitarian airlift support to the United Nations.

It has 53 aircraft, among them nine fixed-wing types – five Let L-410s, three Cessna 208s and a Yakovlev Yak-40 – plus 44 helicopters, mainly Mil Mi-8s.

According to GTLK, thirty-five of these aircraft, five L-410s and 30 helicopters, were leased to SKOL during the years 2017-19. It is taking legal action to recover debts as well as repossessing aircraft. SKOL has not returned the aircraft voluntarily and the lessor has started the process of seizing them.



The seizure of some of the airframes touches some sensitivities in that they are assigned to air ambulance and rescue services. The Mi-8MTV (RA-22636) seized at Perm and others in the fleet are affected. GTLK says it has informed Russia’s health ministry and local medical associations that the helicopter will no longer be available.

SKOL is still operating using the 18 airframes not affected by the leasing arrangement. It is believed that the operator has over 360 employees including about 240 cockpit and cabin crew.

Rosaviatsia states that there have been accusations from health ministry officials that SKOL set “unreasonably low prices” during competitive bidding for medical aviation work, and that this led to “multiple violations” during implementation of government contracts. Rosaviatsia is co-operating with the health ministry to seek alternative air medical providers. [Flight]



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## UNITED KINGDOM

**LINCS & NOTTS:** Last month the HEMS charity Lincolnshire & Nottinghamshire Air Ambulance (LNAA) started a short-term contract for a second aircraft.

The Leonardo AW109 is being operated from Strubby in the east of Lincolnshire where it will be based until the end of August, primarily to meet an expected increase in staycations as the UK emerges from Covid restrictions. Foreign travel is significantly down as the number of foreign countries that can be visited is depressed and families take up more staycations.

The charity has already seen a rise in missions and was deployed to 148 emergencies in April this year, compared with 49 over the same period last year.

The AW109 has been acquired from Sloane Helicopters of Northampton. It will operate alongside the charity's existing AW169 helicopter supplied by Specialist Aviation Services [SAS]. As announced earlier this year, the charity is to transfer its primary contract to German operator HeliService International. It would seem that SAS felt they were unable to support LNAA in this project. [Helihub/PAR]

## UNITED STATES

**ILLINOIS:** Celebrating 21 years of service, MedForce medical transport in Colona acquired a new \$7.1M helicopter and made improvements to the base and hangar. MedForce now has three aircraft to cover the Quad Counties area.

The aircraft serviced and maintained under an agreement with Metro Aviation is a new 2020 Airbus Helicopters H135 (EC135P3) helicopter N301MF (c/n 2109) and features a twin engine, autopilot, and offers improvements to the performance envelope compared to earlier aircraft operated. The aircraft was regis-

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Metro Aviation

tered in November 2020, with the owner shown as Quad City HEMS in Davenport, Iowa. Other aircraft in the fleet include N911KB which is a 2006 EC135P1 owned by Metro Aviation. MedForce. Set up in 2000, joined Metro Aviation in August last year. The company provides aviation services for two bases located in Colona, Illinois and West Burlington, Iowa. N301MF and N911KB are based in Colona.

The arrival of the more capable airframe is helping crews manage flights during the pandemic with another aircraft to use and an ability to take patients weighing up to 400 pounds [28 stone/181kg]. The need to disinfect and spray the aircraft after every patient affected availability significantly. They went from a two-hour turnaround time to around three or four hours depending on how much disinfecting was required.

## FIRE TURKEY

ANKARA: Developed by Turkish Aerospace, the Aksungur Unmanned Aerial Vehicle (UAV) System became operational at the start of June from the Tusas Facility in Ankara. The Aksungur system will be located at Adana Şakirpaşa Airport on the southern coast of Turkey. It will be operated by General Directorate of Forestry for fire fighting purposes.

The Aksungur is a Medium Altitude Long Endurance (MALE) class UAV System, capable of performing day and night Intelligence, Surveillance and Reconnaissance (ISR) and strike missions with EO/IR, SAR and SIGINT payloads, and a variety of air to ground weapons. AKSUNGUR is powered by two PD-170 twin-turbocharged diesel engines enabling long endurance operations up to 40,000ft.



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## SEARCH & RESCUE

### BALTIC SEA

**FINLAND:** The Finnish Border Guard is once again operating the Scheibel Camcopter S-100 UAS for coast guard functions in the Baltic Sea. The system is under contract to the European Maritime Safety Agency (EMSA).

Based in southern Finland at a coast guard station in Hanko, 120km west of Helsinki, the S-100 is undertaking maritime border surveillance, search and rescue, monitoring and surveillance, ship and port security, vessel traffic monitoring, environmental protection and response, ship casualty assistance, as well as accident and disaster response. The information collected in the Baltic Sea by the system is shared in parallel with multiple Member States, allowing for a common maritime picture and more comprehensive coordination. The operations will continue until end of July.

The S-100 is equipped with an L3 Wescam EO/IR camera gimbal, an Overwatch Imaging PT-8 Oceanwatch, a Becker Avionics BD406 emergency locator beacon and an Automatic Identification System (AIS) receiver.

This deployment comes on top of two other S-100 maritime surveillance operations for EMSA currently being carried out in Estonia [directly across the Baltic from Hanko] and Romania. It is the third deployment for the Finnish Border Guard, after an initial trial in 2019. [Schiebel]

### EUROPE

**FRONTEX:** The European Union has publicly recognised the problem of uncontrolled migration, from North Africa and the Middle East, with very serious loss of life in the Mediterranean. It has a plan, to which billions of Euros have been allocated to deal with the problem at source, in the countries where the migrants begin their journeys.

According to Frontex, the EU's border and coast guard agency, 47,100 'illegal border crossings' were made into Europe in the first 5 months of 2021, an increase of 47% for the same period last year. Spain has recently returned recent returned large numbers of migrants and there is talk that the United Kingdom is belatedly seeking to send its would be migrants to a Danish operated processing centre in Africa.

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## SPAIN

CASTILE & LEON: In mid-May the ministry of Development and Environment (Consejería de Fomento y Medio Ambiente de la Junta de Castilla y León) awarded a contract for hiring a full charter service with a helicopter for citizen protection, rescue and salvage work in Castile and León - air rescue services.

Two tenders were received and the successful contractor for the €1.8M contract was Eliance Helicopter Global Services SL in Madrid [TED]

## UNITED KINGDOM

MIGRATION: So, the pressure is on, well it is supposed to have been on for an awful long time. The politicians have been somewhat distracted by the pandemic and even Brexit, but everyone distinctly remembers certain promises made by the Home Secretary [Priti Patel] and the Prime Minister [Boris Johnson] about Brexit being, at least in part, keeping the borders secure. Enter stage left [right and centre] a few thousand migrants to spoil the ill-chosen political rhetoric. They keep paddling across the English Channel in ever increasing numbers.

All the politicians' nightmares came home to roost when an interfering newspaper produced a recording that proved that the Border Force vessel crossed the international border to 'rescue' a boatload of would-be migrants as they made slow progress past a French Gendarmerie vessel. Too slow it seems, clearly it was going to be ages before they crossed the sea border!

Some of us thought that the British government were paying the French many millions of pounds to take them back to France not to direct the non-EU vessel to cross the line to pick them up because they were fed up with waiting!

An enquiry was ordered. After that it seems they kept quiet on the radio traffic and seemed to switch off their anti-collision transponders while crossing the busiest shipping lane in the world. That's a new safety feature, I guess.

A few days later (actually the anniversary of D-Day no less) the apparent answer to the problem was announced in *'The Daily Telegraph'* the RAF's Protector drone is to be added to the armoury combatting migrants crossing the English Channel in rubber boats! Unfortunately, that story also went right down the pan when it was added that the Protector drone won't be deployed until 2024. At the current rate of arrivals that will be 30,000 to 40,000 migrants too late!

Meanwhile one of the missing at sea migrants has been found. Several members of a Kurdish family from Iran perished in the English Channel, off Dunkirk, last October. The bodies of the father, mother and two children were quickly recovered. A third child, an infant was not found and now, some 7 months later, his body was washed up in Norway. Taking into account the prevailing currents, is it possible that the body of this poor infant was taken straight up the east coast of Britain onto the Norwegian coast. How many other migrants have disappeared without trace, attempting to cross the English Channel from France to the UK?

