Police Aviation News

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Aerospatiale AS350 at 50

EDITORIAL

In a few days we will know the identity of the new British government. The stark choices are between the Conservatives, a group that have been in power for 14 years, and Labour who have been hankering to return to power for fourteen years after messing up day to day government the last period they were in power. Clearly not a real choice!

It is fair to say that neither of the leading parties have excelled in their periods in power in the last 50 years and no-one really expects that to change overnight (if at all). As the most likely new leader is going to be a barrister by training and therefore used to expounding the often untrue defences of his clients as 'the truth' he should fit in quite well.

The most pressing issue of the day is undoubtedly illegal migration. Although this is seen as a local issue in Britain, it is clear that it is a far greater problem across Europe and in the Americas. In terms of numbers the traffic across the English Channel pales in contrast with the numbers crossing the Mediterranean Sea to enter Europe and is even more significant a contrast compared to the millions of people infiltrating the southern border of the USA.

It is perception though and it is on such that elections may be won or lost, that the numbers are high. The regular reports within Police Aviation News on the English Channel may be insignificant to international readers but they do provide an opportunity to study the relative success of the emergency services in deterring the arrivals. Air support over a relatively narrow and defined stretch of sea can be shown to be wasteful when it amounts to nothing more than a line patrol gleaning information that ground based cameras can provide more cheaply.

Despite the politicians fine words claiming they will 'stop the boats' it is clear that what really halts traffic is direct action on the ground (also historically known as traditional policing) and the weather. It is the Gendarmes and Police National destroying rubber boats on the beaches of northern France, along with other agencies interfering with the supply chain of rubber boats, slowing or halting the journey from their manufacturing source that provides relief from this British migration problem when the weather is fine. For a time the criminal gangs were obliged to steal 'proper' boats from moorings in nearby rivers, but even that has proved to be a finite source.

It is becoming clear that it may well be cheaper to use ground based sensors and a few cops with knives rather than invest heavily in air surveillance. Meanwhile millions are spent on less efficient air surveillance. Helicopters are different, but not one migrant in trouble has yet been snatched from the sea by a Home Office fixed wing surveillance aircraft or drone. The politicians are being sold lies by their own Home Office experts.

Bryn Elliott

COVER IMAGE: I make no apology for featuring the Airbus Helicopters H125 helicopter on the cover of this edition as well as last month. It is 50 years since the Aerospatiale AS350 first took to the skies, and I doubt if any person would have predicted that this relatively flimsy helicopter would still be in full production all these years later as arguably the prime law enforcement helicopter of all time (naturally with due acknowledgement to the large part also played in the role by the Bell 206).

I well remember the common complaint of pilots 35 years ago when they said it would never out run the Bolkow 105 for rubustness as, yet again, the lamp holder at the end of the tail boom fell out of its housing to swing at the end of its wires in the wind! The engineers sorted that one out eventually!

The image is of H125/AS350B3 AStar N929NP of Nashville Metropolitan Police in Nashville, Tennessee, USA. The helicopters, new in 2022, represent the department's inaugural partnership with Airbus after many years operating Bell and MD/Hughes helicopters.

Nashville covers 526 square miles and includes both high-density urban locations and rural areas. Each year, the department's aviation unit responds to more than 2,000 calls, including searches for lost children, fleeing felons, drug eradication, robberies and vehicle pursuits.

The H125/AS350 accounts for nearly half of all intermediate, single-engine helicopters delivered for the law enforcement mission in North America over the last decade.

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LAW ENFORCEMENT

BELGIUM

FEDERAL POLICE: The Kingdom of Belgium will procure 15 multi-role H145M helicopters for the army and two helicopters plus three options for the Federal Police. The contract was signed between the NATO Support and Procurement Agency (NSPA), on behalf of Belgium, and Airbus Helicopters.

The H145M is the military derivative of the civil H145/BK117 designed to act as a multi-role military helicopter that provides a broad range of mission capabilities. The comprehensive mission packages include hoisting and external cargo capabilities. Additionally, the H145M includes options for future mission capabilities, including data links, further communication systems, and digitalisation of mission-capabilities.

The global fleet of the H145 family has now accumulated more than seven million flight hours. It is used by armed and law enforcement forces around the world for the most demanding missions. Germany already operates 16 H145M LUH SOF and eight H145 LUH SAR helicopters and has recently ordered up to 82 additional helicopters of this type. The US Army employs almost 500 helicopters from the BK117/H145 family under the name of UH-72 Lakota and new production includes the version with the Fenestron tail. Current operators of the H145M are Hungary, Serbia, Thailand and Luxembourg; Cyprus has ordered six aircraft as well as Brunei and the United Kingdom.

Powered by two Turbomeca Arriel 2E engines, the H145M is equipped with full authority digital engine control (FADEC). In addition, the helicopter is equipped with the Helionix digital avionics suite which, alongside innovative flight data management, includes a high-performance 4-axis autopilot, which considerably reduces pilot workload during missions. Its particularly low acoustic footprint makes the H145M the quietest helicopter in its class.

The confirmation of the sale to the military and police took place at the EuroSatory military show in France last month, following approval by the Belgian Council of Ministers in March 2023. Delivery is estimated at around 2027, given the backlog of H145 orders, as tracked by market intelligence specialists Parapex Media.

