

# Police Aviation News

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Issue 330

October 2023

## PAvCon Europe - Future SHOW REPORTS



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## EDITORIAL

All is not well with the international cooperation deal between the United Kingdom and France. The British government is sending millions of pounds to France for a service that should go some way towards thwarting migrant traffic across the English Channel in small, often unseaworthy, rubber boats but some elements of those tasked with undertaking the political deal on a day-to-day basis are clearly not meeting the expectations of either the French or the British governments.

Allegations – copiously backed up with photographic evidence – in the UK *Daily Express* claim that police drafted into the Calais region, mainly Police Nationale and CRS, are not actively seeking to stop the human traffic across that water. Any apparent shortfall in overall numbers can be explained away by occasional periods of difficult weather at sea. This year has been a little rougher than last.

The newspaper described and illustrated police inaction and a tendency to treat the whole scenario as a liquor fuelled break from ordinary duties. The CRS riot police are said to only have a duty time of 6 hours daily.

It appears that the difficulties in ensuring that the British get value for money are suspected, if not well known, in the offices of the Home Office in Whitehall. Although sums in the region of £480M are involved, they steadfastly refuse to answer a Freedom of Information request for the numbers of boats stopped and destroyed by the French authorities. That said, the *Daily Express* managed to elicit a statement that some 15,000 had been stopped by them – although the private FOI request was told they did not know. That figure could simply be the number of people turned back, perhaps the same people several times. Or it may be a fabrication as the number of awkward questions grow. It may be that some Home Office officials may have to give up Working from Home and go into the office – if they can remember where it is.

The *Daily Express* mentions only the local police and CRS specifically so it may be that the inactivity issue is local to Calais and may not involve such as the military and Gendarmerie formations assigned to the tasking in different areas. The same news report complimented the Gendarmerie for their work and other sources suggest that the Gendarmerie were claiming some success in stopping the activities of traffickers.

There have been spasmodic air search operations by Police National using a Cessna leased locally and regular reports of trouble between the police and traffickers but the negative reports in the *Daily Express* are the first to attempt to give an idea of what is happening on the ground. It might be that certain elements of the police object to spending time stopping the flow of would-be migrants to the UK when the net result is that more stay in France – and I guess France has more than enough of its own migrant troubles, so that is an understandable attitude.

If that were not enough, as the month of September closed, the British Home Secretary, The Rt Hon Suela Braverman KC MP., went to Washington DC to propose that the whole concept of seeking asylum was flawed. When the rules were arrived at in 1950 it was a different world, and no-one considered asylum a matter where being a woman or having a non-standard sexual orientation might apply. Well, she may have asked the question and upset quite a few people but any changes will be a long time coming. Meanwhile large tracts of the western world are losing patience with the tide of human traffic.

*Bryn Elliott*

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**COVER IMAGE:** Drone time in Las Vegas. Later in this edition, from page 23, is the comprehensive 6 page report from potentially the most important drone show in the annual calendar.

It may be held in the USA — and their rules are somewhat different to those in other countries — but the report from Mark Colborn represents the opinion of one of the most active in the field who can left a pen to report on the show. In addition Mark is a recently retired former police helicopter pilot and remains actively involved in police drones in his home city of Dallas, Texas. He knows both worlds intimately. In the photograph are Vic Moss (Moss Photography - Denver, Colorado) and Kenji Sugahara (founder of AriAscend - Salem, Oregon)



**Police Aviation News** is published monthly by **POLICE AVIATION RESEARCH**,  
7 Windmill Close, Honey Lane, Waltham Abbey, Essex EN9 3BQ UK.  
Contacts: **Cell:** +44 7778 296650 **Skype:** BrynElliott or +44 20 8144 1914  
**E-mail:** [editor@policeaviationnews.com](mailto:editor@policeaviationnews.com) and [policeaviation@hotmail.com](mailto:policeaviation@hotmail.com)

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## LAW ENFORCEMENT INTERNATIONAL

PAvCon EUROPE: At the beginning of September all the immediate interested parties were informed of how the future of the PAvCon Europe conference and exhibition was to operate. Five individuals and groups expressed interest in taking over the administration of PAvCon in the future. A wish to ensure the event continues was the foremost motive. Negatives expressed are that the British police aviation contingent has chosen not to be involved in this Europe wide event. That is something to address in the future.

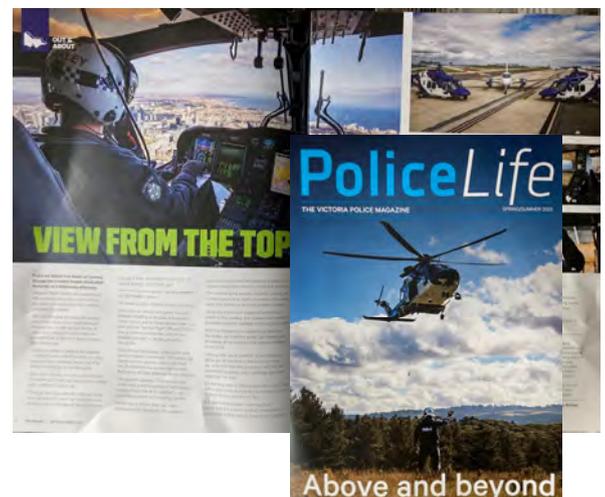
The new operators are Dynamic Range of Erith, Kent. They have been the IT company of choice since the early Shephard Conferences (2006-8) and have undertaken IT on each PAvCon event since 2011. They know the event and many of its idiosyncrasies. The general office e-mail of [admin@pavconeurope.eu](mailto:admin@pavconeurope.eu) will move to them, leaving direct contact to the previous administration reliant upon [president@pavconeurope.eu](mailto:president@pavconeurope.eu) It is not expected that the transition will have any detrimental effect on the show and conference and the Editor will still be advising on programme content.



The next PAvCon Europe is still in preparation and talks are already in place with the expected hosts about dates. A May/June timescale is currently assumed but is not confirmed in any way.

## AUSTRALIA

VICTORIA: The Victoria Police Air Wing started operations with a fleet of three AW139 helicopters and a Beech King Air 350 in 2020. Recently the (Victoria) *Police Life* magazine listed the unit as undertaking 10,550 tasks, 3000 on general patrol, 1600 vehicle evades/pursuits/follows, 3000 searches (people and vehicles) and 220 rescues.



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## COSTA RICA

SVA: The Servicio de Vigilancia Aérea (SVA, Aerial Vigilance Service), the aviation unit of the police of Costa Rica, has retired its fleet of two Harbin Y-12E Turbo Pandas. Both aircraft were used to combat drug trafficking, organised crime, ambulance flights and humanitarian aid.

In October 2016, the Turbo-Pandas with serials MSP009 (c/n **089**) and MSP010 (c/n **090**) were donated by the Government of the People's Republic of China. The decision to retire the type was taken because the manufacturing company's logistics and spare parts supply chain was not able to supply the necessary parts and components. Both aircraft were dismantled at the SVA's main base in San Jose International Airport in Alajuela.

Last month the pair arrived at the National Police Academy location in Pococí, to serve as instructional assets. Also at the academy as instructional airframes are Piper PA-23-250 MSP015 (c/n **27-7954032**) in service since 1979 and that will shortly be joined by King Air F90 MSP020 (c/n **LA-54**). The Beech was an impounded drug runner, previously TG-HOS when it was taken into service a decade ago. [Scramble]

## GERMANY

NORTH: The interior ministries of Niedersachsen-Lower Saxony and Mecklenburg-Western Pomerania have ordered four Airbus Helicopters H145 for their helicopter squadrons as part of a joint procurement following a European tender that was launched in August 2022. The H145s will feature a state-of-the-art police configuration including the latest generation of police mission equipment and Bambi Buckets for firefighting.

The adjoining states in northern Germany currently operate the MD900 and EC135 respectively as their main fleet assets. Both types in the fleets are now over 20 years old.



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

In total, there are more than 1,650 H145 family helicopters in service, logging a total of more than 7 million flight hours. Powered by 2 Safran Arriel 2E engines, the H145 is equipped with full authority digital engine control (FADEC) and the Helionix digital avionics suite. It includes a high performance 4-axis autopilot, increasing safety and reducing pilot workload. Its particularly low acoustic footprint makes the H145 the quietest helicopter in its class, while its CO2 emissions are the lowest amongst its competitors. [Airbus]

BAVARIA: The police in the state took "delivery" of its newest helicopters in a ceremony held in Munich in August. It was a fairly low-key affair involving the Minister of Bavaria Dr Markus Soder and Interior Minister Joachim Herrmann and officials and seen by some as more of a locally focussed election event than one to promote the aviation unit. Local elections are set for October and the intended long drawn-out schedule of H145 delivery has been discussed previously.

Used as the backdrop to the event were a new H145 still wearing its factory marks D-HADN and D-HBPH built in 2010 c/n 0912 now remanufactured as an EC135P3. As previously reported, the new 145 fleet remains a thing for next year. The airframes are used for pilot and engineering training as the manufacturer and police unit work together to bring together the final role fit features including the hoist and the illuminated tip rotor blades. [MM]



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## MORROCCO

Seen at the end of August at the Airbus Helicopter factory, Donauwörth, is a new H135 for the police in Morocco. It wears the test registration D-HCBK but currently there is no clue as to the Moroccan identity.

It is believed that this may be the third H135 for the operator. Just one of several pending law enforcement helicopter deliveries for Brazil, Romania and Serbia at the factory. [MM]

## UNITED KINGDOM

**NATIONAL:** Probably the most long-awaited Annual Report on police air operations ever, NPAS has finally published the 2022/23 version on its website. At twenty-nine pages long it is one of the more comprehensive reports to have come out of Wakefield but of course it still leaves a massive information gap in those years where no report was written.

Long term readers will recall that the last Annual Report, covering 2017/18 was published in 2019 and that the organisation declared that it had decided it would 'no longer produce an Annual Report.' That was until PAN got the National Audit Office involved, they declared that as a public organisation they were accountable, and a report was therefore required. Who thought differently? The resultant secrecy black hole in the reports has therefore been four irrecoverable years. There are black holes in the new report – mainly financial – but who is counting the millions?



Among the pages of mission statements is useful information on missions undertaken and some future plans.

The report states that late last year the former Merseyside Police EC135T2 aircraft G-XMII, now G-POLU, was to return to the main fleet as a training airframe. It does not say whether this is to replace EC135P2 G-EMID or supplement it. The latter is also something of a role spec hybrid as the only Pratt & Whitney powered EC135 initially equipped with the McAlpine role pod (Macpod).

This EC135T2 was leased to the police in Norway for several years in a modified version of its original specification. It sits on high skids, but the "Macpod" has been removed. And it is non-standard for UK police use, while it was away in Norway Babcock converted all the others to a common standard. In recent years it has been used by Airbus Helicopters for trials. Despite the decision to return it to service nearly a year ago in May of this year the colour scheme was mixed. The main pod retained the scheme it wore in Norway with the POLITI sign obscured by its current registration G-POLU. The tail boom was unpainted, straw and black composite and the Fenestron and fin is dark blue with red extremities reminiscent of the Norway colours. Almost incongruously the drive cover to the Fenestron is the POLITI blue. By July it had painted and looked more like a working police helicopter but entry into service is not yet confirmed.

The rotary fleet is now 15-20 years old and adding the existing owned aircraft to the fleet rather than have it little used on trials at Oxford makes sense. There is no indication whether either G-EMID or G-POLU are to be given a role fit makeover to enable them to better fit into the day-to-day fleet.

After all the heart wrenching negative comments about the fixed wing fleet in the Strategic Board Minutes of past years (they were all for scrapping them less than two years ago) a new permanent home has been found for them at East Midlands Airport. This is a recent signing so any move to the 'new' base will not be immediate. The existing structure will need several licks of paint. At least they are not buying an oversize Rubb again.