You might expect that the interminable arrivals of migrants at the southern English coast would stir someone in the seat of power. Lots of rhetoric of course but despite the occasional strong words nothing is happening. Prime Ministers and Home Secretaries do not sit on the beaches of England or con the wheel of the fine ships of the Border Force, but they do direct the finance to see that the job is done by those supposedly trained and paid handsomely to head off the would-be migrants at the deep defensive moat we call the English Channel.

All to no avail it seems. Late on June 16, the day finished with a bit of wind and much rain and went on to rain through the night with an accurate forecast that it was to continue for two days. It appears that the Border force were working from home in the warm and dry. They missed a bunch of migrants who were busy getting to England. The streets paved with gold were a far stronger attraction than the inconvenience of just getting quite wet for a few hours.

The rain continued unabated and on the Friday evening it was reported by the scurrilous editors at the *Daily Mail* that 14 migrants came across the English Channel undetected to land on a beach near Dungeness B nuclear power station before being 'rescued' by the RNLI at 7:30am on Friday, June 18, 2021. Fortunately, it was not a dozen terrorists hell bent on destroying the power station.

They were not the only ones attempting the crossing in poor conditions, another source reported three migrants' boats getting into difficulty off the French coast, two at Boulogne-Sur-Mer and one at Dunkirk, early

on June 18. 2021. This begs the question, if, in adverse weather, three boats find themselves in trouble shortly after setting off, and a fourth boat makes it to the other side, landing in Kent, were there any other boats that got into difficulty and simply disappeared in mid-Channel?

At that point in the month some 1,500 had been reported as making the crossing successfully. With over 5,000 in the half year. Double the rate for 2020, which was already exceeding the 2019 rate. Illegal migration, crossing the English Channel in small boats only became a 'problem' in 2018, just 3 years ago! In the last 3 months of 2018, 297 illegal migrants crossed the Channel and the then Home Secretary, Sajid Javid declared a 'major incident'.... So, what is it now then?

The rate of migrant crossings of the English Channel reflects that of the European Union at 47%. If these figures do read across from those arriving in the UK in 2020 (8,410), 2021 would see 12,362 illegal migrants arriving in the UK. Historically, July, August and September are expected to be the busy months.

A shortlist of companies being invited to tender for the next generation of search and rescue aviation has been announced by the Maritime and Coastguard Agency [MCA].

The bidders will be invited to tender for the UK Second-Generation Search and Rescue Aviation programme – known as UKSAR2G – to provide HM Coastguard search and rescue helicopters, planes and remotely piloted drones.

The invitation to tender will be issued to Bristow Helicopters Ltd., EEA Helicopters Operations B.V., and Serco Limited to provide their responses by the end of August.

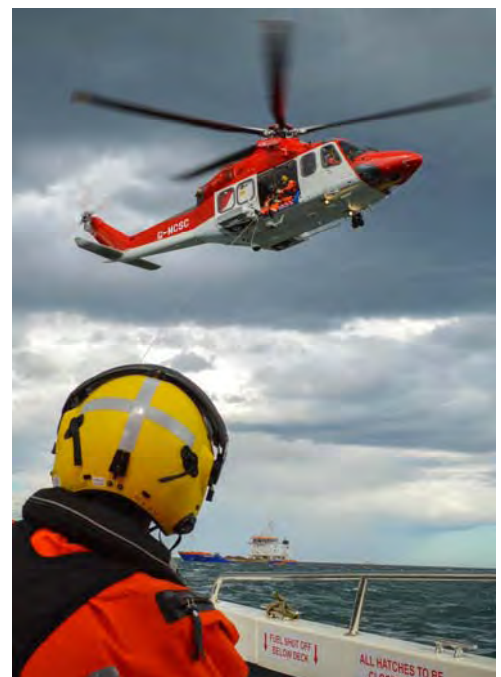


S92 in UK Service ©MCA

There are three elements to the project, short range, long range and fixed wing. The three will bid on the first two but the fixed wing element, potentially a mix of manned and unmanned, for rapid search and pollution identification is to be bid by two additional companies, 2Excel Aviation Ltd., and Elbit Systems UK Ltd as well as EEA Helicopters Operations B.V and Serco Limited.

Lot 4 is a combined solution that contains all of the requirements for lots 1, 2 and 3 but provided by one supplier/consortium. This is seen as driving potential cost saving benefits to the MCA in there being in a single bidder/contractor. This option is being bid on by the original three helicopter contractors with the addition of Airbus Helicopters UK Ltd.

The result of the resultant responses is unlikely to see the light of day before the award of contract in the late summer-2022. Commencement of service is due to be from 2024 for at least 10 years. The cost of UKSAR2G is expected to be lower than the cost of HM Coastguard's current search and rescue and aerial surveillance operations.



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# INDUSTRY

British aviation company **Gama Aviation**, like most airline businesses, suffered a gruelling financial year after the Covid-19 pandemic grounded flights across the globe.

Gama reported a statutory loss of \$14.7M in May, down from a loss of \$11.5M in 2019.

While unable to fly commercially across borders, the group received \$5.8M in government support in an attempt to offset the blow.

Despite the blow of the pandemic, the group's liquidity remained strong with \$16.1M in cash, up from \$8.5M in 2019.

The new revised contract with Scottish Air Ambulance commenced in June. In this Gama operated all aspects of the service using its own fixed wing and helicopters. Previously the helicopters were outsourced to Babcock.

The group also won two five-year contracts last July to offer air ambulance services for Jersey's government and the government of Guernsey. [City AM]

**World Helicopter Day** for 2021 is on Sunday 15 Aug - just over 40 days away. This is its seventh year. Local COVID situation varies greatly around the world at the moment. Some operators, companies and organisations may be keen to hold an open day or at least open their hangar doors, so all is not lost. It only makes sense to be holding in-person public events if the government regulations allow it locally. #Worldhelicopterday hashtag

The **National Business Aviation Association** (NBAA) congratulated Garmin International on earning the prestigious 2020 Robert J. Collier Trophy for Garmin Autoland, the world's first certified emergency autonomous system to safely fly and land an aircraft without human intervention.

Autoland can be activated automatically, or by a passenger, in the event of an emergency such as pilot incapacitation. Once activated, the system flies the aircraft to the most suitable nearby airport and runway, avoiding terrain and adverse weather, initiates a stabilized approach and lands the aircraft.

To date, Autoland is installed in the Cirrus Vision SF50 G2 single-engine jet and Piper M600/SLS and Daher TBM 940 turboprop singles. Earlier this year, Garmin Executive Vice-President and Managing Director of Aviation Phil Straub discussed with NBAA the tremendous potential for autonomous systems to further enhance the safety of flight.

First awarded in 1911, the Collier Trophy is awarded annually "for the greatest achievement in aeronautics or astronautics in America, with respect to improving the performance, efficiency, and safety of air or space vehicles, the value of which has been thoroughly demonstrated by actual use during the preceding year," according to NAA.

Airbus Helicopters and **ZF Friedrichshafen AG** have signed an agreement regarding the acquisition of ZF Luftfahrttechnik GmbH by Airbus Helicopters as part of its strategy to strengthen its maintenance, repair, and overhaul (MRO) capabilities. This step is also a contribution to improving and maintaining the fleet availability of the programs covered by the ZF Luftfahrttechnik product portfolio. ZF Luftfahrttechnik is currently an MRO service partner for the majority of the German Bundeswehr helicopter fleet. It has also delivered more than 10,000 gearboxes all over the world. It is a supplier of the H135 main gearbox, the tail gearbox of the Tiger helicopter, and has a share in the H145 programme. In 2020, the company achieved revenues of € 85.3 million and employed 370 people. ZF Luftfahrttechnik is located in Kassel. The acquisition has been approved by the relevant bodies of both companies. It remains subject to regulatory approvals, as well as other conditions usual in this type of transaction, which should be completed in 2021.