The Belgian Federal Police rotary wing fleet includes operates five MD902 Explorers and two MD520N.
[Parapex/Airbus/PAR]

CHINA

GUANGDONG PROVINCE: Guangdong Provincial Police has taken delivery of an Airbus H175 helicopter. This is the first of six such aircraft ordered by Guangdong Province - at this stage it is unknown whether all six are destined for law enforcement use. The order with Airbus was made in the name of SKYCO International Financial Leasing, an entity owned by Guangdong Province and charged with leading development of its aviation industry. [Parapex Media]

DENMARK

HOME GUARD: A few days after the PAvCon Europe conference and exhibition at the Airborne Technologies facility at Weiner Neustadt the second DHC/Viking Twin Otter destined for surveillance duties with the Danish Air Force Home Guard unit flew in to join the conversion process. The new arrival, OY-FHC, was in standard trim and national marks. [ABT]

GERMANY

BUNDESPOLIZEI: The German Ministry of the Interior has ordered up to 44 H225 helicopters for its Federal Police. This record order for the H225 includes 38 firm orders with options for a further six helicopters. Its payload, range and advanced systems make it a versatile aircraft capable of conducting a large array of law enforcement and homeland security missions ranging from special forces transport to firefighting and disaster relief. Deliveries are scheduled to start in 2029.

The H225 will replace the Airbus Helicopters EC155 and AS332 helicopters that have been in service with the German Federal Police for more than 20 years. The order of the H225 will ensure a seamless transition for pilots and maintenance personnel. The contract also includes training and spare part packages.

The new and powerful mission and communication system guarantees improved situational awareness and smooth data transmission between police forces. It also has an improved main gearbox and an extended health and usage monitoring system, which increases safety and helps to save costs. With a maximum take-off weight of 11,160 kg, the H225 offers an increased range of more than 832 kilometres (1,107 km with external fuel tanks) and an unmatched external payload of 4,750 kg, essential for missions like disaster relief and firefighting. Airbus Helicopters' ambition is that the helicopter will be able to fly with 100% sustainable aviation fuel by 2030 which was already demonstrated at ILA Berlin 2022.

The Bundespolizei operates 94 Airbus helicopters, ranging from the single-engine H120 used for pilot training, to more than 40 twin-engine H135 family helicopters for several missions including emergency medical services on behalf of the Federal Office of Civil Protection and Disaster Assistance (Bundesamt für Bevölkerungsschutz und Katastrophenhilfe), and the Super Puma family, of which the H225 is the latest variant. The partnership began in 1962, when the Bundespolizei (at that time Bundesgrenzshutz) started operation of its Alouette II, manufactured by Airbus predecessor company Aérospatiale. Early versions of the SA330 Puma followed.

Offering the industry's best range, speed, payload and reliability in the 11-tonne twin-engine category, the H225 is the latest member of Airbus Helicopters' Super Puma family that has accumulated more than 6 million flight hours in all-weather conditions around the world. Equipped with state-of-the-art electronic instruments and renowned autopilot precision, the H225 offers outstanding endurance and fast cruise speed, and can be fitted with various equipment to suit a variety of roles.

Ed: The Bundespolizei have been operating Aerospatiale/Eurocopter Puma derivatives since the mid-1970s with the last influx of airframes taking place over a decade ago. The EC155 fleet was acquired at the turn of the Millenium.

SOUTH AFRICA

POLISI: The air arm of the South Africa Police reportedly took delivery of an Airbus Helicopters H125 last month. The delivery was ZS-RZS (formerly F-WWPN) construction number 4000.

By June 2020, 3,663 examples of the AS350/H125/H130 AStar/Ecureuil/Squirrel/Esquilo were operational, the largest number of any type. It continues to be a best selling single engine turbine.

NEW ZEALAND

POLICE: Bell Textron Inc., announced the New Zealand Police Air Support Unit's fleet of three Bell 429 helicopters recently surpassed 15,000 flight hours of successful operations. Since beginning operation in 2019, the Bell 429 aircraft have primarily served as airborne observation platforms to coordinate ground unit operations, especially when persons of interest remain present at incidents.

"Reaching 15,000 flight hours in such a short period is a remarkable achievement for the New Zealand Police Air Support Unit and their aviation services provider, Advanced Flight," said Daniel McQuestin, Bell's business development director for Australia, New Zealand and the Pacific Rim. "Bell values our work with law enforcement customers worldwide who rely on Bell 429 helicopters to safely and efficiently perform their important community missions." The New Zealand Police maintains 24/7 airborne coverage, equalling approximately 3,300 planned flight hours annually.

Advanced Flight completed the final modification of the Bell 429s, installing a custom law enforcement package that suits the mission requirements of the New Zealand Police Air Support Unit. They have supported the New Zealand Police Air Support Unit and their Bell 429 aircraft since 2019.

The Bell 429 has proven popular globally among corporate, emergency medical, and law enforcement customers worldwide due to its smooth and comfortable flight experience with best-in-class cabin space. There are over 450 Bell 429s operating globally, accumulating over 602,000 flight hours to date. [Bell]

UNITED KINGDOM

NORFOLK: Last year the UK National Police Air Service (NPAS) issued a Request for Information (RFI) in relation to the acquisition of Remotely Piloted Aircraft Systems (RPAS) which can be operated beyond visual line of sight (BVLOS).

The form of the BVLOS drone in the forthcoming first responder drone trial conducted in the east of England remains shrouded in mystery. Meanwhile a US manufacturer based in Seattle, Washington is promoting a range of drone products to the law enforcement industry that includes a potential solution.

The Responder drone and Responder Station charging nest from BRINC is now being promoted as the first ever purpose-built hardware designed for Drone as First Responder (DFR) operations. BRINC's integrated DFR solution marks a significant leap forward in drone technology. Responder drones are designed to arrive at emergency calls in less than 70 seconds, give first responders situational awareness before they arrive, deliver life-saving medical payloads, lower response times, and clear low-priority calls without ever sending an officer. It is claimed that the DFR solution can resolve approximately 25% of calls for service without dispatching personnel.

Weatherproof? © brinc

BRINC's American-made Responder drone can support first responders as part of an agency's automated DFR system, a patrol-led DFR approach, or as a manually deployed drone. The Responder can also deliver a wide selection of life-saving payloads, such as EpiPens, automated external defibrillators (AEDs), personal floatation devices (PFDs), and naloxone (Narcan). Its two-way communication capability facilitates instruction and can enhance de-escalation during tense confrontations. Https://brincdrones.com/responder/

Responder is equipped with a powerful camera payload, providing a detailed view to public safety personnel once it arrives on-scene. Capabilities include a Full HD, 40x zoom visual camera array, and a 640px thermal sensor. This industry leading thermal imager is capable of assisting firefighters identify hotspots in structure fires, or help search and rescue teams find people.