There is less information on the replacement rotary wing fleet. That remains effectively dormant except that in the eyes of the would-be suppliers it seems.

LONDON: In the middle of September HeliOperations, the Dorset company who bid the Bell 429 for the NPAS London contract put out a short press release.

**PRESS STATEMENT**

**HeliOperations is delighted to announce a bid to compete for the Metropolitan Police National Police Air Service competition using the Bell 429.**

**The combination of Bell’s class-leading, high performance and globally proven 429 helicopters with HeliOperations’ outstanding track record of aviation services and aircrew training for the public and private sectors worldwide is compelling.**

**HeliOperations’ CEO, Steve Gladston, said: “Our highly competitive bid provides the Met with an opportunity to achieve a step-change in operational capability, performance and service provision”.**

*Ed: Even in the ranks of the aviation media there were sharp intakes of breath, disbelief in the main. The short statement was like no other, unprecedented. This was the company that stood no chance in getting a contract - NPAS has already tried to dump them – hence the short trip through the courts this summer which served to embarrass NPAS in more ways than one. Surely HeliOps knew that the Bell 429 stood no chance (even though it has been selected by numerous police services across the globe) and should simply sit in the corner awaiting their fate? Who is there to say that the Bell 429 is not the best option? What qualifications do they have to decide that?*

*So, what were they up to? Firstly, accepting their fate is not their style. My feeling is that the whole plan for new aircraft is dead in the water, already too much time has passed for the bids by industry to have any real financial relevance, HeliOps were snubbed, and this is the riposte in the form of a perfectly balanced announcement. Potentially viewed as a fruit flavoured one.*



*Whatever happens in the future it would appear that NPAS believe that they would be happy with what remains, the alternate bids by Babcock to meet both the London and main fleet contracts*



A late summer sunset over Lippitts Hill late last month  
(NPAS London X)

utilising the familiar Airbus Helicopters H135. Take it or leave it and at the one vendor price. Not really competitive on any level. Four of the five bids were effectively set aside. But clearly a pre-judgement of the relative merits of the Airbus and Bell has taken place. One can only hope that NPAS have the data to support the 'decision' - perhaps they sent an emissary to Sweden, Australia, New Zealand and the USA to check on the type in service? Sweden is close at hand, just a short plane ride away, and they switched from the EC135 to the Bell 429. They have been to Sweden haven't they?

As other news threads have suggested there is another newer H135 model looming – the one with five blades – and as we do not know any of the timelines for the NPAS plan it may be that the new standard will be the only one available and that alone will skew any existing financial projections. No right minded police air operation would want to be buying 'yesterdays' model' of a successful design when they have a whole fleet to exchange.

The last man standing within NPAS who has a history of actually buying a helicopter many, many years ago was Scott Gallagher, he has just retired and gone off the work in industry for Nova, one of the companies that had hopes for selling their many skills in the procurement.

This is more important than it may seem. Early purchasers of police aircraft and helicopters did not know anything. It is unlikely that any of them had bought anything more expensive than a box of pens and yet here they were thrust into the big time. For decades there was a perceived battle of wits between the police as purchasers and the aircraft vendors. Regardless of who the seller was they were seen to be trying to gain advantages over the "green" purchaser and selling them the wrong tools at an inflated price. In some cases, it was undoubtedly true but it was simply a game of learning to trust the people they were dealing with. Early purchases were often because someone, usually the Chief Constable, liked the look of the product, its colour, or he thought the CEO let him win at golf and was a nice chap. That fuzzy attitude evolved into an understanding of the product and how to obtain best value when purchasing a multi-million-pound product. Which office dweller can judge the difference between an MX-8 and an MX-25 EO/IR? They all produce images, but which is the tactical preference?

All that experience is now gone. When they come to buy – and I am presupposing that one day someone will be given money to be able to buy something – there is no possible way they can make valid judgements on what is best value for NPAS. We will be back reliant on someone with a strong character or a chum in the golf club in assessing which aircraft to buy. By the way this was not a sexist statement, in those days there were no people who identified as lady police chiefs.

## ON YER BIKE

A certainly more positive storyline for all strata in NPAS has been that of the bicycle riders.

A team of three NPAS cyclists cycled some 800 miles between each of the NPAS rotary wing bases in an effort to help boost the funding of Gareth James a colleague who has been undergoing treatment for Stage 4 Colorectal Cancer [bowel cancer]. After many other treatments and operations under the National Health Service the future hope is that a final treatment can be undertaken in Europe. This may require up to £40,000 'self-funded' by the efforts of the patient and his family to make up for the inability of the NHS to fully fund his treatment. Gareth was a Tactical Flight Officer (TFO) at NPAS Hawarden, North Wales, when he was diagnosed with stage four colorectal cancer. Despite a dire prognosis, Gareth has beaten the odds so far and the cancer is stable, with around £23,000 raised prior to the cycle ride fundraiser starting.

Under the tagline Base2Base2023 the four put their time and physical effort into helping reach the significant sum.

At the end of August, the trio of TFO's from NPAS North West took on the fund-raising challenge in support of their former colleague. A few days later, September 2, PC Phil Perkins, PC Mike Dutton and PC Anna Reid, from NPAS's



Barton base, in Manchester, set off on the nine-day cycle, calling in at every NPAS base across England and Wales. They were accompanied by Merseyside Police officer Liam Phillips in a support vehicle.

The ride was launched in the north from the **NPAS base at Newcastle** airport with the first leg ending 115 miles later in West Yorkshire at **Carr Gate, Wakefield**. From there it was up across the Pennine hills, to take in **NPAS Barton** and **NPAS Hawarden**. The next day took the team from Hawarden, south to **Birmingham**, followed by **Husbands Bosworth** and **Benson** near **Oxford**.

Another day, another ride saw the trio head off east across the top of London to **NPAS London (Lippitts Hill)** and **North Weald** - a shorter cycle of just 70 miles.

To avoid cycling through central London they were transported to the base at Redhill, Surrey in a van, thereby avoiding a probably difficult leg, to kick off the next leg – **Redhill** to **Bournemouth** and then striking off to the west to the unit and **Exeter** airport.

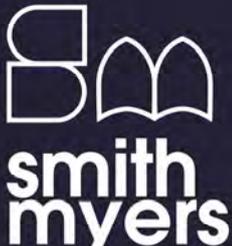
The leg from Exeter to Almondsbury by Bristol was just 91 miles, followed by another final 55 miles from Almondsbury, into Wales and to **NPAS St Athan** – the last day and the finishing post where they were suitably greeted by airport fire engines jetting water in an arch above their heads.



©NPAS



Stopover at NPAS North Weald with a modern and ancient wartime backdrop (EC135 and Douglas C-47)  
(NPAS)



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## UNITED STATES

### ARIZONA

Pinal County SO now has Trakka's cutting-edge TrakkaBeam TLXc, which expands the range of Trakka C4ISR equipment utilised by the department and bolsters their capabilities in search and rescue (SAR) operations. The TLXc, an advanced model of Trakka's High-Intensity Search Lights (HISL) series, incorporates their EO/IR camera. This unit has been integrated into the Pinal County Sheriff's Office's Bell UH-1 Huey helicopter, broadening the spectrum of Trakka's mission systems present across their fleet.

Pinal County's fleet encompasses two OH-58s, one equipped with the TLX HISL, and one with a Total Mission Solution, which includes the TC-300, a 4-axis stabilized long-range EO/IR camera system, TLX searchlight, and Trakka's TM-100 mapping and video management software. The fleet also includes a Cessna 206 outfitted with TrakkaMaps TM-100 equipment. The acquisition of the TLXc has significantly enhanced Pinal County's search and rescue operations and surveillance activities / capabilities, using its HISL and EO/IR technology.



**NEW YORK:** Erie County Sheriff continues to promote a future utilising manned rather than unmanned aviation. There has been uninformed pressure to take the drone option but so far it has been thwarted,

Erie County Sheriff John Garcia wants to double his department's helicopter fleet, he wants to acquire a new \$10M Airbus H135 twin engine helicopter and retain the existing 22-years old AS350 AStar as a backup. The project will cost considerably more than simply replacing the old machine but will seek to offer a greatly enhanced capability and availability by staggering maintenance schedules.

The case for a new helicopter has been made but the capability enhancements are proving more difficult to sell to those that hold the purse strings. The length of time the AS350 has been unavailable due to maintenance downtime has been damagingly significant, fortunately it has a long history of saving lives and that is perhaps the factor that remains in the public perception.

The main opposition to renewing the helicopter -let alone acquiring two – is the growing use of drones and indeed their replacement of full-size manned craft in many places in the US.

There are four law-enforcement helicopters within range of Buffalo, including the aircraft owned by the Erie County Sheriff's Office, New York State Police, the Niagara County Sheriff's Office and the U.S. Coast Guard. Only two of these offer hoists that can lift people to safety. The Coast Guard helicopter is available 24/7 and can reach Buffalo within 90 minutes though some of the choosier customers might consider that to be a long time to be treading water or in other danger.



According to local media the sheriff's office have been reticent about giving them full details of the current operation, they rejected a request for flight logs and financial records showing how the helicopter has been used and at what cost. The classic but pretty baseless excuse has been that such records might endanger lives or compromise investigations. Where details were released, they were not comprehensive and context linked. The usual tactic. Still there was a summary of costs released and that showed that the department spent more than \$404,000 last year and nearly \$117,000 so far this year. The summary did not include other costs including fuel and hangarage.

As a result, journalists resorted to flight tracking websites and learned that 50 flights undertaken between the start of July and August 23 saw the AStar airborne for 61 hours. Tellingly the press research also showed that the helicopter was grounded for maintenance from mid-April until July; a damaging detail when the availability of a handful of drones might ensure that something could be airborne.

In Cincinnati, the decision to sell the Hamilton County Sheriff’s two helicopters was affected by several matters including the cost of hiring a pilot and looming maintenance costs for the department’s two helicopters. The operation was costing around \$3M annually where quality drones cost between \$20,000 and \$50,000. The financial pressures told in that instance and numerous small operations are taking similar decisions. These are the pressures that Erie County face in their desire to continue and expand their manned helicopter operation. *[Investigative Post/PAR]*

WASHINGTON: The Spokane County Sheriff’s Office in the Pacific coast cstate of Washington, could be getting a new \$3.3M helicopter.

Last month the Spokane County Commission unanimously voted to accept a \$500,000 grant from the U.S. Department of Justice that will go toward the Sheriff’s Office’s helicopter modernisation project. Accepting the grant doesn’t officially mean the county will buy a new helicopter, but it makes it likely.

The Sheriff’s Office and Spokane Valley Police Department – which is part of the Sheriff’s Office – have used helicopters for nearly 20 years. Today, the county and Valley have four: two formerly used by the U.S. military.

The announcement comes just a few months after the March delivery of a Trakka Systems announced Total Mission Solutions Package for one of its old airframes.

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# AIR AMBULANCE

## GERMANY

BAVARIA: On the last day of August, Airbus Helicopters hosted the handover of two new H135 P3s, D-HXCC and HXCD, to ADAC Luftrettung at Airbus Helicopters in Donauwörth.



© Michael Mau

One of the machines D-HXCD c/n 2232, is the 1500<sup>th</sup> type 135 manufactured in Donauwörth. This was a special moment in the history of the H135 but also in the partnership with ADAC, Stefan Thomé, Chairman of the Management Board at Airbus Helicopters Deutschland, appropriately noted in his speech, also referring to the now five-decadelong partnership. "Trust, respect and common goals are the cornerstones of this close cooperation. As a result, we have already been able to make more than one million air rescue missions possible," Thomé continued. Better patient care and more safety Production of the H135 at the site is also a real success story outside of the cooperation with air rescue.

Airbus Helicopters now has around 320 customers worldwide who use the helicopter in a variety of areas - including police, training flights, passenger transport, rescue and recovery. This variety of mission areas also ensures that the H135 has now logged more than seven million flight hours. As reported in PAN last month the type continues to be developed.