A rescue helicopter has flown on sustainable aviation fuel (SAF) for the first time, achieving a new milestone in international aviation. Operated by the German non-profit organization **ADAC Luftrettung**, the Airbus H145 rescue helicopter had its Arriel 2E engines ceremonially refuelled with biofuel, a type of SAF, at the air rescue station at Munich's Harlaching Clinic in the presence of the ADAC Foundation's board of directors, as well as the managing directors and top management of ADAC Luftrettung, the engine manufacturer Safran Helicopter Engines, the helicopter manufacturer Airbus Helicopters, and the energy company TotalEnergies. Together, these companies will be a driving force in the



ADAC Sustainable ©ADAC Theo Kline

decarbonisation of helicopter flight by developing alternatives to conventional aviation fuels.

The H145 was using a second-generation biofuel – the SAF of choice of the aviation industry – which reduces CO<sub>2</sub> emissions up to 90 % compared to its fossil equivalent, because it is produced from residual and waste materials from the circular economy such as used cooking oils and fats. As a result, the fuel has no impact on agricultural food production.

The fuel used for the first rescue helicopter flight in Munich was produced by TotalEnergies at its facility in France from used cooking oil, without using any virgin plant-based oil. With this SAF, the ADAC Luftrettung fleet could achieve a 33% reduction in CO<sub>2</sub> emissions, which, with more than 50,000 rescue missions and more than 3.3 million kilometres flown per year, equates to a reduction of around 6,000 tons of CO<sub>2</sub>.

Biofuel is currently certified and approved for aviation use in a maximum blend of 50% with conventional kerosene of the JET-A1 type. The ADAC rescue helicopter was flown on a 40% blend.

**Air BP** now has its Airfield Automation digital technology live at 300 network locations across 28 countries on four continents, with Magdeburg City airport becoming the 300<sup>th</sup> location to implement the technology. Since launching in May 2018, over one million refuelling operations have been processed using Airfield Automation.

Designed to enhance safety and reliability in airport fuelling operations, Airfield Automation has been well received by operators who have reported increased speed, accuracy and efficiency in refuelling. For example, the time taken to get fuelling data into the system has been reduced by 95% in Portugal, one of the first countries where rollout took place. Another example of the efficiency this brings to customers is that requests for copies of delivery tickets can be responded to immediately, usually without requiring action from the airport.

**S.A.F.E. Structure Designs** is pleased to announce the delivery of custom maintenance stands to the New Mexico State Police. The Safety-First ergonomic stands allow technicians SAFE access to all areas of their H145 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 ground handling dolly and on the ground. The H145 stands provide a large work platform for added safety and are used for servicing the engines, transmission and rotor head.

In the past the unit used ladders to reach components. It was deemed uncomfortable and there was always a risk of falling. The new stands increase both safety and efficiency.



**Superior Air-Ground Ambulance Service** is returning to the Metro Family of operations customers this summer, beginning with two new medically equipped LearJet 45 fixed-wing aircraft for organ procurement and patient transport services.

This month, Superior will stand up a new base with Metro Aviation with an Airbus EC135 in Waukesha, Wisconsin. A few months later, Metro will assume operations of Superior's current EC135 Illinois-based operations in West Chicago and Kankakee.

Launched in 2007, Superior's CAMTS-accredited air ambulance division, Superior Air Med, provides critical care in the air with an onboard paramedic and nurse to Chicago and its surrounding communities and northwest Indiana.

Another British engineering organisation is said to be in danger of being swallowed up by a foreign private equity group. In the wake of the furore over Cobham the latest target is **Ultra Electronics**. Cobham was bought by US firm Advent International last year and has been broken up for sale. Only one part remains as a contender - Cobham Advanced Electronic Solutions or CAES. It is based in Arlington, Virginia, and

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It was announced to the UK stock market last month that Cobham said it could look to buy Ultra. In a twist though there is a suggestion that the deal could work in reverse with Cobham CAES being sold to Ultra in return for shares in the enlarged company.

In a fast-moving developing storyline Ultra is said to have stated that the talks were over, and the matter of a takeover was no longer on the agenda for either group. [Mail]

# ACCIDENTS AND INCIDENTS

**30 May 2021 Bell UH-1H-II PNC-0741** Policia Nacional de Colombia. At least five police officers attached to the Narcotics police killed in Cantagallo, south of Bolivar, Colombia. Names given by the Policia Nacional were Major Édison Garay, Major Maximino Azuero, Teniente Luis Fernández, Intendente Jheyson Franco, Patrullero Edwin Jovanny Arcos.

**15 June 2021 Bell UH-1H N398M** Fire Fighting Helicopter. While operating as part of the Montana Department of Natural Resources and Conservation (DNRC) firefighting fleet of five Huey's crash landed, rolled and burned in Deep Creek Canyon. The Bell was operating from Helena Airport, was ordered to the Deep Creek Canyon Fire to bring more crew and help with bucket drops. It was dispatched to pick up a Helitack crew at DNRC's Central Land Office (CLO) in Helena. At CLO, the helicopter loaded a crew of four personnel, including a helicopter manager and three Helitack crew members. Upon arriving at the helibase, near Townsend, Broadwater, the helicopter experienced adverse winds, which caused a hard landing of the aircraft. At impact, the aircraft spun right about 120 degrees and rolled to the left into an upside-down position. The pilot turned off the engine. He noted the aircraft was on fire and that at least two crew members had escaped. With the assistance of a State Trooper at the scene crew members were helped to escape the aircraft. There were no serious injuries. [DNRC]

**19 June 2021 Helicopter** [appears to be a Bell derivative] Air ambulance of Khuzestan Red Crescent being operated for the carriage of ballot boxes from the Ahmad Fadaleh area of Dezful crashed near Dezful in the Lali Mountains, Aligudarz, Iran with 12 persons aboard. Wreck was upright but 80% destroyed in the impact. One security guard reported to have died in the impact the others being injured. [ASN]

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# SAFETY

In the wake of the two high-profile crashes of Boeing 737 MAX airliners in late 2018 and early 2019, on June 21 the FAA announced is launching a new Voluntary Safety Reporting Program. This is an “additional way for its engineers, safety inspectors, systems safety specialists, and other aviation safety employees to report safety-related issues and concerns.”

The scheme is aimed at its own Aviation Safety workforce, allowing them to report safety concerns confidentially without fear of reprisal. The fact that the FAA already has a number of similar schemes that clearly failed to work in the case of the 737 MAX is glossed over.

In an attempt to bypass spurious whistle-blowers, there are follow-up procedures in place. A team will evaluate the safety issue and provide a recommendation on corrective action and will continue to monitor the issue throughout the process.

Newly established is the Vertical Aviation Safety Team (VAST). In cooperation and collaboration with the worldwide vertical flight community, VAST aims to achieve a vision of zero fatal accidents, providing “Safety Above All.” In pursuit of that vision, VAST will use a data-informed, consensus-based approach to better harmonize, coordinate, and implement global safety information, resources, and programs, and to support regional safety efforts.

The international vertical take-off and landing (VTOL) industry includes many groups working to reduce accidents. The International Helicopter Safety Team and, later, the International Helicopter Safety Foundation previously represented these global safety stakeholders.

Regional safety teams will continue to lead safety initiatives in their respective areas. The role of VAST is to engage with those teams and others to promote safety data and recommendations worldwide. VAST represents the combined voices of the worldwide rotorcraft community. Its operations are overseen by two advisers: James Viola, President and CEO of Helicopter Association International, and Miguel Marin, Chief Operational Safety, at the International Civil Aviation Organization (ICAO). Their advisory role will help VAST meet its objectives building on industry best practices and the latest international standard developments.



The onward track towards passenger aircraft flying without pilots gathers pace. Airbus and Hong Kong-based airline Cathay Pacific are developing a system designed to allow for single-pilot, long-haul passenger flights in the A350. Relying on an increase in cockpit automation, it has been suggested that the system will include features such as an emergency descent mode that does not require pilot input as well as real-time, on-board monitoring of the pilot’s vital statistics and alertness. The program—called Project Connect—is reportedly looking to certify the A350 for single-pilot ops at high-altitude cruise by 2025.