Complementing the Responder is the Responder Station, a robotic charging nest designed to be placed throughout communities for fast response times. Responder Station ensures that Responders remain operational, protected from weather, and ready to spring into action at a moment's notice. Together, the Responder and Responder Station enable sub-5-second drone deployment.

Responder drones return to the nearest available Station after the completion of each mission to charge, from 0 to 100% in just 40 minutes.

This entire solution is driven by BRINC LiveOps, a drone operations software platform available on all modern web browsers. This allows for easy access on mobile devices, tablets, mobile data computers, and at real-time crime centres. [BRINC]

A GATHERING: Meanwhile, while taking tea at Rosey Lea tearooms at The Squadron, North Weald, (a recommended daylight watering hole by the way!) on June 20 I noted some odd behavior over in the large NPAS hangar across the lush green grass of this Essex airfield.

When I arrived (1330) there were just two helicopters ; G-POLD the based EC135T2 and one of the London EC145s, G-MPSA.

As the tea flowed and the afternoon wore a second EC145 G-MPSB joined the circuit and dropped in on the helipad at 1400hrs, shutting down as the first EC145 wound up, apparently preparing to leave. Shortly that also shut down and all went quiet for a while until a second EC135T2 flew in and landed on the grass short of the now overcrowded pad. It was G-POLU [the former Merseyside and Norwegian helicopter]. A little judicious shuffling was required and the doors of the cavernous hangar were pulled open to reveal yet another EC135, this time G-TVHB, rightly based at RAF Benson, Oxfordshire. Over the next few minutes the EC145 and the newly arrived EC135 were pushed into the hangar and the doors closed to inquisitive eyes. Five aircraft at the one location seemed a little excessive – especially as three of them were hidden, apparently bedded down, behind the hangar doors.

North Weald base © PAR

At 1500 the EC145 G-MPSA flew off south towards the London base leaving the local EC135 [G-POLD] on guard on the pad.

Were the aircraft not normally based awaiting their turn for one of the two maintenance bays at Oxford and storing them at North Weald saved on parking fees? The massive new facility at Airbus Helicopters Oxford is in the throes of moving so having spare aircraft around might well be a problem.

Not so it seems. After an enquiry to NPAS I received this firm reply

"There are no aircraft stored or awaiting maintenance at North Weald. Any aircraft you have noted there are operational. Plus, our training helicopter, G-POLU, is now flying out of NPAS North Weald on a regular basis."

So, assuming that two of the fleet were already occupying the available spaces at Airbus Oxford, it would appear that nearly a third of the available NPAS fleet were gathered together at North Weald.

A later message from NPAS explained in more detail….

POLU landing at North Weald base © PAR

The NPAS London crews are temporarily operating from the North Weald base whilst necessary maintenance work on the hangars is being carried out at their home base (Lippitts Hill).

North Weald is now increasingly used for training purposes with POLU based there.

All of which makes sense. NPAS need to get the infrastructure up to an acceptable standard before a contractor comes in to deliver the service to the London base.

Unless there has been a further slip, 'best and final offers' should now be in with BlueLight Commercial and the overdue announcement should not be far off.

CIVIL CONTINGENCY: Like many places across the globe, local authorities in the United Kingdom are supposed to ensure that they plan for the worst disasters and keep their records up to date. Some are more successful than others in meeting the strictest expectations laid down. It is effectively the modern version of Civil Defence but goes under the more wordy title of the Joint Emergency Management & Resilience (JEMR) Team, each being a regional enterprise with its own conferences and training. Clearly not all are up to date with all aspects of their tasking. In recent weeks the Penrith (Cumbria) region was asking after updating the contact details of their local Civil Air Patrol. The British arm of this organisation has featured in Police Aviation News in the past but many readers will recall it is not a subject that has graced its pages recently. The only one to be seen or mentioned was that associated with the USAF.

Effectively the UK CAP no longer exists.

A contributory factor was the formation of the National Police Air Service (NPAS) in 2012. Police chiefs were mostly negative about having volunteers offering their private aircraft and services to support policing in general in a manner like the volunteers found in such as the Lifeboat service. There were pockets of mainly lower ranking police officers interested in cooperating with volunteers but faced with NPCC negativity they could not prevail.

The creation of NPAS made it all the easier to reject and kill off the offers that the volunteers were putting forward under the mantle of the CAP. For a long while the only people interested in getting free air support were the resilience teams and such as the local coast guard and search teams. There was no inter-agency training, so the arrangement simply became a few names in a directory that got very out of date. The volunteers simply retired or died out while the quite substantial NPAS offered each of the 43 police forces a 24/7/365 service with 30 bases.

Sadly, that Rolls Royce of air services soon started to falter and could not maintain its service. Within five years it was showing a steady decline in ability. Following a very critical report by one of His Majesty's Inspector of Constabulary, Matt Parr, *'Planes, drones and helicopters - an independent study of police air support*', published in November 2017, NPAS was shown to have 'withered on the vine' and reduced to just 14 bases with a similar reduction in helicopters.

There remain some private pilots out there who are willing to support the Local Resilience Forums and the Volunteer Emergency Liaison Groups, but they are having to make new arrangements to identify points of contact on a local basis.

Latest delivery for the police in Washington DC © Davenport

UNITED STATES

DISTRICT OF COLUMBIA: Davenport Aviation has announced the delivery of a brand-new Airbus H125 helicopter to the Metropolitan Police Department of Washington, DC.