ADAC Air Rescue already has 46 other H135s in service. By investing in the latest version of the H135, ADAC are increasing the quality of supply and flight safety, while also pioneering innovative retrofits in Germany. Because further developing what already exists and proactively solving challenges in rescue services are at the core of the ADAC mission. (Via Michael Mau)

## NORWAY

NATIONAL: Helsetjenestens driftsorganisasjon for Nødnett HF (HDO) has selected the Frequentis multimedia communication solution LifeX™ as the next-generation communication solution for the Norwegian emergency services. HDO is a public service provider with main responsibility for the operation and management of control room solutions, radio terminals connected to the Norwegian Emergency Public Safety Radio Network – Nødnett – and services to its customers.

The solution for HDO will allow control room operators to see all the relevant incoming information about an incident at a glance, while meeting the highest demands of mission-critical emergency services use

cases. The additional mobile functionality will allow nurses to continue consulting patients by phone when away from the workstations to monitor patients at their hospital unit, easing the management of their workload to the benefit of all patients.

The solution will be deployed for all 16 Emergency Medical Communication Centres (EMCC) and more than 150 General Practitioner On-Call Centrals (GPOC-Central) and Emergency Departments (AED). The solution will migrate from the current Frequentis integrated command and control system (ICCS).

Images: The Frequentis Norway team and the HDO team at the contract signing at HDO headquarters in Gjovik

## UNITED KINGDOM

LONDON: with new aircraft purchases on the horizon London's Air Ambulance is recruiting a Chief Pilot. Reporting directly to the Chief Operating Officer / Accountable Manager, the post will work to ensure strict compliance with CAA rules and regulations and appropriate standards as stipulated in the London's Air Ambulance Operations Manual.

The post will also be responsible for the operational change management process to convert from the two MD902's operated currently to a pair of Airbus Helicopters H135's. The closing date for this process was 11 September 2023.

## UNITED STATES

FLORIDA: The Health Care District of Palm Beach County has taken delivery of the first of two Leonardo AW169 helicopters to operate the Trauma Hawk service previously operated using Sikorsky S-76 helicopters.

Meanwhile down at Pompano Beach they are continuing to deal with the aftermath of the fatal Broward Sheriff Fire Rescue EC135 helicopter crash reported last month.

In addition to the fatality in the aircraft there was one on the ground in a building the helicopter crashed into and as a result several people were left with next to nothing after the helicopter crashed into their apartment complex.

Three weeks after the life-changing incident some of the residents were still without a place to live. The family involved had not been given access to the crash site and therefore they do not know which of their belongings might have survived, and that includes all-important identification documentation.

The dispossessed family has been reliant on hand outs from neighbours but making do with temporary housing, temporary food and temporary clothing. Their current home is a hotel, but they are expecting that they will need to give that up by the end of September. A multi-million-dollar claim is pending.

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# SEARCH & RESCUE

## EUROPE

EUROPEAN UNION: Sources may differ in their opinions, but the current suggestion is that mankind is believed to have originated in Africa. The current 'illegal' migration flows suggest that a large section of mankind no longer likes Africa (and a great many other places) and is getting out – fast.

For those getting out of Africa and other places the aim is to claim and attain asylum in countries where the weather is most definitely temperate. Europe.

So far this year, Germany has received the most applications: 30% of the total, almost twice as many as Spain (17%) and France (16%). Asylum applications registered in EU countries are surging. The EU's Asylum Agency said there was a 28% year-on-year increase.

Some 519,000 asylum applications were lodged in 29 countries between January and the end of June and are trending towards exceeding one million by the end of the year. That is not a peak, the conflict in Syria saw asylum applications reach 1.3 million in 2015 and 1.2 million in 2016.

The news images, especially those from the Mediterranean suggest the traffic is from central Africa but 44% of applications have come from the populations of Afghanistan, Colombia, Syria, Turkey and Venezuela. There are many countries in between but they are being shunned in favour of somewhere in Europe. It seems all of the would-be recent countries are struggling under the application workload, others may struggle more but it is reported that 41% of applications have received a positive response in the first instance.

All this traffic discounts the, hopefully temporary, hosting of more than four million Ukrainians fleeing the 2022 Russian invasion.

## UNITED KINGDOM

Continued attempts by this publication to get meaningful information on the effectiveness of the French campaign on the beaches of northern France via Freedom of Information (FOI) requests remain thwarted into early September.

The latest knock back is that the information commissioner's office has denied an appeal on earlier requests for information.

The original FOI requests to the Home Office were an effort to try and keep an eye on the value of the UK Government spend of what is now £478M to the French Government in a joint Anglo-French operation to 'stop the boats.'

How is it that the Home Office doesn't know, on a daily basis, how many migrants have been turned back, how many boats have been destroyed and how many outboard engines have been confiscated? And yet they deny having such information.

We might assume that the people traffickers will be fully aware of the locations and the days when migrants have been prevented from leaving France, with their boats destroyed and outboard engine confiscated, how can sharing this information with interested stakeholders, members of the British public, have any impact on law enforcement?

The Home Office/Border Force were contacted in April with a FOI request with regard to how many migrants were turned back by the French, how many boats were destroyed and how many outboard engines were confiscated in the period 1-10 April 2023 on the beaches of northern France. In this period there was a surge across the Channel, 1,106 migrants in 26 boats.

This request was declined, on the 11 May, because the Home Office didn't have all the information and anyway informing the British public of any successes could assist the people traffickers!

This was appealed and the FOI request declined for the second time, on July 14. A further appeal to the Information Commissioner, on the 20 July, was rejected on September 6, 2023. The next and final step is a further appeal to the 'First-tier Tribunal (Information Rights)! [Tony Cowan]



# INDUSTRY

**UMS SKELDAR** and **Marshall Land Systems** have jointly developed an expandable container solution to support the rapid deployment and operation of rotary uncrewed aircraft. Unveiled at Defence and Security Equipment International (DSEI) 2023, the Battlefield Deployable Uncrewed Aerial System (BDUAS) sets a new industry standard, offering unprecedented functionality, versatility and mobility.

**Airobotics Inc.** was granted an Airworthiness Type Certification from the Federal Aviation Administration (FAA) for its Optimus-1EX. The FAA's Associate Administrator for Aviation Safety announced the grant of the Type Certificate during Commercial UAV Expo held in Las Vegas, Nevada. Airobotics Optimus-1EX is the second ever Uncrewed Aircraft to receive this certification and the first "Drone-in-a-Box solution", designated.

**Leonardo UK** has signed a Memorandum of Understanding (MoU) with the High Value Manufacturing (HVM) Catapult, a network of seven world-class research and innovation centres that turn great ideas into commercial realities. The new agreement, which focuses on Leonardo's UK-based helicopters and electronics businesses, represents a significant step forward in the partners' long-standing collaboration. Under the new MoU, the two organisations will explore and pursue innovative opportunities in advanced manufacturing, rotorcraft technology, supply chain optimisation and skills development. Under the MoU, HVM Catapult will explore collaborative opportunities within the state-of-the-art iAero Innovation Centre in Yeovil, Somerset. This will support a range of advanced manufacturing research projects at Leonardo's UK onshore Helicopter business, ensuring that the company continues to provide the best value for money for its UK customer and compete effectively in export markets. At DSEI, the company revealed that £1.6Bn in helicopter exports from the UK had been achieved over the last 18 months and is looking to grow this in coming years.

**Aviation Industry Corp of China (AVIC)**, the nation's leading aircraft maker, has started the mass production of its AC352 medium-lift utility helicopter and plans to begin the delivery in 2024, according to a project manager.

The AC352, China's first 7-metric-ton-class helicopter, was co-developed by AVIC and Airbus Helicopters – the equivalent Airbus model being the H175. Work began on the helicopter in 2006 and it made its first flight in December 2016 in Harbin.

In July 2022, the Civil Aviation Administration of China conferred the type approval certificate to the AC352, marking the successful completion of the helicopter's research, development and test flights. Propelled by two turboshaft engines, the helicopter has a maximum takeoff weight of 7.5 tons, a maximum carrying capacity of 3 tons and a cruising speed of about 280 kilometers per hour. It can fly up to 850 km on a single flight, according to AVIC.



Back in the western world the AC352 is known as the H175 and, after relatively slow sales in the west, the type has recently been boosted by sales into the oil industry – always a prime market.

**Airbus Helicopters** and PHI Group (PHI) have signed a framework agreement that includes commitments for 20 super-medium H175 helicopters and 8 H160s to serve the energy market worldwide, including in the US. These commitments are composed of firm orders as well as purchase options that PHI may exercise during the course of the framework agreement.

PHI operates over 200 helicopters across the globe serving a number of markets, including energy and air medical. PHI's Airbus fleet consists of H125, H135, H145, H160 and H175 family helicopters - with the H175 being the latest addition.

In service since 2015, Airbus' H175 belongs to the super-medium class of helicopters, combining long-range with smooth flight qualities, making it the perfect solution for several mission profiles, including off-shore crew change, public services, and private and business aviation. 54 H175s currently in service have accumulated around 195,000 flight hours, of which 170,000 are flying for the energy sector.

Designed as a multi-role helicopter capable of performing a wide range of missions, the H160 integrates Airbus' latest technological innovations. With its light maintenance plan, the H160 optimises operating costs and offers a new standard in availability. The helicopter is powered by two of the latest Arrano engines from Safran Helicopter Engines that offer a 15% reduction in fuel burn. Both the H175 and H160 are already certified to fly with as much as 50% sustainable aviation fuel.



Andy Offer, 2Excel Aviation, left seals the Heron deal with a handshake with Moshe Levy, IAI

Last month at the DSEi Show at ExCel London, **Israel Aerospace Industries (IAI)** and **2Excel Aviation** signed a Teaming Agreement to forge ahead developing future uncrewed aerial systems (UAS) use in UK airspace.

Initial efforts will focus on growing and enhancing 2Excel's regulatory approvals in the uncrewed sphere using the Maritime version of IAI's Heron.

The highly capable aircraft has notched up 500,000 hours of safe operations around the globe. It carries a suite of advanced sensors, cameras and communications equipment that provide persistent reconnaissance for a range of missions, including Search and Rescue, border protection, fisheries patrol, and safety at sea.

Successful in-person and virtual demonstrations of the Heron for UK Government and civil observers, flying out of West Wales Airport in Aberporth, Wales, proved IAI and 2Excel could operate a highly capable Medium Altitude Long Endurance (MALE) platform in the UK within the constraints of the regulatory environment. Feedback from the UK Civil Aviation Authority was very positive, paving the way for future uncrewed operations.

Andy Offer, co-founder, and Director of 2Excel Aviation, said: "2Excel and IAI have already demonstrated to potential customers we were able to deploy Maritime Heron for a variety of tasks in restricted UK airspace during November 2021.

"This agreement will see us jointly develop these capabilities and approvals, using a real aircraft flying in the real world. The rapid pace of technological advancement is creating new ways to generate actionable intelligence, insights and awareness which is potentially incredibly valuable for a range of customers."

*Ed: UK based 2Excel appears to grab a few column inches every month in PAN. If it's not notices of the company looking for new employees, it is notices of the new people arriving. More often than not aircraft get a look in and the 2Excel fleet is seemingly ever changing.*

**2Excel Aviation** and partner **Metrea** have secured a follow-on contract to deliver Close Air Support and Intelligence, Surveillance and Reconnaissance training for the UK Armed Forces.

Delivering superb value-for-money for taxpayers, the flexible training is design to evolve to meet modern day threats and involves emulating fast jets, uncrewed aerial systems (UAS) and other aircraft which are called in by troops on the ground to strike targets, provide a 'show of force' or pattern of life above the battlefield. It is an essential requirement that key troops within UK Land and Marine forces develop and maintain their expertise and are ready for action when needed to protect the UK's national interests.