# UNMANNED

An NTSB preliminary report on an injury incident involving a light drone in Georgia, USA reveals that the cause related to defences put up by a prison facility.

The pilot of a DJI Matrice suffered a serious hand injury after trying to manually control the hovering machine on May 6. The pilot was demonstrating the drone to a prospective customer, but the aircraft wouldn’t respond correctly to control inputs. He hit the “return to home” feature and the drone settled into a hover at about seven feet above a vehicle in the car park where the demonstration took place. When the drone refused to budge and ignored a command to land, the pilot tried to move the drone manually by grabbing the landing gear. The drone resisted and headed back to its holding position. When he tried to take the batteries out of the still-hovering drone he was hit by one of the propellers and suffered injury to one hand.

The investigation revealed that it was the choice of venue that created the odd reaction of the Matrice. The pilot selected the car park adjoining the Young Harris County Jail for the flight demonstration. The drone’s standard feature geo fencing software marks all jails, prisons and other high-security facilities, like power plants and military installations, as “restricted zones” that the drone will not enter. Although the car park was outside this area it was close enough for the geo fencing to influence the flight path of the drone. The pilot states that he failed to note the warnings the drone sent as it got near the jail.

After his hand was injured, the pilot simply held on to the drone until the batteries were drained. [AvWeb]

Sensor solutions provider HENSOLDT is vigorously pushing ahead with the development of a collision warning system for civil and military drones: after the radar sensor as the core element of a collision warning system was successfully tested in flight as part of a study programme. Work on the software required for interaction with an autopilot is well advanced. This summer, a demonstrator of the collision warning



system is to prove in flight tests that the sensor performance and the software-supported avoidance logic correspond correctly with the autopilot.

Since the beginning of the year, HENSOLDT has also been involved in the EUDAAS (= European Detect and Avoid System) programme, in which several European companies are developing a concept for bringing large military medium altitude/long endurance (MALE) drones, such as the Eurodrone recently released by the German parliament, into European airspace.

HENSOLDT's "detect-and-avoid" radar uses the latest Active Electronically Scanning Array (AESA) technology, which allows multiple detection tasks to be performed simultaneously and enables very rapid target detection. The scalable radar can be used in large military drones as well as on board smaller civilian drones.

## **GUEST ARTICLE**

Airborne mobile intelligence opens new possibilities for police operations.

by *Andy Gent, CEO Revector*

Law enforcement and public safety are foremost priorities for the UK's police and, with a continuously changing security and crime landscape, it is no wonder that police professionals look at how the latest technology can enable a high standard of service delivery.

Recently, attention has focused on airborne technology as the latest Unmanned Aerial Vehicles (UAVs), or drones, offer the versatility to approach security, law enforcement and criminal investigation in new ways. Drones are increasingly being used for a range of purposes including detection, surveillance, monitoring and mapping and are set to be a hotspot for investment over the next few years.

It was recently announced that Hertfordshire police, along with the fire services, would be using drones for locating missing people, photographing crime scenes and monitoring major incidents. Yet, drones can also be used to gather mobile phone intelligence to enforce security, provide information on criminal activity and protect the public using IMSI-catcher (International Mobile Subscriber Identity) hardware.

An IMSI is a 15-digit number assigned to the SIM card that identifies an individual mobile user within the network. Each IMSI is unique to a subscriber and is a way of identifying the owner. When authorised for legal use, IMSI-catchers act like a traditional mobile phone network meaning nearby mobile phones connect to them. They can then pinpoint mobile phone locations and accurately identify where a mobile device, and hence an individual, is located.

Portable and light IMSI-catchers for drones

IMSI-catchers are not entirely new to law enforcement and security organisations. They have been used for lawful covert surveillance and to detect illegal activity since the early 2000s but were bulky and limited to fixed positions such as roadside or in-vehicle. However, with advances in technology it has been possible to build IMSI-catchers that are highly portable, small and light enough to put in backpacks or even to mount onto drones. This has opened a host of new possibilities for their use.

For example, the police could deploy drone mounted IMSI-catchers ahead of raids on criminal organisations to identify and pinpoint the location of specific individuals. This technology can also be used for enforcing perimeter security for high profile government events or locations, such as the recent G7 Summit. Emergency services could also use this technology for safeguarding purposes, such as tracking missing people, or search and rescue operations. IMSI-catchers can detect mobile phone activity anywhere as long as there is an active mobile phone signal. Every country has different legal parameters for IMSI-catcher use so this is an important consideration.

With IMSI-catchers now weighing as little as 750g, they are a viable and cost-effective option to support the full range of police activity. Easy and quick to deploy onto drones, police and security forces can consider harnessing this technology to fulfil current and future operational requirements.

*Andy Gent, CEO Revector* <https://www.revector.com/news/>

*Ed: Taking a very contrasting view on the technology are two US politicians.*

According to BuzzFeed, on June 17 Democrat Senator Ron Wyden and Representative Ted Lieu introduced legislation that seeks to restrict police use of international mobile subscriber identity (IMSI) catchers.



US police frequently use IMSI catchers and cell-site simulators to collect information on suspects and intercept calls, SMS messages and other forms of communication. Law enforcement agencies in the US currently do not require a warrant to use the technology. The Cell-Site Simulator Act of 2021 seeks to change that. IMSI catchers mimic cell towers to trick mobile phones into connecting with them. Once connected, they can collect data a device sends out, including its location and subscriber identity key. Cell-site simulators pose a two-fold problem.

The first is that they're surveillance blunt instruments. When used in a populated area, IMSI catchers can collect data from bystanders. The second is that they can also pose a safety risk to the public. The reason for this is that while IMSI catchers act like a cell tower, they don't function as one, and they can't transfer calls to a public wireless network. They can therefore prevent a phone from connecting to emergency numbers [112/999/911 etc].

In 2018, the American Civil Liberties Union stated that at least 75 agencies in 27 states and the District of Columbia owned IMSI catchers. [Igor Bonifacio]

## PEOPLE

In addition to being the Chief Executive of Magpas Air Ambulance, **Daryl Brown**, who is 37, has held a number of charitable, NHS and local authority positions in Cambridgeshire. Daryl was recently appointed by Her Majesty The Queens Lord Lieutenant of Cambridgeshire as a Deputy Lieutenant for Cambridgeshire and has now been awarded an MBE in Her Majesty The Queens 95th Birthday Honours List.

Daryl was born in Cambridge and studied at Anglia Ruskin University and has led local charity Magpas Air Ambulance for 12 years.

Daryl currently holds Trusteeship and Directorship of Air Ambulances UK, the membership body and charity representing the United Kingdom's Air Ambulance Charities. He is also a serving Director of the British Helicopter Association (BHA) and supports Anglia Ruskin University serving on its Alumni Board.



Motivated by her own fight for life as a new-born baby, NPAS Redhill's Tactical Flight Officer **Michelle Robinson** faced up to another challenge last month - swimming across the English Channel.

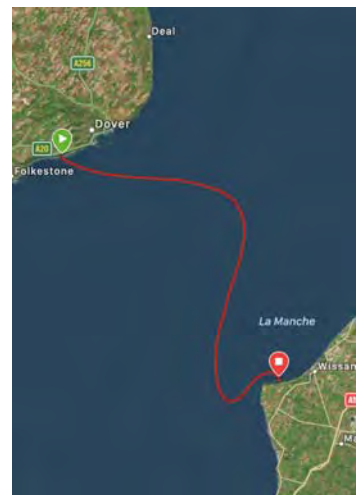
Michelle was one of a relay team of five who swam the choppy 22.5 miles on the morning of June 14, 2021. Her swim was for The Alexa Trust. Swimming in one-hour shifts, wearing just a swimming costume, hat and goggles in nippy 12-degree Celsius waters, Michelle and her teammates completed the challenge in under 13 hours.