This is the MPD's first new helicopter purchase since 2005, enhancing their public safety capabilities in the US National Capital. Purchased through Davenport Aviation's GSA contract, this high-performance H125 is equipped with state-of-the-art features to support various airborne missions. From advanced communication systems to surveillance equipment, it's ready to serve and protect. The helicopter registered N48AH is a 2023 build airframe c/n 9452. It joins N911AS c/n 3964.

CALIFORNIA: King's County Sheriff in California have bought MD500E N197E from Kern County Sheriff, based further south at Bakersfield in the same state. The aircraft was delivered on 2nd April of this year to their operational base at Hanford Municipal Airport (KHJO) and the FAA processed the ownership change in early June. King's County covers around 1,400 square miles and has a population of 150,000. Meanwhile, Kern County continue to operate their other 500E, but we expect that it is up for disposal as they have taken delivery of two new Airbus H125s [Parapex]

NEW YORK: Increasingly some areas of the USA declare an effective war on unnecessary helicopter noise with such as tourist flights under constant threat of being shut down. As Los Angeles has already illustrated, law enforcement operations get dragged into the excess noise arguments.

In the city of New York, the NYPD operate helicopters, and it flies them around quite a bit – a factor that brings them into public scrutiny.

It is alleged that under Mayor Eric Adams it has been flying them around more than in the past, a factor that caught the eye of Bloomberg. They have been analysing the last five years of the department's helicopter flight data.

According to Bloomberg the police spent $12.4M dollars flying their helicopters around in the 2023 fiscal year, a figure which doesn't include the personnel costs. That's more than double what was spent in 2021.

Bloomberg discovered that the NYPD has been using social media to its best advantage and getting local TV news channels to cover their day-to-day work in an exciting manner that reduces the number of real time complaints and effectively paints them as everyday heroes. The unit is at pains to show that each of their flights has a purpose and, in a reflection of the high-profile campaign again sightseeing flights, not merely an official site seeing exercise.

Despite their efforts it seems that the Bloomberg team's analysis is that sightseeing is exactly what is happening. Bloomberg's examination of past flight records shows that many of the department trips left the city limits and some followed trajectories that hit multiple city landmarks like the Statue of Liberty, Yankee Stadium, the Empire State Building and the World Trade Center. To the Bloomerg team there is a suggestion that passengers are being ferried to and from these high-profile tourist locations and to out of town venues. Backing this up they seem to have hit upon an instance where a police helicopter undertook a return trip to Philadelphia so a deputy commissioner could attend a gala event in style – the fact that the proven instance quoted took place in September 2001, more than two decades ago, is simply glossed over.

One of the primary tasks of US law enforcement aviation has been to visit potential terror targets to check whether they have bombs on them. The US authorities also make a major case for flying helicopters over sports venues to see whether they can detect radiation. Although many denigrate the whole idea as pointless in a shaking and rattling helicopter the sniffing and visual inspection tasking does actually require the

regular flying of air assets to ships passing down the Hudson and East River's, various bridges and city landmarks like the Statue of Liberty, Yankee Stadium, the Empire State Building and the World Trade Center.

The NYPD has seven helicopter's, and they are used for "operational and training use, and official-use travel." According to the report, in 2023 NYPD helicopters made 3,938 separate flights and spent 2,857 hours in the air—a roughly 63% increase from 2021. In contrast the three EC145 helicopters assigned to London England are expected to fly a similar number of hours looking after that city, so the number of hours for a city scape is not excessive, indeed it is probably low.

The Bloomberg report highlights the style of activity undertaken by the NYPD helicopters when assigned to such as street protests. – hovering flight. Although such activity is central to the use of helicopters in cities across the globe Bloomberg seeks to paint them as peculiar to the NYPD and therefore something of a threat to US society.

It seems that the lawyers in New York may have made the situation worse. There was something peculiar to US law that allowed part of the settlement agreed to stop lawsuits flying around as a result of the 2020 George Floyds protests involved the NYPD committing themselves to stop flying its helicopters over protests "with the intent of intimidation or the intent of disrupting, interfering with or dispersing a lawful [First Amendment activity]," Perhaps fortunately all the lawyers got themselves confused with the actual terms of the settlement, and no one is quite clear whether the NYPD is in the right or wrong.

As with the 2001 visit to Philly, the critical Bloomberg report appears to be good on history, even quoting a 1983 movie as inspiration for a 2005 case where a police helicopter was found to have filmed a couple having sex on a roof top. The trouble with that is that a movie is not really 'history' as we know it and I can offer you several instances of police helicopters in other countries doing exactly the same thing without needing to watch an old movie. Just give them a camera 'and they will come.'

NORTH CAROLINA: In recent days the executive board members of the Southeastern Airborne Law Enforcement (SABLE) airborne law enforcement operation have decided to discontinue future use of crewed aircraft and transition into full-time use of unmanned ariel vehicles (UAV).

SABLE operates two government surplus Bell OH-58 Kiowa helicopters on loan from the Department of Defense, according to a news release from the Wilmington Police Department. The aircrafts are more than 50 years old and require frequent maintenance.

Originally, SABLE was formed in 2006 and centred on the City of Wilmington's desire to increase airborne response for law enforcement. Initially it was financed by a mix of locally sourced funds, grants, and partner agency support. The program expanded in 2018 to include a UAV/drone component.

In keeping with the level of the local population, the funding of the operation is low and there is no prospect of ever being able to afford a newer full time manned helicopter. Meanwhile the helicopters used are around 60 years old and increasingly difficult to support. Recent experience, including a precautionary nighttime landing due to mechanical issues only served to highlight the dangers.

The SABLE executive board members have concluded that continuing with crewed aircraft operations are no longer financially feasible. Members are no longer comfortable routinely placing personnel in aging aircraft that may be unsafe.

All participating agencies will transition resources from the crewed helicopter program to the SABLE UAV drone program, In the event a helicopter is needed, the Wilmington Police Department will work with the North Carolina State Highway Patrol or the North Carolina Air National Guard for use of an aircraft.