2Excel and Metrea deploy high-tech, low-speed aircraft equipped with high-definition cameras, military grade navigation and communications systems and downlinks to provide a live emulation that looks and feels real to the troops on the ground and is much more cost-effective than using frontline aircraft.

**2Excel** has recently acquired two new Diamond DA62 aircraft to supplement its existing PA-31 Navajo fleet alongside a Cessna 406 from Metrea to deliver this critical service. The 2Excel fleet of Diamond DA-62s is now four, with three delivered and one still in completion in Austria. The intention is that the older Piper aircraft will now leave the fleet.

Negotiations over the future of **Doncaster Sheffield Airport** the former operating base for both 2Excel Aviation and NPAS fixed wing continue. Current assessments are that it will take a minimum of two years to realise even a limited reopening of the airport to enable flying to restart. Progress towards a full service potentially involving the return of airline services will take longer. Meanwhile 2Excel Aviation retain their foothold at the airport in the hope that all aviation activity will return there. It is suggested that the current names of the airport (Doncaster Sheffield and Robin Hood) will be swept aside in favour of a new title more in keeping with the local authority.

The recent move of the **Oil Spill Response Limited (OSRL)** Boeing 727 spray aircraft from Teesside International Airport to Southend on Sea airport (reported last month) was to meet a need to keep the aircraft under cover in the coming winter. Teesside did not have spare capacity under cover.

**Vislink Technologies Inc.** has acquired the majority assets of **Broadcast Microwave Services, LLC (BMS)**, a provider of wireless microwave equipment for video and data transmission.



BMS designs and manufactures microwave technology systems that serve a diverse customer base in government surveillance, law enforcement, uncrewed aerial vehicles (UAV), and unmanned ground vehicles (UGV) markets. BMS offers a complete suite of mission-critical solutions, allowing reliable, long-range data transmission in the most demanding environments. With over 30 years

of experience in real-time microwave transmission, BMS has longstanding relationships with customers in the United States, Europe, Asia, and the Middle East (EMEA).

“BMS is a well-established international player in the AVDS space,” said Vislink CEO Mickey Miller. “By adding its assets to Vislink, we are consolidating the market and extending our position as the leading worldwide provider of AVDS products. We look forward to driving new sales to a larger customer base with an increased focus on the growing public safety market. Our strong balance sheet allows us to meet the needs of current BMS customers, while our industry-leading technology provides us with an attractive opportunity to up-sell and cross-sell our solutions. With the addition of BMS assets, we are even better positioned to scale our business in the growing MilGov sector.”



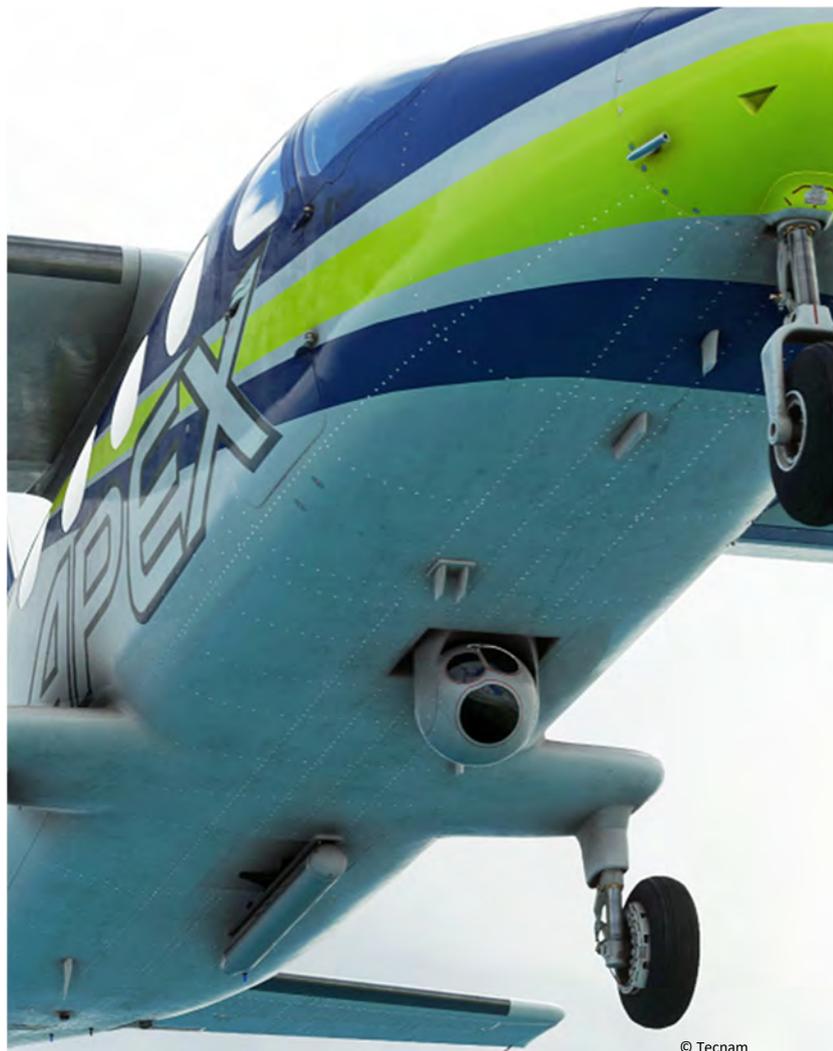
**Costruzioni Aeronautiche TECNAM** has announced a further expansion of mission capabilities for the versatile P2012 aircraft series with Apex Aviation, in Taiwan, with a Memorandum of Understanding for a special mission P2012 Sentinel SMP dedicated to surveillance and maritime patrolling with IMSAR mission equipment.

Apex, based in Taitung, purchased the first P2012 for skydive and aerial tourism in cooperation with Taitung government in 2022. A second P2012 with ambulance configuration was delivered in June 2023. The Company has six other P2012 options.

The new P2012 SMP will be configured with IMSAR systems that include two EO/IR cameras, a power box to feed all systems, radar, infrared sensor, AIS sensor, data downlink installation. The configuration is to be offered to the Taiwan Coast Guard.

In recent months Tecnam has been delivering the first batch of two P2012 Traveller aircraft to Pacific Air Charter Inc. in Hawaii. Following the delivery of the first aircraft in August 2023, this second aircraft took off from Santa Maria (SMX) California and arrived in Honolulu (HNL) after a 14h 57m flight over the sea.

With a third P2012 aircraft currently being assembled at Tecnam’s facility in Capua, Italy, and 24 additional Travellers on option, Pacific Air Charters Inc.’s fleet is growing rapidly to serve



the Pacific transportation market. The first P2012 Traveller delivered to Hawaii demonstrated its versatility when a series of wildfires broke out in the US state of Hawaii in early August 2023, mainly on the island of Maui. The aircraft, operated by Pacific Air Charter Inc, had only been in Hawaii for 10 days when it was used to transport and deliver thousands of pounds of desperately needed food, medicine and other supplies to Maui and, on return flights, to evacuate those who needed medical attention in Honolulu.

British aircraft manufacturer, **Britten-Norman**, has begun renewed UK production of the BN-2 Islander, the world-leading sub-regional and surveillance aircraft, having shifted its manufacturing back to the UK from overseas for the first time since 1968.

The move is the culmination of years of strategic planning and follows the announcement by the company in June that new aircraft production was to be fully repatriated to its flagship manufacturing site in Bembridge on the Isle of Wight. The first UK Islander aircraft now in production is due for completion in May 2024.

A ribbon-cutting took place at an event on Thursday 21<sup>st</sup> September as the new production line at the Bembridge manufacturing facility was officially opened by Bob Seely, MP for the Isle of Wight.

The move signifies Britten-Norman's commitment to British manufacturing and its dedication to fostering innovation within the aerospace sector. Returning manufacturing to the UK will not only strengthen the company's position as the world-leading sub-regional aircraft manufacturer but also contribute to the growth and development of the British aerospace industry.

The Bembridge manufacturing site has been at the heart of Britten-Norman's operations since its inception, and this repatriation marks a significant homecoming for the company. With a renewed focus on British craftsmanship and engineering, Britten-Norman will be able to enhance its production capabilities, improve supply chain efficiency, and accelerate innovation in aircraft design and manufacturing.

The Company is planning for new aircraft production to increase fourfold by 2027 with strong economic performance and increased revenue projected. The repatriation to Bembridge is expected to create numerous job opportunities and contribute to the economic growth of the Isle of Wight and the wider Solent area.

The Company has already embarked on a recruitment campaign, further boosting job creation in the UK's Solent Local Enterprise Partnership area, with roles including aircraft fitters and technicians, production



An advertisement for COMMTECH. The top left corner features the logo 'COMMTECH' with a stylized 'T' and 'E' and 'TCI | ECS' below it. The background is a cityscape at dusk or dawn, with a helicopter flying in the sky. The text 'ELEVATING LAW ENFORCEMENT' is prominently displayed in the center. Below it, a paragraph describes the 'Evenlode' equipment series. At the bottom, there is a call to action: 'To Learn More Click Here'.

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engineering and supply chain management. The expansion will also create new traineeship and apprenticeship opportunities on the Isle of Wight and in South Hampshire.

Island MP Bob Seely said:

"The Islander's return to the Isle of Wight is an important and exciting day. I am delighted that Britten-Norman has made the decision to bring back the production line of their iconic plane to where it was first built, on the Isle of Wight.

It's a major vote of confidence in the future of the Island and a significant investment for our skilled manufacturing base."

The repatriation of production to Bembridge represents a new chapter in Britten-Norman's storied history, promising exciting developments, and opportunities for both the company and the UK aerospace sector.

**Specialist Air Services** continues to downsize the MD902 fleet it holds with both G-KAAT (900-00056) and G-EHAA (900-00079) being disposed of to Belgium in recent weeks. Meanwhile another former air ambulance Explorer G-KSSA (900-00123) is reportedly in line for export to an as yet undisclosed country.

During the German National Aviation Conference in Hamburg, **Airbus Helicopters** unveiled the PioneerLab, its new twin-engine technology demonstrator based on the H145 platform. It complements Airbus' range of FlightLabs and focuses on testing technologies that reduce helicopter emissions, increase autonomy and integrate bio-based materials.

The PioneerLab aims to demonstrate a fuel reduction of up to 30% compared to a conventional H145, thanks to a hybrid electric propulsion system and aerodynamic improvements. Aboard the demonstrator, Airbus Helicopters will also flight-test structural components made from bio-based and recycled materials, which aim to reduce the environmental footprint across the entire aircraft life cycle. The company intends to produce the new parts using processes that reduce material and energy consumption and improve recyclability. Further research activities will include the integration of the latest digital technologies into the aircraft's flight control system and associated sensors to increase autonomy and safety during critical flight phases such as take-off and landing.



PioneerLab is partially co-funded by the BMWK, the Federal German Ministry for Economic Affairs and Climate Actions through its national research program LuFo. Airbus Helicopters' FlightLabs provide agile and efficient test beds to quickly test technologies. They are part of the company's strategy to bring incremental innovation to improve its current products and as well as to mature technology for future platforms. The PioneerLab's flight campaign has already begun at the manufacturer's largest German site in Donauwörth, with a rotor strike alerting system being the first techno-brick tested on board the demonstrator. The next phase will be to test an automated take-off and landing system.

## ACCIDENTS AND INCIDENTS

**1 September 2023 Bell 206** Iranian Police Aviation. Local media reported that the helicopter containing five persons was severely damaged in a forced landing on rocky terrain in Kermanshah region of Iran. No report of casualties. Image on X shows the helicopter upright and to have suffered crumpling of lower airframe tail boom and horizontal stabiliser. No fire.