Dodging container ships and ferries in two major shipping lanes, the team started at 1-58am from Samphire Hoe, Dover. 12hrs 51mins 31 secs later they landed on a beach in France near Cap Gris-Nez. The team caught and overtook all 7 boats out that day achieving the fastest crossing so far this year. Fair winds and bright sunshine. "The beach was underwhelming with no one to greet us except unbelievably the police helicopter. Probably looking for the French pirates we had encountered."

Michelle quickly exceeded her £2,500 target for donations to The Alexa Trust, a UK charity set up to support the parents of babies receiving neonatal care – a cause close to her heart.

Michelle answered an advert for the charity swim and had to complete a grueling two-hour qualifying swim in waters below 15 degrees Celsius to make it onto the team.

Once qualified, her training was limited to a local lake near her Sussex home because lockdown prevented her travelling to the coast. [Just Giving [www.thealexatrust.org](https://www.thealexatrust.org)]



A prestigious Royal Humane Society award has been presented to HM Coastguard Search and Rescue Lydd helicopter winch paramedic **Mark Scotland**, following his heroic actions in the effort to save a 12-year-old girl off the coast of Kent last year.

Scotland was awarded with the Testimonial on Parchment for bravery, which recognizes someone who has put themselves in danger to save, or attempt to save, someone else.

In California the Orange County Fire Department's first female helicopter fire pilot, **Desiree Horton**, is suing the agency for sexism.

Horton, the first female pilot to work for the California Government, has 31 years of experience and 9,000

hours of flight time. However, OCFA fired her for what they called “substandard performance.” Reports state that she was untrainable.

Horton is suing OCFA for sexism. She claims that in 2019, OCFA’s aviation business unfairly evaluated her without proper training received by her male colleagues and dismissed her before the end of the one-year probationary period without a test flight. OCFA would not comment on the current proceedings. It is not only about pilots and helicoptering it seems, but also about working conditions. For a time, Horton was obliged to live rough in motor vehicles to follow the fire, and even when based at home was expected to go to the fire at short notice. It is claimed that seventeen fire departments do not have women’s toilets or shower facilities to accommodate the gender-separated workforce for women to actually take a shower on duty. [News Times]

## BOOK REVIEW



Available shortly – at least in America – is a new book on flight safety by the ‘guru’ on the subject Bryan Smith. Bryan the Safety Program Manager for the Airborne Public Safety Association and a familiar face at the PAVCon Europe police aviation conferences including the virtual event held last month.

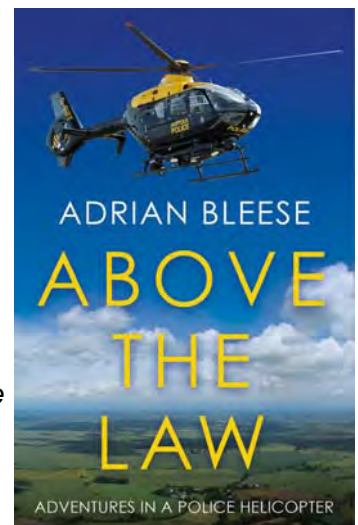
Well, I do not have a copy of the book, or the text, so no review but I can point the US audience towards their local bookstore with some details and images!

The book is called **Air Support Safety – an airborne public safety pilot’s quest to reduce flight risks** by Bryan Smith. It is a paperback costing \$19.99 and is due to be published on July 20. Amazon already have it listed so that is a good sign for its wider availability.

Also published this month is the long-awaited book on UK police aviation by Adrian Blease.– **ABOVE THE LAW**.

Time has moved on since I reviewed it a couple of months ago, the book is almost going to be a requiem. The official release day is July 19. Kindle edition £3.79 and the paperback, normally £9.99 is on offer at £8.19. The book is also listed on Amazon.

*The plan, and who can plan anything these days, is to have copies of these two books and the **Haynes Police Aviation** title at next years 2022 PAVCon Europe in Austria. There is probably some post Brexit iregulation about importing them from the UK into the EU but I will do my best to get them there.*



## MOVE ALONG THERE

Last month there was a feature on the police use of airships in 1921 and within a matter of hours there was the would-be modern airship seller Airlander extolling the virtues of travel in its relatively new craft. A year ago, this mode of transport was being promoted as a cargo craft and load lifter, now there has been a definite, if subtle, shift to marketing it as a means of luxury air travel, with plush seats and a wall of observation windows as the Airlander 10 which at 300 feet is almost double the length of and average commercial aircraft.

In the future all-electric configuration Airlander is set for a decarbonised future. Due in 2025 with a potential range of 500 miles the firm says it will be perfect for intercity mobility such as Liverpool to Belfast.

*Editor: Or - if the customary wind is blowing in from the west it is likely to be a totally unplanned magical mystery tour of Scandinavia!*

Any thoughts that PAVCon as a name was unique are slowly being eroded. Either that or I have unknowingly decided to expand the business.

PAVCon is a derivation from police aviation conference but it seems that the word Pavcon is getting to be a world class name.... in aviation and in surgical supplies, let alone dry stone walling.

PAVCon was a name we first used in 2009 but it seems that we appropriated in all innocence, since 1998

a group in the USA, have been providing the disposable gloves, disposable surgical gowns, hand sanitizer, alcohol wet wipes, disposable face respirators and many more items as that brand.

Or maybe it escaped our attention that Pavcon was a paving contractor [as in Paving Contractor] and hot mix asphalt supplier with plants in Harrisonburg and Lexington serving the Shenandoah Valley of Virginia. Not sure yet what line of business the Pavcon Consultancy Ltd specialised in, but it was a short-lived information technology consultancy incorporated in 2019 with a registered office located in London. It closed in March 2021.

Or perhaps the name fits well as Pavcon Construction based in Zimbabwe. They build stuff.

But the latest worry is back in the USA where it turns out that PavCon is a woman-owned small business, building an artificial-intelligence based predictive maintenance platform for the U.S. Air Force.

PavCon's CRiSTL platform works to detect and repair anomalies in aircraft equipment before problems occur using AI and data analytics hosted in AWS GovCloud (US)... Phew that's way above my pay grade - It must be my wife running that...

According to selectively chosen quotes from the company website "PavCon's use of artificial intelligence ... is a game changer ..." Now that sounds like the PAVCon I know!

PAVCon Europe – A game changer!

## Aerial Searches and Change Management

A time to take a step back, a deep breath and think! David Howells



The majority of flying time spent by police air support unit aircraft is undoubtedly utilised on searching for missing people with the greatest risk being those who are deemed as being vulnerable. That vulnerability may be because of a person's age, their health (both physical and mental) or the environment in which they find themselves inhabiting at that time.

The normal sequence of events following the report of a missing person to the police control room was for a linear 'tick box' exercise to be put into operation. The control room operative would inevitably rely on a check-list to assist them cover and consider all available options and decision making. These check-lists were more than likely formulated as a result of someone in the control room forgetting one of the items so someone deemed it necessary to come up with a list, an 'idiots guide' if you like, of how to find a missing person. This linear thinking process did not allow for that non-linear aspect of thinking and utilisation of a broader more holistic picture to obtain true context surrounding the scenario.

As someone who actually enjoyed the challenge of finding vulnerable people, I knew that we could do better and experience more success, which in itself promotes future engagement and increased success. It actually creates a snowball effect as the satisfaction and dopamine released when you do find someone is addictive. You want to experience that rush time and time again. If you realise that if it had not been for you and the crew that person may have died, then that dopamine hit can be immense and on occasions extremely emotional.

The problem with these check-lists is that they can become counterproductive and overly prescriptive (linear) as these situations are varied and involve ever changing circumstances therefore not allowing for a 360-degree holistic response which is based on the context of the individual situation of that specific missing person.

The problem that we continually faced on air support was that the 'phone the air unit' request was inevitably high on the control room check-list. It was as if we possessed some magical wand and super powers to find the missing person without the need for deploying any other ground-based unit, which were generally in short supply and in high demand. It also relinquished the control room operative of one less task themselves as they had contacted the air unit and would therefore not get into trouble for not having done so. There was also, on reflection, an interesting background influence to these situations which has seemingly permeated across the whole of policing and that is the belief that if I simply do my job as requested, as the book and training prescribes and not question any orders coming from the rank above it will not get me into trouble. Less stress and risk adverse 'I will just do as I am told' mentality. On occasions those orders do need to be questioned with respectful dissent.