Editor: The Prime aircraft used Bell OH-58 N54LE was with the unit from 2007 but it was a 1968 airframe and therefore over 55 years old and having great difficulty in finding spares. Over the years the various local law enforcement agencies were able to access the service for a relatively small investment. The lead in the operation was Wilmington Police Department, that town having a population of just 115,000. Of the others, some of whom joined and left supporting the operation almost on an annual basis due to funding issues, New Hanover County Sheriff had a population of 225,000, and Brunswick County Sheriff's Office oversee a population of 136,000 but smaller areas including Pender County Sheriff's Office had to

draw their membership from the taxpayers of a population of just 60,000, and Leland Police Department, a population of 20,000. For each of them finding an annual sum of $25,000 could be very difficult and the actual payment was often less. Some private pilots added their own more modern helicopters and time to the operation, but these were the exception and usually short lived.

TEXAS: After modifying an Airbus H125 AStar with several upgrades, Metro Aviation recently delivered the new-production helicopter, N270PW, to the Texas Game Wardens, a division of the Texas Parks and Wildlife Department (TPWD).

The new arrival © Metro

In addition to an Oceana Aviation Cargo Swing, a frame that enables carriage of heavier external loads, Metro installed an L3Harris Wescam thermal imaging system with moving map, searchlight, and 17-inch touchscreen mission monitor, as well as SiriusXM radio.

The mission equipment includes a programmable video switch with push-button source switching, according to Metro, as well as a flip-down 10-inch monitor, data converter that cross-fills point data from the moving map to a Garmin GPS navigator, public address loud hailer, Flightcell DZM Iridium satellite and cellular communication unit, Garmin traffic advisory system, and Garmin GFC 600H autopilot.

Responsible for conservation law enforcement, search and rescue, aerial firefighting, and other activities, the Texas Game Wardens have used aviation assets since 1930. The organization has another AStar and a 2014 AS350B3e N350PW c/n 7823 in its fleet and has two Cessna's on order.

"With the delivery of the 2023 Airbus H125 completed by Metro Aviation, along with our 2014 H125, we will have a strong fleet of AStar helicopters in the Texas Parks and Wildlife Aviation Unit," said Game Warden chief pilot Brandon Rose.

Further on this year the unit expect to take delivery of two Cessna 08 Grand Caravan aircraft. One has already been delivered to Integrated Surveillance and Defense, Inc (ISD), a prominent aerospace firm focusing on Intelligence, Surveillance, and Reconnaissance (ISR) solutions for completion.

ISD report that the contract with TPWD is worth $13.6M. The collaborative venture is geared towards bolstering the department's aerial surveillance capacities and strengthening their capabilities of safeguarding and preserving Texas' natural and cultural heritage.

Under this contract, ISD will provide the TPWD with two state-of-the-art Cessna® Grand Caravan® EX aircraft equipped with the advanced Shotover M2 Electro-Optical/Infra-Red (EO/IR) sensors. This aircraft is renowned for its reliable and efficient performance, making it an ideal choice for challenging missions, high payloads, and short, rough runways.

The integration of the Shotover M2 EO/IR camera system into the aircraft, utilizing a certified lift, will provide the TPWD's aviation unit with unprecedented clarity and advanced long-life High-Definition infrared technology. This cutting-edge system features large format colour sensors and precision high-magnification zoom optics, enabling the aircraft to maintain greater stand-off distances for enhanced safety and stealth. Additionally, the system includes built-in 4K video and metadata recording capabilities, with real-time overlays for instant identification of locations.

The Shotover EO/IR turret © PAR

AIR AMBULANCE

AUSTRALIA

QUEENSLAND: Leading aeromedical organisation LifeFlight has officially joined the list of 'Queensland Greats' after taking out a prestigious award at a ceremony in Brisbane on June 6.

LifeFlight Chair Hon. Jim Elder was presented the Queensland Greats Institution Award by Premier Steven Miles at a gala dinner at the Queensland Gallery of Modern Art, to coincide with Queensland Day. The annual Queensland Greats Awards began in 2001 to recognise extraordinary individuals and institutions that have made a meaningful contribution to Queensland. Mr Elder said the not-for-profit was driven by a profound desire to make a difference in Queenslanders' lives.

Under the leadership and guidance of Retrieval Services Queensland, LifeFlight's rescue helicopters perform a vital retrieval and rescue function in Queensland – connecting all Queenslanders to world-class, life-saving care.

LifeFlight CEO Ashley van de Velde OAM, who started with the organisation as a volunteer aircrewman in 1981, said the award was an acknowledgement of LifeFlight as a Queensland success story.

LifeFlight's fleet of four Air Ambulance jets and 16 helicopters service Queensland, other states in Australia and abroad. LifeFlight also supports search and rescue efforts across 53 million square kilometres of land and sea for the Australian Maritime Safety Authority.

UNITED KINGDOM

CAMBRIDGESHIRE: A 24-hour helipad has been approved for Addenbrooke's Hospital, a large teaching hospital and research centre in Cambridge, England, with strong affiliations to the University of Cambridge. Addenbrooke's Hospital is located on the Cambridge Biomedical Campus.

Planning permission for a 24/7 helipad at Addenbrooke's has been granted to improve outcomes for patients requiring emergency care. The extension has been welcomed by Air Ambulance charities in the East of England, and Cambridge University Hospitals NHS Foundation Trust (CUH) as the Major Trauma Centre for the region.

Currently, East Anglian Air Ambulance (EAAA), Essex & Herts Air Ambulance (EHAAT) and Magpas Air Ambulance use a temporary helipad at Addenbrooke's, which was operational between 7.00am and 9.00pm. The extension to a 24/7 basis, which came into effect on 20 May, will benefit patients suffering from the most serious injuries, where immediate transportation to emergency care facilities can be vital.