**7 September 2023 McDonnell Douglas MD500E (369E) R501** Hungarian Police. The aircraft on a training flight with two occupants descended into the waters of Lake Balaton, off Balatonszeplak, Hungary. Both occupants were rescued, and the helicopter recovered. A video of the incident appears to show that the MD500 was at about 300 feet when it lost tail rotor authority and spiralled down. [media]

**9 September 2023 helicopter** The CAL FIRE contracted **helicopter** crashed near the Teakettle Experimental Forest. The aircraft was battling the ... The aircraft was battling the Tea Fire at the Teakettle Experiment Area, Shaver Lake, CA 93664 at time of the crash.

SkyLife and emergency medical services were sent to the scene and the National Transportation Safety Board has been notified.

Fresno County Board of Supervisor, Nathan Magsig, was briefed on the incident and tells Action News that the helicopter pilot is being treated at Community Regional Medical Center and is expected to be okay.

**7 September 2023 McDonnell Douglas MD 500E (369E) N8372F** Houston Police Department helicopter made a hard landing at the Houston Southwest Airport Rosharon, Fort Bend County, Texas while undertaking autorotation training. The MD, built in 1991, sustained substantial damage to the tailboom. The two pilots were not injured. [FAA]

**9 September 2023 Bell 212 N873HL** Firefighting helicopter of Rogers Helicopters. Departed from Sanger Heliport to operate over a fire. Sustained substantial damage when it came down in the Sierra National Forest near Teakettle Experimental Forest in Fresno, California. The sole pilot received serious injuries. [Media/ASN]

16 September 2023 Mil Mi-8 EX-08041 firefighting helicopter with four aboard was taking on water from a lake at the Tahtali Dam, Menderes district, Izmir, Turkey when it crashed by the dam. The crew consisted of 4 people: three citizens of Kyrgyzstan and one citizen of Turkey. The co-pilot, a citizen of Kyrgyzstan, was rescued alive, the rest died. [media/ASN]

**19 September 2023 Kawasaki BK117B-2 VH-HHJ** The Hamilton based rescue helicopter of Philips Search and Rescue Trust crash-landed while en-route to rescue a trumper with a dislocated shoulder from the Wharauoa Track in the forest in Waikato, North Island, New Zealand. It came down on the Pirongia Mountain with three people aboard in a reported heavy landing. Landed in dense trees and ended up right between two trunks. No fire or serious injuries were reported from the accident. [RCCNZ]

**20 September 2023 Bell UH-1.** Firefighting. While operating on a fire at Tregony, near Cunninghams Gap, came down to pick up water but collided with a dam wall at Scenic Rim, Queensland, Australia, turned over and sank. The pilot and sole occupant Grant Schultz says he was running out of air as the helicopter was sinking; He escaped the crash almost uninjured except a scratch on his face.

## UNMANNED UNITED KINGDOM

**SOUTH:** Thames Valley and Hampshire and the Isle of Wight police operate drones as a consortium and there has been a huge investment in drones over the last four years.

The two police service operation has expanded from 15 to 20 pilots [and] seven drones to 130 pilots and 49 drones. That has resulted in the workload moving up from a couple of hundred jobs a year to 1,500 deployments a year across the two forces so it's a massive change.

The pace of drone innovation presents a challenge. Keeping up with technology, without racing too far ahead presents dangers where they might find themselves with a drone that is not fit for purpose.

Current regulations state the police must be able to see a drone to fly it safely, but the Joint Operations Unit is working with the National Police Chiefs Council, the Civil Aviation Authority and others on technology that could allow pilots to fly one as far as 62 miles (100km) but that technology has yet to be developed. An accurate hazard detection system would be essential but remains elusive.

The joint unit is currently commanded by Insp Guy Summers, the main operations are searches and over-seeing large public events. At the Reading and the Isle of Wight's festivals, and at Henley Regatta, drones were in the air for around 70 hours.

**MEDICAL:** The questionable trials of drones for moving small medical samples and supplies in and around remote areas continues. Issues are being raised around how these trials are being facilitated in the absence of any sense and avoid technology. Most are short lived as different topographies are investigated. On occasion the siting of the drone operation and the rules surrounding it raise local concerns. To enable the continuance of a trial using a 'dumb' drone in the north-east of England other aircraft users were being banned from airspace.

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Recently the BBC reported that a new Temporary Danger Area (TDA), proposed by Apian Northumbria NHS Air Grid encompasses a very large piece of Class G Airspace to the north and to the west of the Newcastle CTA, from the North Sea coast in the east, to the town of Haltwhistle in the west.

As with earlier trials, those proposing the TDA, **Apian Ltd**, a medical logistics startup founded by NHS doctors, wishes to move, 'Prescription medication, medical implants, medical electronics, blood packs, medical and consumable supplies and medical documentation' utilising the now familiar **Skyports** drone with a payload of just 3kg, or a **Zipline** drone which drops its package, of a similar weight, by parachute, or by wire and then returns to the distribution centre.

In the absence of 'sense and avoid' technology Apian wishes to operate its drones beyond visual line of sight (BVLOS) by creating a TDA in Class G airspace. This will close the airspace to other members of the general aviation community and, at the same time, have a significant financial impact on those airfields within the TDA. In effect, Apian wishes to ground other airspace users so that they may transport a payload of just 3kg, the equivalent of 3 bags of sugar, for a cost that has yet to be specified but is known to be significant.

A much larger payload may be carried in all weathers, day or night, by a courier driving a van, or riding a motorcycle. If, as Apian suggest, 'green' technology is important factor, then an electric vehicle, to transport medical supplies by road, may be preferred.

Over in the USA, where both the air and ground are less congested than in Europe, **Zipline International Inc.**, has received approval from the Federal Aviation Administration (FAA) to conduct commercial deliveries using drones beyond visual line of sight and without visual observers. The approval will help enable broad integration of autonomous aircraft into the US national airspace and make commercial drone delivery scalable and affordable.

Zipline's drones have an onboard detect and avoid system that has been tested and proven to enable continuous, real-time airspace monitoring to ensure safe operations. The company has flown more than 50 million commercial autonomous miles and completed more than 750,000 commercial deliveries without a single major safety issue.

Zipline's safety system includes more than 500 preflight safety checks, strategic route design, and redundant flight-critical systems. Its onboard perception system uses ADS-B transponders that identify aircraft in the nearby airspace, as well as an acoustic avoidance system that uses small, lightweight microphones to detect and avoid other aircraft flying up to two miles away in all directions, including during the dark of night and in challenging weather.

Zipline operates at national scale in multiple countries where it delivers up to 140 miles round trip, and began serving the USA in 2020 by delivering medical supplies during the height of the pandemic. The company also achieved Part 135 aircraft carrier certification and is approved to operate the longest-range drone delivery flights in the US.

Red Cat Holdings, Inc. subsidiary **Teal Drones** has announced the signing of a \$1.8M contract with U.S. Customs and Border Protection (CBP) to provide Teal 2 quad rotor systems to U.S. Border Patrol. Teal will deliver 106 Teal 2 drones, plus spare parts and training. Border Patrol is using the Teal 2 to provide supplemental airborne reconnaissance, surveillance and tracking capability. The single-source contract is part of a Blanket Purchase Agreement (BPA) between CBP and five drone companies, announced in December 2021, with a total estimated value of \$90M over a five-year period.



# 2023 Commercial UAV Expo

## September 5 – 7, 2023, Las Vegas, Nevada



By Mark Colborn (Dallas PD helicopter pilot and UAS operator Ret)

There is truly something for everyone in Las Vegas, Nevada. And after attending the Commercial UAV Expo for the third year in a row, surprisingly, the trip never gets old. And I don't gamble! If you're a people watcher, you'll see every side of humanity in Sin City. The crass opulence and cheesiness of the casinos is positively legendary, whether it be the illusion of moving clouds on the ceiling inside the Venetian, or the figures of ancient Roman emperors in Caesars Palace next to a \$13 a scoop Gelato stand, or the ridiculousness of a 460' high water fountain and light show in a desert at the Bellagio. The experience can't be duplicated. And the newest attraction in town, the massive eyeball, or MSG Sphere, is positively mesmerizing. Last year I was shocked by what I later learned was a prototype sphere, inside Resorts World - Conrad. The MSG Sphere dwarfs that experience. Also, if the casino's gaming tables or noisy slot machines don't call your name and separate you from your hard-earned cash, their expensive retailers, big billboard shows, and famous chef restaurants will complete the fleecing! But we flock there anyway. Combining a drone conference with all the entertainment available in Vegas is just a win-win!

Drone Responders returned this year with five, one and one-half hour sessions for public safety drone operators. Sundance Media facilitated another live outdoor drone demo in Cornerstone Park in Henderson, and a large number of FAA representatives were in attendance to answer questions and hint at – but never fully disclose – regulatory updates. Also, the FAA is re-booting the Drone Safety Team, which had reached the point of stalemate following nearly two years of inactivity. The most significant news, and no doubt on many conference attendees' minds, was an announcement that the implementation of the Remote ID rule will be delayed. Readers may recall that Remote ID is the ability of a drone in flight to provide identification and location information through a broadcast signal that other individuals can receive. A so-called "license plate in the air" for drones. David Bolton, Associate Administrator for Aviation Safety at the FAA, revealed during the keynote Wednesday morning that "there will be relief before September 16<sup>th</sup>."

Lisa Ellman, Executive Director of the Commercial Drone Alliance began the morning keynote by telling the audience that there are three crucial steps that need to be taken to move the industry forward. First is to promote the current FAA reauthorization bill winding its way through Congress. The bill includes provisions to realign the FAA to improve efficiency and facilitate the adoption of widespread Beyond Visual Line-of-Sight (BVLOS) operations, a necessity for the industry to scale. Second, Ellman would like to see the executive branch do more to help the industry become world leaders on the UAS/UAM/AAM stage. And third, work toward ways to help the FAA streamline waiver and exemption approvals for BVLOS operations in the short term. Ellman asked attendees what is needed to scale, where does artificial intelligence and technology fit in, and what are we missing to make the industry thrive. All are good questions and set the stage for her interview with Associate FAA Administrator David Bolton.



Ellman was frank, but diplomatic with Bolton from the beginning, stating that approvals for waivers and exemptions (for BVLOS operations) are frustratingly slow. She asked what the FAA can do to improve the process. Paraphrasing Bolton, he stated, "We owe you an answer. It may not be what you like. But telling you nothing is unacceptable." But in stating this, Bolton emphasized that safety must be the top priority.

He admitted, as an example, that perhaps using drones for agricultural spraying operations might provide a lower risk alternative, citing the 10 to 13 deaths a year in crewed aircraft ag accidents. Bolton stated that the unknown puts us at a higher risk and the more we know helps us to identify, reduce, and mitigate risks. The FAA needs more data to evaluate risk so they can publish a guide for conditions and limitations that will lead to a streamlined process – and that is coming, he said. Four big BVLOS exemptions were recently granted. And with each one the FAA and the industry gain more knowledge. “The more we fly, the better we learn,” Bolton said.

Regarding Remote ID, Bolton cited supply chain issues (ongoing chip shortage) for the delay in implementing the regulation. “Once you make a rule and set a date, it’s hard to change that date,” he said. “You will see something in the next couple of days, a public notice most likely.” Note: the FAA extended the deadline for compliance by six months on September 13<sup>th</sup>. Ending the conversation, Ellman asked Bolton for a final take away from their discussion. “The more we know the better we are...you know we are going to take the conservative approach...we must collaborate, cooperate, and share data,” paraphrasing Bolton’s reply.

The Drone Safety Team is being re-booted by FAA co-chair Jeffrey Vincent (Executive Director of the FAA’s UAS Integration Office) and Industry co-chair Dallas Brooks (Aviation Regulatory Lead for WING). On Tuesday, both men signed a new charter designed to re-focus the group on its main mission, the fast and safe integration of uncrewed aircraft systems into the National Airspace System. Previous by-laws contained overly restrictive provisions and limitations that hindered the team’s performance. It had restrictions on who could apply for membership and attached attendance requirements. Since the group receives no funding and is strictly volunteer, these provisions were unacceptable. Brooks and Vincent are eager to get to work and encouraged everyone in the jam-packed meeting room to get involved and submit an email to [dronesafetyteam@gmail.com](mailto:dronesafetyteam@gmail.com) requesting membership.