We were frequently being told to get airborne too early on too many occasions without any scientific evidence as to why, and on numerous occasions where! We were literally being sent on a mechanical goose chase.

We would listen to the local police radio channels to gain some form of insight into where best to deploy our expensive resource to it best effect. We would regularly call this stage the 'headless chicken' stage as we would hear patrols being sent here, there and everywhere chasing shadows, hunches and gut feelings with nobody seemingly able to obtain a grasp of the situation. On occasions there was also a feeling that officers did not want to take ownership of the incident as they already had a bulging case load. By making themselves 'busy' and by avoiding physically attending the missing persons home address, they would sidestep the necessary paperwork and would not then be the 'officer-in-the-case', therefore increasing their workload. If the missing person was reported at the end of a long shift, then this would also be another reason for officers to sidestep the paperwork and all-important liaison with the missing persons family, as these investigations could well become protracted. There is also a question here of having available suitable and experienced supervision able to take control of the situation who could determine who was to be deployed where in those initial stages.

As a unit we could see what was needed was a calm and considered overview of all the available evidence. For everyone to take a cumulative 'deep breath' and step back, removing the blinkers and grasping the whole situation. Would you start making an important and complex birthday cake by rushing in and guessing the quantities, not reading the recipe, not having enough time to carry out the baking or having none of the vitally important utensils to make a successful creation? No. It's the same with this important game of hide and seek as someone's life could well be hanging in the balance. We had to get it right and that meant getting everything aligned from the moment that the person was reported missing to the police. Wasting expensive flying hours by looking in wrong areas may have also resulted in the development of a negative crew attitude and focus. Having been involved in so many searches over the years many were conducted by a crew that already knew, in many cases, were going to be a wasted effort. This would immediately dishearten that team effort, especially when their combined experience and knowledge was being ignored by control room staff.

For example, missing children were highly emotive and when they were reported large numbers of police resources were literally 'thrown' at the incident. The first question we would always ask the control room staff was 'has the house been searched?' Invariably we would get a,

*'Yes, the parents have looked!'*

This was never a good initial response as parents will understandably be frantic and any search by them will have been conducted under a huge amount of stress and panic. We started making sure that the very first thing that happened was that a police officer would attend the house and search every 'nook and cranny' of the missing child's home. That needed to include every room, the garden, every wardrobe, every suitcase under a bed, not just in their own bedroom but everyone's bedroom. Every feasible and unfea-

sible space that a child could hide in. It became extremely rare that we were ever required to lift and assist with such a search again.

We were even asked to go and look for a person in Cannock when the control room knew that the adult missing person had an active mobile phone in their possession. We asked if the necessary mobile phone checks could be made with the phone provider in order to gain a location from the phone's signal as that would greatly help our efforts. The person could actually be miles and miles away from where the control room wanted to send us! The control room manager responded with a definitive 'No', with their justification being 'You come and look and if they are not there then we will then check where the phone is!'. Madness. So, you are happy to waste £1000 per hour flying time when you could invest a fraction of that time and expense to determine exactly where the phone is, and likely the missing person with it, by simply contacting the mobile phone provider. As you guessed it the helicopter was 'forced' by overbearing rank to go and search for the missing person who was not found because, as the later phone enquiry proved, was miles and miles away from the area we were asked to initially search. It was sadly on occasions easier just to go along with the whim of the control room staff (usually an inspector) rather than argue and suffer the threat of a complaint and discipline from senior management. Bearing in mind the crew were generally police constables, or in my case a sergeant, arguing the need for deploying the helicopter could become very tiring and wearing so unfortunately it was simply easier to attend a task even though there was next to no expectation of a result, other than proving the inspector wrong and avoiding a complaint.

There was also another aspect to this scenario and that comes with any hierarchical organisation whereby rank will inevitably take precedence even though the best people to resolve this issue, and any other issue, come to think about it, may not simply be the higher rank. The duty of the higher rank, in this situation, should be to draw in the best talent for the incident in a psychologically safe setting and to then decide upon the best solution for that particular set of circumstances. They are a conduit of logical reasoning rather than the font of all knowledge or hold the monopoly of good ideas.

The problem with rank causes so many issues when wielded in the wrong way and the person holding that power can become hamstrung by that position. Having 'lesser' ranks come up with logical and sensible solutions can be an affront to their ego and status. The question they may ask themselves is 'why didn't I think of that?' which then is seen as a direct challenge to their position and ego. We also get into the realms of the Peter Principle and Dunning-Kruger which are a dangerous cocktail evident at many levels of a hierarchy.

As a unit we decided to do something positive to turn this state of affairs around. We desperately wanted to experience more success, find more people as that would indirectly assist our colleagues who were being run ragged on the ground. We also wanted to prevent all of those wasted flying hours that could be then utilised for more proactive and impactful tasking to make a difference for the wider community. We needed to be that breakwater, that element of calm in a stressful situation. We needed to be the team that took that deep breath and the step back to process and gather the intelligence and the evidence. We could then decide where best to deploy, based on our knowledge, experience and context of the whole situation in a holistic manner.

We spoke to police search managers and control room staff to turn the situation around. One justifiable delaying tactic to bring about that space and time to consider the full circumstances was to start to insist on a trained police search advisor (PoLSA) to be contacted prior to the request for the helicopter. It was not a problem for control room staff to notify the air unit of the missing person in order that staff at the air unit could read the incident log created. They could then start to build up that vital picture of the task. What we would require was a conversation with the POLSA to determine where best to deploy to, if at all. As a result of this simple step of liaising with a PoLSA, by the air unit and control room staff we started to experience a higher success rate. When a comparison was made, we were found to be successfully locating more people using fewer flying hours. Result.

We even started to locate missing people simply by sitting in our own operations room at the air unit and directing other resources to strategic locations. We even picked up on vital evidence embedded in missing person logs which had been unfortunately missed by control room staff. We were joining the dots... There was also an unforeseen and positive consequence as it provided additional credibility for members of the air unit. We were starting to be seen as the experts in searching for missing people so other officers were beginning to listen to what we actually had to say on these matters.

By simply generating that time to take one vital step back, along with a deep breath, saved time and undoubtedly lives.

The exciting thing is that there are people 'out there' that want to make a very real and positive difference in this important area. Innovation is all about joining those dots and having the courage to reach out and look for alternative methods and ideas that can then be put together in order to make something fantastic. After recently talking with an ex-colleague on the subject of searching for missing persons several dots joined together and that creates a 'buzz' to explore new and innovative ideas. Simply by picking up the phone and having that conversation is all that it sometimes requires.

As has already been mentioned one of the challenges facing PoSA on the ground and police air support units in the air, has been to seamlessly identify the areas to be searched and to then interchange that information with one and other, rather than flying around without that vitally important spatially based plan, which has unfortunately sometimes been the case at times.

One company that provides expertise in this domain is Cunning Running Software Ltd, who are providers of geospatial counter terrorism tools, used by UK policing for strategic, tactical and operational support for defensive venue assessments, incident response plans, surveillance planning and drone launch site assessments. In recent years, it has extended the capability into search and helps the PoSA community react more quickly to missing persons, through removing much of the manual process in identifying relevant areas and creating detailed search strategies and plans.

These search plans are created with digital tools which exploit Grampian and iFind data and along with details of the Missing Person (such as age, last known location, underlying condition) can interrogate the mapping data and provide the most appropriate areas of interest for woodland, bodies of water, parks etc within minutes.

To then share this spatial information with airborne assets, exporting a map file of the search areas to the airborne unit, so they could then upload it and know precisely where they need to fly, has very real and obvious operational benefits. If you have the information, then we are not simply 'throwing darts in the dark' and improve the probability of a successful and timely outcome. In essence we are looking for a speedy resolution for both the missing person/s and the emergency service assets therefore preventing undue stress for relatives and potentially protracted and expensive utilisation of police staff and resources.