Addenbrooke's current pad is unsophisticated © HELP

It will also reduce the need and time for additional transfers by land ambulance, ensuring critically injured and unwell patients from anywhere in the region can receive quicker treatment from the Major Trauma Centre, regardless of the time of day or night. This will also help to reduce discomfort for patients and pressure to an already complex medical emergency.

EAAA has been flying 24/7 from their Norwich base for almost three years. In the last 12 months, as well as seeing a 6% increase in daytime taskings, the charity, which has a base in Cambridge, has been significantly busier at night, with a 17% increase in callouts.

Alan Ward, Aviation Advisor at EAAA says: "We have been really pleased to work in partnership with Addenbrooke's on the development of a 24/7 helipad, which will have a notable positive impact on patient outcomes in our region. The helipad time restrictions required secondary ambulance land transfers if, for instance, the patient is landed at Cambridge Airport, so this progress towards a 24/7 helipad at Addenbrooke's is significant in giving everyone the best chance of surviving and recovering from a life-threatening emergency."

Dr Tony Joy, Medical Director at EHAAT welcomes the extension. "With Addenbrooke's being a primary Major Trauma Centre for Essex, Hertfordshire, and the surrounding regions, we frequently transport patients there. The plans to develop a 24/7 helipad landing site are hugely welcome and will lead to a reduction in transfer times for critically ill and injured patients, helping to improve their clinical outcomes."

In April 2021 the air ambulances were unable to land at Addenbrooke's Hospital after its helipad was destroyed by a US military Osprey aircraft undertaking a training exercise.

ESSEX & HERTS: *CORRECTION*: An earlier report that the new Leonardo AW169 G-EHAT had left Staverton on June 3 contained an error. It was stated that the helicopter departed from the Babcock facility but should have stated that it was the GAMA facility – the former Specialist Aviation Services building.

KENT, SURREY & SUSSEX: More than 160 specialists in Pre-Hospital Emergency Medicine (PHEM) attended the world-leading Air Ambulance Charity Kent Surrey Sussex (KSS) `Future Directions in HEMS' conference, which took place on June 13 at Holiday Inn, Gatwick, attracting renowned UK and international speakers.

The successful event was focussed on bringing together the PHEM community to collaborate and innovate, to share knowledge and learn from one another, so that future tangible improvements in patient care could be achieved globally as a result of the day.

The conference sessions examined critical topics affecting pre-hospital emergency medicine:
PHEM research – a look at the groundbreaking studies and advancements shaping the future of air ambulance operations.

- Managing fatigue and crew welfare – how to create and build teams that perform well under pressure, and strategies to enhance crew welfare and ensure optimal performance.
- Technical advances – an exploration of how HEMS can increase our reach to patients and learnings from other complex industries.
- The future of endovascular interventions – the cutting-edge technologies and techniques reshaping medical interventions in emergency situations.

UNITED STATES

CALIFORNIA: Enloe Health unveiled its new Airbus H130 helicopter during a dedication ceremony at the Chico Air Museum.

Enloe Health's FlightCare is the only hospital-owned and -operated air ambulance operation in California. The new H130 arrived in Chico last month, after being manufactured by Airbus in France and retrofitted as an air ambulance by United Rotorcraft in Colorado. The new aircraft is an updated version of Enloe Health's existing H130 (EC130T2). Both helicopters have additional space to accommodate lifesaving technologies, such as a temperature-controlled incubator for newborns and specialized equipment to transport complex heart patients. Additionally, these helicopters have extra seating to help keep families together during transport.

FlightCare provided 1,040 patient transports in 2022 and 923 in 2023. The primary aircraft flies around 1,000 hours per year. A scheduled rotation between the current H130 and the new aircraft will allow Enloe to extend the life of both helicopters. The current backup aircraft, the 23-year-old AStar helicopter, will be retired.

The cost new H130 cost approximately $5.4M, and the Enloe Health Foundation covered the majority of the cost through philanthropic gifts from the community. The fundraising efforts are ongoing. FlightCare began in 1985. Since then, it has served more than 25,000 patients across Butte, Tehama, Glenn, Plumas, Colusa, Sierra, Yuba and Lassen counties.

Ireland's SAR Team

Ireland's newest SAR specialists pictured in the Netherlands with a Bristow AW189 - Rich Bolton (SAR Commander), Alan Speed (Technical Crew), Mike Beamish (Technical Crew Manager), Craig Thomson (Technical Crew), Kevin Drodge (SAR Commander)

SEARCH& RESCUE

GREECE

The Hellenic Ministry for Climate Crisis and Civil Protection is enhancing its emergency response capabilities by introducing three Leonardo AW139 intermediate twin engine helicopters. Under the recently signed contract, the new aircraft are expected to be delivered in 2026 with two units dedicated to healthcare missions and disaster relief and one unit to be used for transportation of the crisis management teams. The order also includes a comprehensive technical, logistical support, and training package. The AW139s will be operated by the Fire Brigade on behalf of the Ministry from a base in Attica.

The AW139s will feature a flexible and modular cabin layout able to host a mix of up to five passengers and up to two stretchers. The cabin can easily and quickly be converted providing the possibility of up to 14 passengers, if required, for the deployment of the incident management team.

IRELAND

SAR: Ireland's newest helicopter search and rescue (SAR) specialists are getting hands-on with the future as they carry out detailed training on the advanced AW189 aircraft.

Ahead of the first brand-new Irish Coast Guard aircraft being delivered in-country, the new and growing Irish team of experienced SAR pilots and technical crew is busy honing their skills alongside counterparts in The Netherlands, where the AW189 helicopter is already regularly called on to deliver life-saving missions.

Still on test in Italy © Leonardo

The seasoned rescue professionals, each highly experienced in working with the AW189, are looking forward to introducing the new aircraft type and supporting people and communities across the country once the new service gets underway in the autumn.