The first item of business on the agenda on the DroneResponders’ program was to recognize the commitment of New York City Fire Department (FDNY) Captain Michael Leo [right] for his service to the public safety drone community. Mike was presented the Officer Eric Talley Award in remembrance of Boulder, Colorado Police Officer and drone team leader who bravely gave his life to save others during an active shooter incident. According to a DroneResponders press release, “This award is given to a public safety leader who demonstrates exceptional leadership in the advancement of public safety drones at the local, state and national levels.” This correspondent has had the pleasure and honor of working on projects with Mike Leo as members of the FAA’s Advanced Aviation Advisory Committee (formally the Drone Advisory Committee) since 2019. Congratulations, Mike!



The first DroneResponders session dealt with programs utilizing Drones as a First Responder (DFR), and was titled, “Is the juice worth the squeeze?” For the panelists who are now conducting DFR BVLOS programs, the juice has been worth the squeeze. However, like any other new program in law enforcement, getting those programs into operation presents challenges and takes a great deal of effort. Describing those challenges consumed most of the hour-and-a-half discussion. What is a DFR program exactly? A DroneResponders slide describes the program as “...the innovative use of drones for public safety. Instead of launching a drone once a first responder arrives on the scene, the DFR approach strategically places drones at permanent locations throughout the jurisdiction to respond to emergencies as soon as they happen. The intent of DFR is to get a drone on scene before first responders arrive, live-stream the drone video of the incident to commanders and first responders and improve response times.”

Overcoming command perceptions was a big issue for one agency. After seeing a demonstration at a conference, one police chief thought it would be a good idea to buy Autel Dragonfish vertical takeoff and landing UAVs for their new DFR operation. Program organizers had to explain to the chief that this aircraft would not be a good fit for their particular type of operation. Each agency’s operation is different. What

may work for a small relatively square municipality like Chula Vista, California, will not work for Miami Beach, Florida, which is  $\frac{3}{4}$  miles wide and seven miles long from north to south, with only three roads in and out of the city. Plus, agencies should consider issues like population density, airspace limitations, available launch locations, and local and state rules and regulations. The list is extensive, and the program must be tailored to fit the personality and tempo of the department. All panelists agreed that any program will need more assets than are originally asked for, including personnel.

Batteries and drones that are designed for consumer use wear out much faster when subjected to the rigors of police work. "Buy more than you think you need" is the advice given. Agencies must get buy-in from stakeholders, both street officers, politicians, and the citizens being served. Agencies must be able to sell a tangible benefit before starting a program, such as the drone's use as a de-escalation tool or improving response times. In Fort Wayne, Indiana for instance, with their DFR program, they have found that drones provide a "disregard" on calls for service 17% of the time, thus freeing up ground officers to respond to other calls. They are also using their drones when it is slow, to jump lower priority calls and save officer time. Panelists agreed to start small, for instance utilizing one launch location, collect data and learn, then after realizing success, scale the operation.

The subject of equipment was brought up by moderator Christopher Todd from DroneResponders. Considering the Chinese drone ban in Florida restricting government use, he asked if there was a suitable replacement for DJI or Autel products. The quick and resounding answer was, "No." The audience applauded, indicating that legislative attempts at country-of-origin bans are not being well received by first responders in the United States. "American companies are not there yet," one panelist remarked. Another stated, "They [DJI] are very cop-proof...and especially fireman-proof!" This solicited roaring laughter from the audience.

Other guidance included getting to know your local air traffic control facilities and explaining to them that you understand their airspace. It goes a long way according to one panelist. "Leverage the FAA to get what you need," was a comment by another. Regarding training, require at least a remote pilot certificate for selection as a drone operator in a DFR program. Don't take officers that are on light duty or the injured list to be drone operators. Create a state certified 40-hour training program and run all members of the DFR program through this training. Include NIST standards and train to those standards as a minimum for evaluating operator performance and continued proficiency. Train, train and continue to train, with specialized units and other agencies that you will be working with.

One panelist offered some advice that I had never considered before on how to properly keep a fleeing suspect in sight with a drone. In a helicopter, we are generally high enough to keep a suspect in sight even if they pop around a building. Our elevation generally gives us an advantage. However, with a drone at less than 400' AGL, this is a little more problematic. The secret, he said, is to stay ahead of the suspect as they flee. Thus, if they pop around a corner, duck into a doorway or under a tree, the drone operator is in a better position to anticipate any evasive maneuvers beforehand.

The second DroneResponders panel session, entitled *Taming Disaster with Drones for Good*, featured Christopher Todd as moderator. The discussion revolved around industry developments, technology, and trends. Faine Greenwood, owner of a consulting firm and a lead spatial analyst at the Massachusetts Department of Transportation's Drone Program in the Boston area spoke about her research and fascination into how drones are being used in the Ukraine war. The Russians were caught totally off guard, Greenwood stated, and was fascinated at how effectively the Ukrainians have deployed their drones from the beginning and throughout the conflict. Ukraine, according to Greenwood, had a very robust drone program before the war and their use in combat should not have come as such a surprise to the Russians. Nonetheless, she said drones have significantly changed the way wars are being fought and will be fought in the future.

The third session of the day entitled *sUAS Manufacturer's Showcase: Capabilities, RID and Beyond* featured reps from Brinc Drones, DJI, Skydio, Japanese manufacturer ACSL, Parrot Inc., and the Virginia Public Safety Innovation Center. The initial discussion revolved around Remote ID, and if public safety agencies will be able to turn it off, thus preventing RID from compromising a planned or in-progress operation. The concern is anyone with a RID smartphone application (Drone Scanner for instance) will have the ability to see all Remote ID drones, thus giving bad actors advance notice that LE are using or launching a drone to observe their activities. There apparently is an FAA waiver process that will allow holders to turn off RID. However, the problem is that manufacturers are required by the rule to build Standard RID into drones so it specifically cannot be disabled by the user. The rep from ACSL stated one problem is how can his company give LE users the ability to disable RID without giving it to bad actors. Chief Wayne Baker from DJI suggested an approval system for disabling RID that is similar to DJI's process for unlock-

ing the GeoFencing feature. The Skydio rep stated the disabling feature will probably be on a mission-by-mission basis, not a blanket approval. Nonetheless, all manufacturer reps agreed that it is very difficult to make changes to designs after product releases, and any design changes would come at a huge expense to their budget.

This topic led to the subject of expected or planned future upgrades or product improvements. All reps agreed it's very hard to make changes to an existing design because of tooling and economies of scale. Larger manufacturers like DJI, as they go global with a product, Chief Baker stated, have a harder time getting changes or upgrades through engineering. And because of economies of scale, turning a hobby product such as Avata, for instance, into an Enterprise product for public safety just might not make marketing sense. The Brinc rep stated that prototyping is easy, scaling is much more difficult. The Parrot rep stated that requests come in for changes all the time, but making those changes is hard, not because the manufacturer doesn't want to do it, but because any change that is made to the software or firmware affects everything else, and can even affect end user third party apps that users are utilizing to operate the product, i.e.: Axon, DroneSense, etc.

The panel also discussed battery technology and agreed that batteries are the bane of their existence. The issue is most consumer and prosumer drones come with charging systems that only charge one battery at a time, or in series. This is problematic for public safety because of the tempo of many LE and fire operations. Although all reps recommended third party chargers like Colorado Chargers for charging multiple batteries at the same time, they cautioned to be careful and do your research.

Panelist, as a final question, were asked what the low-level airspace will look like in five years. The Skydio rep seized the opportunity to remind everyone that his company will have a big announcement on new technology for drones on September 20<sup>th</sup>. The Parrot rep also used the opportunity to remind prospective customers that the technology is already here for BVLOS flight because their drones are 4G equipped, allowing remote connections for flight. Chief Baker said we will see a lot more DFR programs in the future. He also put in a plug for DJI's drone-in-a-box solution, and although DJI's air-conditioned docking station will charge the M-30's batteries from 10 to 90% in about 25 minutes, he admitted it was not actually designed for DFR because hot swapping of the batteries has to be done manually.

The last Drone Responders program that I was able to attend revolved around government insights into security and counter-drone issues. Michael Robbins, Chief Advocacy Officer for AUVSI moderated this robust panel including DJ Smith, Technical Surveillance Agent with the Virginia State Police, Brett Cotton, Director of Department of Homeland Security (DHS) Counter UAS Policy, Michelle Duquette, Outcome Leader for Unmanned and Space Operations at MITRE Corporation, Jay Stanley, Senior Policy Analyst with the American Civil Liberties Union (ACLU), Terry Flemming, a researcher at the FAA and Blake Davis, a security specialists at the FAA that handles all Temporary Flight Restriction (TFR) requests. Cotton, as a member of one of only four cabinet-level agencies in the US Government that is allowed to employ active counter-drone equipment, related that the DHS coordinates every deployment of their equipment with the FAA to ensure no interference issues and to know if their equipment is performing to manufacturer specifications. Ongoing testing of counter drone tech is constantly being accomplished according to Cotton, to include "detection only" testing by the Transportation Security Agency around airports and the Bureau of Prisons. Cotton also stated that their agency is exploring the possibility of granting relief from Title 18 (interception of oral and wire communications) to critical industry and local and state LE. Cotton stated his agency is proposing to partner with local and state agencies on counter-drone, planning to implement 12 programs per year for 5-years.

Jay Stanley from the ACLU was asked to express his opinion about the expansion of counter-drone capabilities, especially using active measures to mitigate drones. Stanley stated there are three levels of concern that must be addressed – the first being constitutional concerns and who will be granted the authority to use the equipment. For instance, there are a number of existing federal Uniform Code of Regula-

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tions (UCRs) that restrict the warrantless interception of oral, wire and data communications. There are Federal Communications Commission rules regulating radio emissions that must be followed, as well. And, bringing down a drone is essentially a civil asset forfeiture and will be conducted without a warrant. Stanley stated that we need to better define what constitutes “critical infrastructure” in the US and apparently is not pleased with the DHS’s Special Event Assessment Rating (SEAR) system, or the methodology the agency uses to assess threats, vulnerability, and the consequences for submitted security events. The second consideration, according to Stanley, is the need to strike a balance between freedom and liberty. A terrorist event is a tiny tip of the issue, and we can’t build a system that centers around the worst-case scenario he said. Thirdly, Stanley stated that counter-drone is just one piece of the puzzle. “Are drones really an issue?” he asked. Who decides who is the threat, and if the drone is seized, how does the operator get it back, he posited. There was continued discussion about the uninformed and ignorant drone operators versus the bad actors wanting to do harm, with both sides of the issue expressed. Cotton continued to defend his program and assured the group that his agency was taking all the considerations raised by Stanley into account.

The floor was eventually opened for questions from the audience. This correspondent took to the microphone, and I started by thanking Jay Stanley for agreeing to appear on a panel surrounded by a bunch of cops, which, as a general rule, are less than amicable to the views of the ACLU! Playing the devil’s advocate, I advised Stanley that he had made some great arguments and agreed with his position that I’m not entirely comfortable with the idea of giving counter-drone responsibilities to state and local LE. Taking over or downing uncompliant or hostile drones presents many challenges, including constitutional issues, liability concerns, and signal disruption problems. Making those kinds of decisions should be left to the feds, who enjoy many more layers of protection from civil actions than locals. Blake Davis, TFR coordinator at the FAA reassured the audience that even if local or state LE is given permission to conduct active counter-drone operations, there are many layers of checks and balances built into the system. A TFR must be in place first, and the level of threat assessed before any authority to take over or bring down a drone is granted. DJ Smith had previously stated that his agency was only interested in detection and agreed with this correspondent that many sheriffs or police chiefs might not want to accept the liability involved in employing active counter-drone measures. This Drone Responders segment was by far the most interesting session of the entire conference.