Cunning Running are already developing the capability for importing drone flight tracks into their software. This will work on similar principles for a PoSA or Counter Drone specialist, where a flight can either show what hasn't been or what has already been searched, or where the drone needs to be programmed for flight to capture the required information.

The camera data also captures the height information, and this data can be exploited to show what can be seen from a particular point, or perhaps what can't be seen from a certain position, and this can be queried at a height and elevation of choice.

What is then impressive is that the results can be shown in 3D, giving a PoSA, SecCO or drone pilot a visualisation of the relevant environment in another dimension.



Why is this useful? Well, a pre-recce can take place from within the office and decisions can be taken on what height, distance, camera angle will be covered before any arrival on site.

Technology now allows operatives on the ground, in the air and those commanding operations, to know what is covered, where are the obstructions or what can be seen and then make evidence-based decisions more quickly through knowing this information.

Reducing complexity and increasing awareness is what ultimately, we all want to do and anything that helps specialist airborne resources or PoSA to do their work and maximise the chances of a successful search, has to be a good thing.

It is this interaction and combination of assets that could bring a successful conclusion to these types of incidents, whereby each asset, rather than working with a silo mentality, actually understands and complements each other's important work with a broader team ethos and ultimately a shared success.



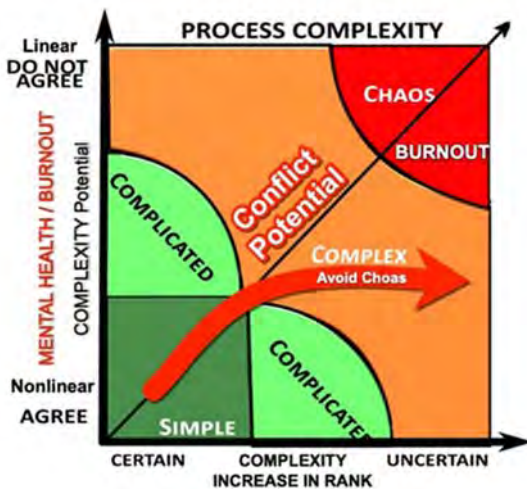
Having considered changes to the process and thinking around how aerial searches were conducted it struck me that this is the very reason NPAS was unfortunately doomed to failure from the onset. We just didn't see it coming! Some may actually think that it hasn't failed but that is somewhat, in all honesty, of a linear, delusory and blinkered reality. It is also not the fault of any one individual or group of people but a set of consequences that plague every change management projects. The circumstances surrounding the whole project set it up for failure because of the dynamics of people and their linear or non-linearity thinking. Throw in some functional illiteracy and a large dose of Peter Principle and Dunning-Kruger and you inadvertently create the 'perfect storm'. NPAS unfortunately did not realise that it was sitting on a time-bomb as the ratio of linear to non-linear thinkers was compounded by the selection process and the role that these people were selected to perform in the first instance. The Tactical Flight Officer and pilot role were overwhelmingly a non-linear role so the selection process was driven, unknowingly, to select this particular type of person. It is very much like the stock market companies who naturally selected risk takers which then inadvertently caused the stock market crashes we experienced in the past, and will probably see again in the future. If they were to select more circumspect people, we may not see that risk taking but profits may not be so profound!

If you actually think about it air support inadvertently selected non-linear talent as the unique flight test would (we didn't know it at the time!) select those candidates who could grasp non-linearity, especially when we threw a last minute 'divert' into the set planned navigational test? This 'divert' would gauge how candidates reacted to a changing situation, think on their feet and remain calm in an already stressful situation. There was also a question of bias on my part and seeing something of me in those assembled candidates. Prior to NPAS being formed in 2013 individual air bases recruited and selected their own staff and it was very much an 'in-house' process. That gave me as a base manager the autonomy to, in effect, select free thinking, innovative, motivated, creative, trustworthy, loyal, humorous, would not take themselves too seriously type people who could work with minimum supervision. When you then naturally select a high amount of non-linear people having major change thrust upon them by high-ranking predominantly linear selected people conflict and frustration will naturally occur and then unfortunately, but totally understandably, it becomes personalised simply due to that lack of understanding they have of themselves and also of each other! You then have an unrepairable conflict with bullying and toxicity being organically developed as a consequence. Understanding that discrepancy is therefore key to help everyone to understand those critical dynamics and to remove conflict and frustration. If you think that each of the 15 air bases had a similar non-linear ratio due to that selection policy is there any wonder base managers and staff all generally saw 'eye to eye' and fought the linear change driven by senior management?



If we also consider that the Pareto Principle (80% of outcomes, or outputs, result from 20% of causes, or inputs, for any given event) also has a major bearing on this discourse. Why? Because 80% of the population, of an organisation's employees, are of a linear thinking persuasion whilst 20% of the population or employees are of a non-linear thinking persuasion. By focusing on selecting non-linear staff for air support we are dipping into a far smaller pool of potential and they then have to pit their thinking, and wits, against a higher percentage of linear thinkers, be it when assisting with a missing person search or dealing with change, dictated to them from on high.

There is also a dangerous health issue here, both physical and mental. That frustration and conflict, which can sometimes be seen to be continuous, is debilitating. If some non-linear thinkers do manage to squeeze through the ranks to higher office, they will face that frustration and conflict but multiplied exponentially. They will also run a higher risk of suffering burn out and serious health issues and with that comes the increased risk of divorce and conflict at home, along with associated financial risks. Some may be able to adapt to this level with a degree of self-awareness but it will ultimately take its toll on the individual, their immediate colleagues and their home and social life as this stress is cumulative and will invariably want to be released and vented in some shape or form. Unfortunately, we will continue to see heart attacks as a symptom of this conflict and pent-up frustration.



The graphic seeks to explain the concept via a Conflict Scale.

Schoeman and Howell, 2021

In conclusion, by understanding ourselves and our innate-talents we can change for the better, becoming better versions of ourselves. With a greater self-awareness comes a greater understanding of not just ourselves but others around us, helping to contextualise those situations and circumstances that surround us and are in continuous motion.

You cannot reduce the complexity altogether but you can avoid escalation from simple to complicated to complex and unnecessarily creating chaos and the only way you do that is via:

- Self-awareness*
- A shared awareness of complexity*
- Monitoring of mental health*

By utilising and combining these three important elements it will make it far easier for people to manage complexity. Even if the leaders themselves lack complexity yet possess self-awareness, they can still make better informed decisions by leveraging people around them from that position and state of increased awareness.

The section on drones and the search software was provided by John Overend and Corin Pegden. The author worked with John in Staffordshire Police, he was a police search trained officer and a drone pilot. He and Corin now work for the software company Cunning Running Software Ltd. <https://cunningrunning.co.uk>





**FORENSICS  
EUROPE EXPO**

14-16 September 2021  
ExCeL London

**CTC**

COUNTER TERROR CONGRESS

14-16 September 2021  
A Hybrid Event



**DSEI**

14-17 SEPTEMBER 2021  
EXCEL - LONDON



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Event sponsor  **MESSE FRIEDRICHSHAFEN**

**Late Accident in Brazil.**

A Eurocopter AS 350B3 Ecureuil PT-SUS Air ambulance of the Corpo Bombeiros [Fire Brigade] rolled over in an attempted landing at a fuel station 4 km north of Jequitaiá, Minas Gerais, Brazil. A video of the accident shows the helicopter approaching to land, starting a thick dust cloud in which it is lost to sight. When the dust clears the airframe is on its left side largely intact with its nose close to a substantial bush. No indication of a fire and no reports of significant injuries in the crew of four.

The helicopter had been dispatched to assist a medical team in Jequitaiá, dealing with a patient with a heart attack.

There are also reports of a fire fighting helicopter crashing in recent days. .... details next month.



**Air  
Med**  
World Congress  
**SALZBURG 2022**

# LATE NEWS REPORT

At the recent G7 meeting in Cornwall Excelebrate Technology helped UK police personnel to stay in touch with friends and family, and enjoy much-needed down-time in a safe environment, by ensuring guaranteed coverage on its Enhanced Resilience Satellite Network (ERSN) on board MS Silja Europa, the police accommodation vessel deployed at the Summit.