Technical Crew Manager, Mike Beamish, said: "Training with our colleagues in the Netherlands is allowing us to continue developing our skills and the AW189 is the perfect aircraft for SAR operations. We look forward to commencing training on the AW189 in Ireland and to actively engaging with the wider Coast Guard and SAR community.

"The AW189 helicopter is genuinely next generation. It's an ultra-modern airframe but has already proved its worth in critical missions all over the globe. It can land and manoeuvre where other aircraft can't, it carries the very latest mission systems and rescue equipment and is safe, fast and responsive to fly. The team loves it.

Bristow Leasing Limited, a UK subsidiary of the Bristow Group, has entered into a new Export Development Guarantee term-loan facility for an aggregate amount of up to €100 with National Westminster Bank Plc ("NatWest") as the original lender and UK Export Finance guaranteeing 80% of the facility (the "UKEF Debt"). The proceeds from the financing will be used to support Bristow's capital commitments related to the next generation of search and rescue ("SAR") operations in Ireland. UK Export Finance is the UK's export credit agency and provides the Export Development Guarantee product to support the working capital and capital expenditure needs of UK exporters that meet certain criteria.

JAPAN

COAST GUARD: Bell Textron Inc. has announced that Subaru Corporation has signed a contract for two additional Subaru Bell 412 EPX helicopters with the Japan Coast Guard. These two helicopters will support the Japanese Coast Guard's maritime security, search and rescue operations, maritime disaster relief efforts, and cargo transport needs.

With this signing, the Japan Coast Guard's fleet has grown to six aircraft. The Japan Coast Guard has operated more than 40 Bell 212 and 412 helicopters for over five decades. The transition to the Subaru variant is seen as a logical next step due to shared design commonalities. The variant overs extended hover ceiling, increased payload capacity, robust main rotor gearbox and dry run capability, adding to its long-standing reputation for reliability.

INDUSTRY

At the Critical Communications World event held in Dubai, in May 2024, Cambridge, UK, based **Sepura** announced that it has shipped its 3,000,000th TETRA radio terminal. The product shipped is the SC21, one of Sepura's most popular models of small hand-portable smart radio. Since its launch, the SC21 has proven extremely popular with public safety organisations across the globe.

To mark this important milestone, Steve Barber, Sepura's CEO, presented a specially designed commemorative trophy of the SC21 to Sepura partner Jomtel Communicaciones at this year's Dubai event.

Sepura is a recognised global leader in the development and supply of radio terminals, accessories and applications for mission-critical and business-critical communications. Based in the UK's Cambridge technology hub, Sepura provides local support through its global footprint, and is a trusted partner to public safety users and commercial customers in the professional mobile radio (PMR) market. Sepura's comprehensive solutions for critical communications enable customers to address the demanding operational challenges they face.

Smith Myers, announced at PAvCon Europe, just days ahead of the CANSEC expo in Ottawa, that it has been selected to be integrated on the RCAF Cormorant upgrade.

The CMLU Project aims to transition Canada's AW101/CH-149 "Cormorant" SAR helicopter fleet to the latest standard, aligning with Norway's SAR capabilities – which also selected Smith Myers ARTEMIS system.

Smith Myers' ARTEMIS Mobile Phone Detection Location System is a critical addition to the CMLU, contributing to the overall

effectiveness of search and rescue operations. This innovative technology enables precise mobile phone detection, enhancing location accuracy and reducing search times. The result is a more efficient and focused rescue effort, enabling "less search and more rescue."

Loft Dynamics, a global leader in virtual reality (VR) flight simulation technology, announced its expansion beyond helicopters to include electric vehicle take-off and landing (eVTOL) aircraft simulators. As the first and only VR simulator with major regulatory approval, the company is utilising its proven technology to develop its first VR eVTOL simulator for Dufour Aerospace, a leading innovator in eVTOL flight technology. Both companies unveiled the partnership at the Loft Fest event, which brings together the global aviation community. They shared that the Aero3 VR eVTOL simulator is currently in development and scheduled to enter the market in early 2025.

The CAMCOPTER® S-100 has been in service with the French Ministry of Armed Forces since 2012. In order to more closely support this successful partnership and meet the operational requirements of the Armed Forces in case of major engagements, Schiebel has established a company in France, situated close to its customer, in Toulon. The new Schiebel entity will provide localised support for the French Navy's fleet of S-100 within the framework of a 5-year contract DMAé (Direction de la Maintenance Aéronautique) awarded to Schiebel at the end of 2023.

Schiebel Aéronaval SAS will house a production and repair facility to conduct the assembly and maintenance of the S-100 systems for the French Navy and other customers. The new Schiebel company will also have a training department to train operators and maintenance technicians.

Furthermore, and significantly, the entity is intended to become the main European production and payload integration site for the evolving CAMCOPTER® S-300.

Schiebel Aéronaval SAS embeds itself into the French Aerospace industrial network, works closely with other local French companies and is expected to generate many employment opportunities in the Toulon area.

Lockheed Martin announces that the Romanian Ministry of Internal Affairs has awarded a further contract to **PZL Mielec** (a Lockheed Martin company) for the purchase of a new Black Hawk utility helicopter for emergency and fire-fighting services.

The helicopter will join the existing fleet of Sikorsky S-70M Black Hawks in Romania, bringing the total to eight.

Financed by European Union RescEU funds, this purchase strengthens Romania's capacity to respond to disasters.

The Black Hawks are used for a variety of missions including rescue, medical transport and firefighting, benefiting from a robust design adapted to harsh environmental conditions.

The **AW609 tiltrotor** programme set another major industry capability milestone after its first successful ship trial, which was recently conducted with the support of the Italian Navy. In early April, the AW609 AC4 aircraft, fully representative of the final production configuration, performed demonstration trials relocating from Leonardo's facility based in Cascina Costa (Samarate) to Maristaer Grottaglie Naval Base. The tiltrotor, with test pilots and flight test engineers from Leonardo (supported by Italian Navy personnel for the embarked operations), took off from the base inbound from the Italian aircraft carrier (ITS CAVOUR - Navy Fleet Flagship), 20 nm offshore, showing its effective approach, stable deck landing, and touchdown capabilities.