It was at least 20 degrees Fahrenheit cooler this year at the Sundance Media outdoor drone demonstration Tuesday morning. Unfortunately, the number of demos was down, with a lot of standing around waiting for something to happen; plus, the event ended one-hour early. The sound system, for the third year in a row, was plagued with issues, and the chosen location forced participants to look up into the rising sun to observe the aircraft. Despite these issues, the flight demos included a Sentaero 5 VTOL manufactured in the US by Censys and a DJI drone-in-a-box solution utilizing Frontier Precision Unmanned’s Flight Hub 2 software, which helps the operator create autonomous flight routes.



Cencys Sentaero 5 VTOL in the display

© Mark Colborn



The Indian drone manufacturer, IdeaForge, who is very interested in breaking into the US market, demonstrated their 6 kg Q6 UAV enterprise solution quad with a 60-minute range with day payload. The Q6 according to the announcer is completely autonomous and flies off waypoints but an operator can use the joysticks for smoother payload control. Also demonstrated was the US made Skyfish M4 and M6 models sporting the new Sony Electronics Alpha super compact, lightweight and programmable block cameras. The ILX R1, introduced by Sony that morning and flown on the M4, sports a 1.38 inch full-frame back-illuminated Exmor R™ CMOS image sensor with approximately 61.0 million effective pixels, perfect for digital twin production. Skyfish and Sony spent two years developing this camera specifically for UAS applications. The announcer boasted that the ILX R1 is “likely the smallest full-frame camera available in the world.” Autel Robotics launched their new Evo Max 4N. The Max with 4N camera system integrates a wide-angle starlight camera and 640x512 high resolution radiometric thermal imaging camera with a laser rangefinder. The starlight camera has an impressive 0.0001 LUX with ISO ranges from 100 to 450,000. It can track and lock on targets at night and the laser rangefinder can provide coordinates and altitude of targets up to 0.75 miles away. Also demonstrated with the Evo Max is a new ring payload drop system that can deliver small items like cell phones or first aid kits to stranded individuals. Closing out the demos was Event 38 Unmanned (Richfield, Ohio) with their E400 carbon fiber 20-lbs VTOL 10’ wingspan fixed wing aircraft. The E400 is battery-powered and can fly for 90 minutes with a two-pound payload. It employs a Pixhawk Cube flight controller running Ardupilot, QGroundControl, and MAVLink. It has a modular airframe and payload compartment and supports open-source components.



Vegas has a spectacular skyline, and it beckons to be filmed by camera equipped drones. Therefore, after the exhibit hall closed Tuesday and Wednesday evenings it was off to The Strip and the MSG Sphere with Vic Moss (Moss Photography - Denver, Colorado) and Kenji Sugahara (founder of AriAscend - Salem, Oregon) as featured on the front cover, to fly at sunset. Both men planned days in advance and received waivers to fly in the Harry Reid International Airport’s Class B surface airspace area. Although many drone flyers are unaware of the rules, or don’t care and fly anyway, Vic remarked that flying can be done legally. A drone flyer must navigate through the procedures put in place by the FAA and make the right calls to local authorities. It was fun acting as a visual observer and watching two pros make their DJI drones sing for their suppers!

This year's conference attracted 3900 registrants from 26 countries, 206 exhibitors and 150 presenters, down slightly from last year's 4100 registrants and 232 exhibitors. Also, every year entrepreneurs can be found roaming the exhibit hall with products they have personally developed. One such product, by Bill Bongle from Suamico, Wisconsin, which might interest LE flyers, is an external light mount system using two FoxFury D3060 lights for the DJI Avata. It has a robust design and is available for a reasonable price at [www.TitletownDrones.com](http://www.TitletownDrones.com). The Exhibit Hall Event Center was hosted by DJI, and even DJI's Director of North American Public Safety Sales and Retired (he uses the word "recovering") Fire Chief Wayne Baker, made an appearance!



## PEOPLE

As predicted in last month Police Aviation News, the Chief Constable of the Police Service of Northern Ireland, Simon Byrne, resigned his position on September 4. The resignation came within hours of him stating he was not going; it appears the pressure to go was just too great and he even failed to attend the meeting at which his departure was announced.

His PSNI contract was recently extended by the Northern Ireland Policing Board until 2027.

Byrne has had to deal with a number of controversies and challenges, both political and within the staffing ranks, since taking up the position in July 2019. He faced a major revolt among the ranks under his command and was severely criticised by the local Police Federation.

Mr Byrne arrived in the region after a tumultuous end to his tenure as chief constable of Cheshire Police, when he was suspended over misconduct claims. He went on to be cleared by a panel of all 74 allegations made against him.

In case you had forgotten, the interest of PAN in the comings and goings of Simon Byrne related to his past position as the NPCC Aviation Lead when he was with suspended from Cheshire Constabulary. Sadly it looks like the latest NPCC Aviation Lead also has his problems. Another potential nail in the NPAS coffin.

Daniel Schwenzel Chief Flying instructor at Airbus Helicopters in Donauwörth is said to be the oldest pilot there now. In 2015 he was awarded the European Flight Test Safety Award, marking individuals who made significant contributions in the area of safety within flight testing. He is seen with Correspondent Michael Mau; they served together in the army.

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## CHANNEL REPORT - YES, THE BOATS CAN BE STOPPED

On Thursday evening, 21 September the British Government Immigration Minister, the Rt Hon Robert Jenrick MP appeared on the programme, 'Channel Crossings', broadcast by the BBC. The Minister was, quite rightly, pleased to announce that, year on year, 2022 - 2023, up to and including the 21 September, the number of migrants landed in the UK, by the Border Force and the RNLI, had fallen by 21.5%. However, without wishing to 'rain on the parade' the total for 2023, currently, 24,830 will, most probably exceed the total number of migrants landed in the UK from small boats in 2021, which was 28,526.

After a surge of landings in the first half of September, when 3,895 migrants were landed by the Border Force and the RNLI from 71 boats in just 17 days, an average of 55 migrants per boat, there were no further crossings for 8 days. Was this the result of adverse weather, a stiff breeze mid-Channel, or a renewed determination by the French security forces to 'stop the boats'? Then in the last week of September, in 2 days, there was another surge of 297 migrants in 5 boats. On one day, 26 September, 212 migrants were landed in the UK, by the Border Force and the RNLI lifeboat service, from 3 large inflatables. With an average of 71 migrants per boat this broke the previous record of one boat carrying 67 migrants! The last day of September saw, in good weather, a calm sea with a light breeze, a further surge of 537 migrants landed in the UK from 9 boats, an average of 60 migrants per boat.

So, why have the numbers dropped so dramatically in 2023? Those of us who have been following this story since 2018 may agree that it's a combination of adverse weather, particularly very strong winds, day after day, and greedy people traffickers, those who have developed a new business plan; mass transport with large, flimsy, unseaworthy inflatable boats built in Turkey and China. Boats that routinely carry 50 or more migrants, described by the National Crime Agency as 'death traps'. Boats that can only be used in near perfect weather, with a calm sea and no more than a light breeze.



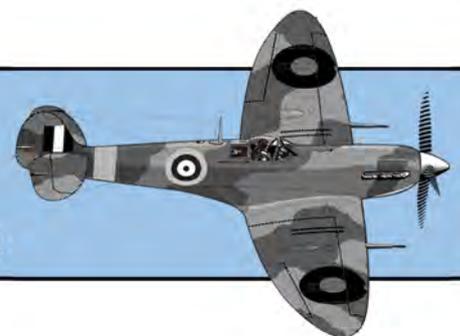
**The new generation of inflatable boats, purpose built in Turkey and China, can carry over 50 migrants, but they can only be used in perfect weather with a calm sea and no more than a light breeze.** Credit: Mail OnLine.

The other possibility although, most surprisingly, the UK Home Office (Department of the Interior) professes not to have any details, is that the French police have been much more active than in previous years in 'stopping the boats'. Moreover, there have been reports that there are far fewer crossings, of the English Channel, from those beaches controlled by the Gendarmerie and the Police Nationale, as opposed to the beaches controlled by the French municipal police. Another factor which has recently come to light is that French authorities have created barriers across the rivers and canals in northern France. Those rivers and canals where the people traffickers have gained access to the English Channel without crossing a beach. The new tactic, forcing the boats back onto the beaches, means that they are more easily intercepted, on land, before being destroyed. Nevertheless, according to the media, the Belgium police, who, unlike the French, will intercept boats at sea, are currently doing much better than their French colleagues when it comes to frustrating the people traffickers.

### NORTH WEALD AIRFIELD MUSEUM

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**In recent weeks the French authorities have created barriers across those rivers and canals in northern France that have access to the sea. This forces the people traffickers back onto the beaches where their large inflatable boats are more easily intercepted and destroyed.** Credit. Twitter@Aubergemigrants.

Also, we must remember that it was Robert Jenrick MP who, just weeks ago, pointed out that the 'goal line', the 'line in the sand' is on the beaches of northern France. Have any of those aircraft flying up and down the middle of the Channel, 10 miles from Mr Jenrick's 'goal line', the de Havilland Dash 8, the Diamond DA62, and the Coastguard King Air, together with the Tekever AR5 drone, ever stopped a boat, those carrying migrants, from leaving a beach in France? I very much doubt it.

One day, hopefully quite soon, the Anglo-French operation, funded by the British taxpayer, will take place on and above Mr Jenrick's 'goal line' on the beaches of northern France, with light aircraft, 'spotter planes' supporting the Gendarmerie, the Police Nationale, and the French municipal police, to detect and to deter those migrants planning to cross the Channel in a flimsy inflatable boat. How difficult can it be to spot, from the air, a large, black inflatable boat, together with 50 plus migrants milling around, on an isolated beach in northern France? Air power can be a game changer, a force multiplier, but only if the aircraft are in the right place and at the right time, above the beaches of northern France and not half-way across the English Channel, it may be agreed.

Tony Cowan MBE

Squadron Leader  
Royal Air Force (Ret'd)

## MOVE ALONG THERE

No doubt the mainly international readership of Police Aviation News will occasionally despair over the constant focus on the migrants heading our way in the United Kingdom. Yes we know that the numbers at 40,000 a year are fairly puny compared with other countries. Our problem is the generosity of heart when they get here. Columnist Amanda Platell identified the problem.

"If we think we've got it tough with soaring numbers of illegal immigrants, we can always spare a thought for New York.

"Democrat mayor Eric Adams says that, as more than 110,000 migrants have arrived in his city since last spring, the crisis threatens to destroy America's most famous city.

"Imagine how much worse it would be if, instead of housing them in gyms and car parks, New Yorkers were paying more than £2billion a year to put migrants up in hotel - as we so generously do."

Therein lies the rub. The British Commonwealth fought throughout the 1939-45 war without recompense (in fact it pretty much bankrupted the UK) and the same applies with receiving the English Channel mi-

grants. They are welcomed with hotels, food and financial support for months on end at massive cost. If you are going to migrate anywhere choose the host with the best benefits. The migrants in France will risk anything to swap their decrepit tents and winter mud for a simple Travelodge – and some get far better hotels.

## LINCOLNSHIRE

And so it goes on! Can a local council stop development on a military base? Interestingly, no one was interested in developing RAF Scampton, derelict, covered in weeds and in the middle of nowhere, until the Home Office decided to re-purpose it as accommodation for migrants! Suddenly it's seen as a heritage centre and how dare anyone disturb the grave of a dog whose name cannot be spoken or written! Not that anyone knows where the black dog once owned by an RAF officer is buried as the grave moved to the front of the squadron HQ every time No 617 Sqn moved from one location to another on the airfield.