Around 6,500 officers from all over the UK were deployed to support the summit in Carbis Bay, of which around 1,000 of those aboard the ship were facing the 10 days with potentially limited local cellular connectivity on their smart phones and devices.



Excelebrate created a 'temporary' WIFI network for those onboard the vessel berthed in Falmouth.

David Wilson, of Devon and Cornwall Police, stated: "The welfare of our police personnel is critical during such long events where shifts can be long and down-time short. Excelebrate were responsive and able to come up with a solution to suit our needs with such a quick turnaround. It's important that our police officers rest and recuperate, and being connected certainly helped."

The company also supported co-responding services and agencies with resilient communications across mobile deployed vehicle solutions during the summit and has a strong heritage in supporting major events such as the NATO summit at Celtic Manor in 2014, while it is also working closely with Hamed Medical Corporation to improve public safety at the 2022 Qatar World Cup. <https://www.excelebrate-group.com>

As we closed for press the Daily Telegraph announced that the Border Force is to be 'shaken up'. This comes as yet another 200 migrants arrived across the English Channel in the last weekend of June. They are now using ever larger boats of the type previously seen in the warmer waters of the Mediterranean Sea. The latest total of migrants for this year is 5,539—more than double the number at the same date last year.

It is said that two directors-general of Border Force and Immigration Enforcement are to quit their posts and be replaced by a single person tasked with curbing the crossings and reforming Britain's asylum system.

The politicians are of course not hands on with any of this but they are being shown up by a lack of action by the people tasked with stopping the arrivals and by recent activities at sea by Border Force vessels (as per page 19).

Bigger, longer and more efficient  
(Dave Finn Photography)




**THE EMERGENCY SERVICES SHOW**

HALL 5 | NEC | BIRMINGHAM | 7-8 SEPTEMBER 2021

## TAIL ENDER

We could have a conference to discuss how we might rescue UK police air support from itself and from deeply entrenched ideas.

That was a proposal put to PAVCon Europe in the wake of the Mayor's announcement. I must admit I was not immediately drawn to the idea.

So what is best to do with negative thinking – yes think about it again a little while longer!

After a couple of days I decided that I was not totally against the idea in principle, it is just that I really do not see that much will be gained. It's the same old people unless we can interest either the Home Office or the Mayor of West Yorkshire to put the idea forward as their idea. They like doing that. Alternatively I suppose we could bring in some famous comedian to lead proceeding. At least we would enjoy ourselves as we tried to turn the tide.

But where to hold it? The National Memorial Arboretum in Staffordshire? It is not quite a burial ground for lost police officers but it's the next best thing. Probably more useful is a small pub just near there. The location, wherever it might be, will say a lot about the aims of the project. That would therefore also mean the rejection of police premises, all of them not just Wakefield police HQ and Lippitts Hill.

Getting everyone in the same room might be an aim but getting all the heads in the same forum via Zoom or Teams might be considerably easier. Travel and availability are seen as an important element these days. And if fighting does not break out within hours, then we might just set up a conference – Angela Merkel might be in the Chair. She has hinted at some availability shortly.

So how do we think a gathering of say 50 or 100 disparate police aviation souls might go, bearing in mind that we know that thirty or so attendees of the quarterly Strategic Board Meetings have overseen what we have now?

OK. Six of us will meet in a bar then. Better plan and it avoids trying to understand this.



## FUTURE EVENTS

Organizers of Commercial UAV Expo Europe have announced that the next edition of the event will take place with Amsterdam Drone Week (ADW) and EASA High Level Conference at RAI Amsterdam 18-20 January 2022. Previously, the events were scheduled to take place together in December 2021, but the organizers have decided— in close consultation with partners Amsterdam Drone Week and EASA— to delay the event until early 2022 due to the impact of COVID-19 on travel and the event industry. This date will offer partners, speakers, visitors, and delegates more certainty to travel to Amsterdam and thus bring the worldwide UAM/UAS community together. Future editions will revert to the typical December time frame.

## UPCOMING EVENTS

27-29 July 2021 moved from 30 March – 1 April 2021 the 2021 edition of Rotorcraft Asia and Unmanned Systems Asia will be held at the Changi Exhibition Centre, Singapore. As Singapore remains closed to almost everyone it will be run digitally. Even without the distortion caused by the pandemic, this event was tiny last time out [in 2019] but it remains to be seen whether it can be run at all. If the timings are all right this could be the making of this small event for an industry that has had no venues to show their wares. While the world celebrated with optimism when the first vaccinations were rolled out, our reality still proves to be challenging as resurgences and variants emerge amidst ongoing travel restrictions around the world. The safety of all exhibitors and visitors is of utmost priority, and given this current landscape, RCA-UMSA will focus primarily on strategic conversations via a fully digital format this year.

In person live event are still rare. APSCON should happen in the USA but only on a smaller scale and only because the USA is taking some risks. The best hope for Europe appears to be early September 2021, the event industry has high hopes in catching up on some of its missing events.

Several have been telescoped together around the customary dates for The Emergency Services Show at Hall 5, NEC Birmingham. The main event will still be held over two days on 7-8 September but around the corner in the same venue will be other events normally held in London. As ever in this strange world there remains a possibility of the events not taking place but the future does look promising.

Mainly associated with the Fire and Ambulance services, the organisers have launched a new feature: Future Policing, supported by an Advisory Council chaired by Lord Hogan-Howe, the former Commissioner of the Metropolitan Police Service and architect of all that is NPAS. Showcasing the latest innovations

available for the police sector and sponsored by Audax, Future Policing has the full backing of the Police Federation of England and Wales and will feature a two-day, CPD-accredited high-level conference with a line-up of senior speakers.

The Emergency Services Show still hopes to feature more than 450 exhibiting companies including leading names in search and rescue, extrication, training, protective clothing and uniforms, medical equipment, vehicles and fleet, vehicle equipment, outsourcing and safety. New technology on display will include connected vehicles that serve as mobile communications hubs, satellite communications, ruggedised mobile computers, tablets and phones, data, cloud storage, wearable tech, connectivity, UAVs/drones, hybrid and electric vehicles, body-worn cameras and other video capture systems.

For the first time it will be co-located with The Fire Safety Event, The Health & Safety Event, The Security Event & The Facilities Event, creating the UK's largest event dedicated to the protection of people, places and assets.

The events are organised by Broden Media Ltd., Robert Denholm House, Bletchingley Road, Nutfield, Surrey, RH1 4HW <https://www.emergencyuk.com/>

<p><b>New dates for 2021</b> <b>7-8 September</b></p>		<p>Book your stand now <a href="http://www.emergencyuk.com">www.emergencyuk.com</a></p>
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A little later in the month Clarion Events Defence and Security have announced that Counter Terror Expo (CTX) and Forensics Expo Europe (FEE) will be rescheduled and take place alongside DSEI at ExCel London on 14 – 16th September 2021.

DSEI is on track to deliver the event' with both returning key accounts and first-time exhibitor numbers reflecting the industry's commitment to a return to live events. As the UK's leading networking event for security professionals from industry, infrastructure, government and policing, CTX attracts attendees and exhibitors from across Europe, all of whom will have the opportunity to seek counter-terror business synergies with a wider pool of stakeholders attending DSEI across the Land, Naval, Aerospace, Joint, and Security domains.

Clarion Events, one of the largest exhibition organisers in the world, hold the safety and well-being of all event attendees as the highest priority. DSEI aims to deliver an event as similar to those in previous years as possible and will fully implement all public health requirements, in order to make the venue COVID-19-secure. Working alongside Government, public health officials, the venue, business partners, transport operators and hotels, DSEI 2021 will take all the necessary precautions. <https://www.dsei.co.uk/>

World Helicopter Day for 2021 is on Sunday 15 Aug - just 45 days away. This is its seventh year. This helicopter focussed event is a good way to keep the locals onside to remind them of the public good / economic benefit you bring to the area if they are prone to noise complaints. Also a very low cost marketing activity with potential for local media coverage.

<p>CTX   ExCeL London</p>	<p><a href="#">View this email in your browser.</a></p>
	