## POLICING IN BRITAIN

Poor pay for the responsibilities and restrictions that are placed on your life. Cannot fathom how they expect people to do it for 35 - 40 yrs. Let's not forget the staff association that works against its members, lies and bully's them, even works against members best interests

## HEADS DOWN



Aha, but is this a box of Walkers Ready Salted or a kit for a killer drone? Cardboard drones are not new, they turn up regularly at drone events, but usually in some life saving parachuted supplies role where the structure is designed to be disposable. The latest rendition in cardboard may be as easy to assemble as an Ikea flatpack but reports suggest that they are a dangerous weapon of war. They are believed to have destroyed five Russian jets in an attack by Ukrainian forces. The airframes destroyed were said to be four Su-30 aircraft and one Mig-29 hit at Kursk airfield just across the border in Russia. A late August assault, said to have involved 16 drones, was said to have damaged two missile launchers and an air defence system. There are reports of airliners being damaged or destroyed but it is difficult to say which type of drone was involved in each instance.

The weaponry is called the Corvo Precision Payload Delivery System (PPDS) and was created by Australian manufacturers Sypaq. The cost of just £2,750 each places them in a position that may have a wider threat to public security even away from wars.

The Australian manufacturer is delivering 100 a month into Ukraine and with numbers like that it might be easy for a flat pack or two to go astray. The kits are just two-and-a-half feet long, use a waxed cardboard held together in part by rubber bands - they can be assembled in roughly an hour.

The drones, believed to be virtually undetectable by radar, can fly for 75 miles at 37mph and are capable of carrying up to 3kg of load – that can be a camera or an explosive charge. That makes walking the streets in future a mite uncertain! It is one thing to face a raging thug with a knife but quite another to be threatened by a flying cardboard box.



## A LITTLE KNOWLEDGE

A cautionary tale from Nigeria for those in police aviation who do not know what they are doing.

The Rector of the Nigeria College of Aviation Technology [NCAT], Zaria, Captain Akali Modibo, has revealed that over a period of ten years the college spent N5bn [around US\$6,700] to service two helicopters that the organisation had no use for.

Modibo was speaking at the Aviation Africa Summit and Exhibition held in Abuja when he revealed that the institution spent N500m annually to service the two helicopters which he described as not suitable for "initial training of pilots." The two Bell 206 helicopters were acquired by the Federal Government about 12 to 13 years ago during the time of former President Goodluck Jonathan. They were purchased to train pilots but not one pilot was ever trained on either of them.

Jonathan's government acquired the two Bell 206 helicopters for NCAT alongside 8 other helicopters for the Nigeria Police, the Nigeria Customs Service and the National Emergency Management Agency. Modibo was of the opinion that if the government had consulted NCAT they would have requested piston engine helicopters for training, not the turbine Bell. More controversially he stated that you cannot use Bell 206 for training and that nowhere in the world is this helicopter type used for training (which is patently untrue).

Eventually the Ministry of Aviation decided to sell the helicopters and replace them with the preferred piston-engine helicopters. It was 2019 before they were put forward for auction but then the Ministry of Aviation decided to sell them using the Bluebook rating - new helicopter prices – and it seems there was some discussion while it was explained to the people who should have known better that the Bluebook numbers could not be applied to 10 year old helicopters even if they had been maintained annually at significant cost. Neither of the Bells had accrued 40 hours flight time in more than a decade they had been in Nigeria. [The Whistler]

## DSEi

Earlier pages contain stories plucked from a brief visit to the DSEi military show held at ExCel in London's Docklands last month, so no report as such for this years event.



Sufficient to say that both Tekever and Scheibel were exhibiting their drones in the halls, with the latter able to show success in selling to the Royal Navy. Tekever remains actively involved in providing 'top cover' for the migrants crossing the English Channel.

## HELITECH

Police Aviation News has been a regular at the Helitech branded shows for decades and has often been critical of the marketing of recent editions of the show. But the show goes on and the 2023 edition happened! Even now it is difficult to be sure whether they are deliberately making improbable claims for the number of 'full size' aviation related exhibitors, the number of 'full size' manned aviation speakers and other aspects. Nothing in the hall met the promotion promises. As part of the organizer written pre-event promotion script sent to PAN for publication or directed mail drop the organisers still talked about Helitech being an important European event, I deleted or modified it, as patently untrue. It is a less than sparkling British left over from a once successful European cooperation formula, no more.



Last year there were several drones as exhibits but only an autogyro and an old RN Westland Lynx representing full size airframes. Neither was really appropriate but as I said at the time set dressing is set dressing and there may never be a need for hardware for visiting professionals. This year they bit the bullet and there were no full size manned airframes to be seen - appropriate or otherwise. A simulator was as near as they got to hardware. From experience (with PAvCon Europe) I know that full size airframes are a luxury but it is great if they are present. Sometimes there are no exhibitors who want to go to the effort and expense of getting them on site.





The marketing continued to be inappropriate and lies stacked on lies. Nothing new there then. The suggestion that Helitech attracted 300 exhibitors is laughable, all three shows in one resulted in around 80 booth spaces being erected, not all of them were occupied and the majority of them were drone related. In terms of manned aviation there were perhaps eight exhibitors and those few did include 'big' names including L3 Harris who were promoting their smaller 'drone' cameras via their UK agent Helimedia. They had a good show with lots of interest being shown but they were the only EO/IR camera people in the hall. Their big HD screen was the only real eye catcher in the place. Other big names included Gentex with their flight helmets – but very few of the Drone X visitors are likely to identify with that sort of kit, Oxley's range of specialist lighting and Cobham and Thales (who caught the early bus home) were absent by mid-afternoon on day 2..

Unfortunately I got the impression that compared with last year the Drone X content was dwindling. If Drone X were doing well you might expect major players to be showing their faces by now. Sadly that is not the case. There was no sign of Tekever or Scheibel or indeed any second league manufacturers that might strive to be a household name some day. Although well-known names were in the theatre line up and sponsoring they were low key on the exhibition floor. They saw an opportunity to get their name up in lights but were not willing to invest in floor space or staffing.

Drones are the future in police and emergency services aviation but no one appeared to be pushing BVLOS technology – the future – in any tangible way.

Each 'show' within the show has its own web presence and while the Drone X website seems sensible the Helitech one looks to be playing catch up – perhaps because it cannot match the status it once had as a European event with partners from Europe. It still likes to consider and promote itself as a European event but this simply annoys their former partners who now operate European Rotors. Hopefully they will eventually sell what they have and not just expound some dream drawn from the past. There is little doubt that if they were to hark back to the Duxford days and ring a Spitfire to the show they would increase footfall. If not there is no chance of a future.





## COMING SOON

**October 2023.** For several years the northern police air units have been undertaking hoist and mountain flying training in and around the Allgäu Alps, near Füssen, Upper Swabia, Germany. Around 15 helicopters from a range of Federal and state units take part each October and are nominally based at the Bundespolizei (Federal Police) base at Oberschleißheim, Munich, Bavaria and fly out all day using the glider field at Füssen as the forward field. The training is for the young new Pilots. The hosts at the field are Luftsportverein Füssen e.V., and they welcome the clattering helicopters at the grass field normally associated with near silent gliders. Füssen is normally available as a backup airport for emergency situations for emergency forces and is unique in the district undertaking that so the addition of the field as a training base makes sense. Füssen is a Bavarian town in Germany, just north of the Austrian border. The Allgäu Alps are a mountain range in the Northern Limestone Alps, located in Bavaria and Baden-Württemberg in Germany. [MM]

**9-10 October 2023** The 7th OFSEC - Oman Fire, Safety and Security Event to be held at the Oman Convention and Exhibition Centre, Muscat - Sultanate of Oman. The event is designed to meet the needs of the local, regional and international markets by linking practitioners, suppliers, distributors and manufacturers from the fire, safety, HSE and security industry, with key decision makers from the government and private sectors, making it a definitive networking platform, where new projects and partnerships are initiated, and visionary objectives are implemented. This event also aims to create synergy and strengthen the collaboration between the authorities and the industries.

The 2-day Expo will attract participation from a large number of exhibitors and representation from over 20 countries, with product and service launches, to the trade visitors and potential buyers from the region and beyond.

For more information on Sponsorship and Exhibiting Enquiries, please contact the Project Director Navneeth K. Mobile: +968 9123 7892 Email: [nk@muscat-expo.com](mailto:nk@muscat-expo.com) Muscat Expo LLC | P O Box 1406 PC 133 | Al Khuwair, Sultanate of Oman

**16-17 October 2023** Aerial Fire Fighting – Europe Conference and Exhibition, Athens, Greece Organised by Tangent Link. Childrens House Business Centre, Eton Place, 64 High Street, Burnham, SL1 7JT UK. t: +44 (0) 1628 660 400 [www.tangentlink.com](http://www.tangentlink.com)

**18 October 2023** Riverside County Sheriff's 7<sup>th</sup> Annual Safety Fly-In. To be held at the RCSO Hangar, 4850W Stetson Avenue, Hemet, California. Starts at 8-30am to 10am with coffee and donuts and ends after the 12-1pm lunch. Detail and booking. +1 (951) 925 9591 RSVP to [eromero@riversidesheriff.org](mailto:eromero@riversidesheriff.org)



## ADVANCING PUBLIC SAFETY AVIATION

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## AIR POLICING 100 YEARS AGO

The 1923 Derby Day Races, held on Wednesday June 6, marked the first fully documented Metropolitan Police use of a fixed wing aircraft on traffic duties.

For many years it was believed that a wireless equipped RAF Bristol F2B Fighter biplane undertook the trial. Eventually it was found that it was a large and unwieldy single engine civil transport called the Vickers Type 61 Vulcan employed to fly the police over the Epsom Downs.

The Vulcan biplane was an unsuccessful type offering a fully enclosed cabin accommodation to its 6-9 passengers. This was a rare luxury for the period, unfortunately this very attribute was little use in the observation role. The police officers inside the cabin were hemmed in by relatively small windows and a forest of struts and wires linking the bi-plane wings.



The 360hp Rolls Royce Eagle engine was insufficient power for the bulk of the Vulcan, leaving it under-powered and incapable of carrying its designed load of passengers to its intended destination, France. Less than a dozen Vulcan's were built, most of the purchasers sending them back to the manufacturer after a brief acquaintance. The blue and silver Vulcan the police used, G-EBBL, had originally served as the prototype prior to service with Instone Airline Ltd. It first flew in

early May 1922, was quickly tested, certified and delivered to the airline at Croydon. Carrying the name "City of Antwerp", it flew a number of return services on the Croydon - Paris route before it ran out of fuel and crashed near Tonbridge six weeks later. It was so badly damaged that it was returned to Vickers for repair. By the time it returned to Croydon in 1923 Instone's had withdrawn the other Vulcan's from service.

Clearly incapable of meeting its airline specification load, for police purposes connected with the 1923 Derby Day the Vulcan was capable of an adequate performance.

The head of B2 Traffic Department at Scotland Yard, 58 years old Superintendent Bassom, was taken aloft along with two police wireless operators and their equipment by Donald Robins the Instone pilot. The police team were in constant touch with Percy Laurie who was in charge of the control room at Epsom. Although it was not a primary player in the operation, Marconi made available the unique Marconi wireless car that was still undertaking experiments with message transmission on the move.

Superintendent Bassom, in charge of the Traffic Department from its 1921 formation, and his small team were in touch with the operators of the wireless sets fitted to the handful of Crossley Tenders normally operated by the first Serious Crime Squad later nicknamed "The Flying Squad".



Previously in service with the RAF, the newly acquired and Marconi wireless telegraphy [W/T] equipped vehicles, although often referred to as cars, were substantial lorries, some with metal bodies but others with a typical goods vehicle canvas tilt body. Both types were fitted with cumbersome folding aerial arrays on the roof. When erected, this feature considerably increased the height of the vehicles, reducing overall mobility. The Epsom operation was undertaken in a static mode, with despatch riders undertaking to re-transmit instructions to traffic affected road junctions.