During the demonstration, the AW609 provided a unique opportunity to further strengthen the awareness of the outstanding advantages of Leonardo's tiltrotor in a dedicated maritime environment.

The demonstration trials are the latest step taken under the activities carried out by a joint working group established in 2022 including Leonardo, the Italian Navy, the Italian Army, and Guardia di Finanza (Italy's Customs Police). The working group is intended to evaluate the potential of tiltrotor technologies as complementary capabilities to the assets already in use among government services, providing a fast long-range capability with vertical take-off and landing and fast cruise, above the weather thanks to the AW609's unique pressurized cabin and high altitude performance.

Telecoms giant **Motorola** has filed a lawsuit against the UK government over claims it has failed to pay £14.5M worth of bills linked to a contract to modernise communications for the country's emergency services.

The upgrade to the communications system, which commenced in 2015, is designed to allow ambulance workers, firefighters and police officers to share data more easily when responding to emergencies.

But Motorola claims it is still owed money from this programme.

A spokesperson for Motorola said that "despite concerted efforts to resolve this dispute, the Home Office has failed to pay the full amount of sums due to Airwave under invoices issued since 22 March 2023."

The claim is linked to a long-running dispute the telecoms giant has with the Competition and Markets Authority (CMA), where the regulator ruled in 2022 that Motorola had a monopoly in the emergency service radio network.

The CMA found that a lack of competition has allowed Motorola to make around £160M in excess profits a year, weighing on public funds with the Home Office and emergency services as its top customers.

Last December, the CMA implemented a price cap on Motorola which limited how much the company can charge for the use of its Airwave Network. Motorola is seeking to appeal this decision

ACCIDENTS &INCIDENTS

6 March 2024 Airbus AS350B3e N612RX Air ambulance of REACH Air Medical Services McClellan California USA. During a scene response to a remote Landing Zone the tail rotor blade tips contacted a bush on touch down. The damage to the tail rotor blade tips was discovered by the pilot during post flight inspection. The AC was taken out of service for maintenance action and an alternative transport was provided. Causal Factors were assessed as Inadequate Real-Time Risk Assessment due to a misevaluation of the risk of the landing zone hazards. Failure to abort the landing after the noted re-evaluation of the hazards in the LZ. Contributory Factors: Reduced visibility due to blowing dust during the final phase of landing obscuring the hazard. Possible fixation on landing vs aborting the approach to the LZ when the hazard reassessment was found to be of a higher risk potential. The proximity of the tail of the aircraft with the bush was not identified or communicated from the LZ ground staff with the Pilot. [Concern]

5 June 2024 Antonov An-2R RA-40420 Surveillance aircraft operated by the Federal Aviation Forest Protection on wildfire surveillance. According to preliminary data, at 14:25 (local time) the An-2 aircraft was carrying out aerial work to detect fires in forests. When landing on the landing site in Svobodny, the plane's propeller touched the ground surface and damaged the propeller. There were 2 crew members and an observer pilot on board the aircraft. There were no casualties. [ASN]

10 June 2024 Airbus Helicopters H145 Ministry of Internal Affairs, Serbia. Helicopter operating at Kuljani, Serbia a training base collided with drone operating illegally over a karting race in Zalužani. The incident occurred at 3:00 p.m. during the landing of the helicopter at the Training Center of the Ministry of Internal Affairs of the Republika Srpska, in the zone where the use of unmanned aerial vehicles is prohibited. At that moment, the helicopter was flying low, and the drone hit it.

12 June 2024 Ilyushin Il-76TD RA-76363 Ministry of Emergency Situations of Russia. The aircraft was flying at an altitude of 3,000 Ft, when it suffered an engine failure. The aircraft returned to Ramenskoye airfield and landed safely. [ASN]

14 June 2024 Sikorsky SH-60 JayHawk US Coast Guard from the base in Clearwater, Florida, made an emergency landing in Lake County on Friday morning, officials confirm. According to the USCG. The aircraft landed in a field at the intersection of Osgood Road and Dodie Trail in Montverde around 17 miles west of Orlando, Florida. The seven people aboard were not hurt.

14 June 2024 Canadair CL-215 TC-TKV Water bomber, firefighting.of Türk Hava Kurumu. The CL-215 belonging to the Turkish Aeronautical Association, suffered an accident on Bafa Lake and came to rest with the forward fuselage submerged. The aircraft was used by the General Directorate of Forestry to fight a fire near Aydın Didim. [ASN]

18 June 2024 Pilatus PC-12/47E VH-OWY Air ambulance of the Royal Flying Doctor Service. During a landing at Nullagine Airport, Western Australia it struck a cow and was substantially damaged. Departed Newman Airport WA. No injuries reported. [ASN]

21 June 2024 Air Tractor AT-802A N331BS Fire fighting single of B&S Air Inc. Crashed near Capitan, New Mexico, USA under unknown circumstances', killing the pilot .[ASN]

25 June 2024 Canadair CL-215 Water bomber of the Hellenic Air Force. Struck a pine tree on top of high terrain with its left wing during a water drop dive in the Nafpactos area of western Greece. Made a precautionary landing under control with no further damage or injuries. [ASN]

26 June 2024 Agusta Westland AW109SP JA01KG Air ambulance of Kagoshima International Aviation based at Urasoe General Hospital. Reported to have lost its two right aft acrylic windows while en route over Agarie Junior High Scheel, heading for Yoron Island to pick up a patient. Made a precautionary landing on a helipad at Nago City Fire Department, Okita. No injuries among five occupants. No other damage reported. [ASN]

SAFETY

A loss of engine power due to poor maintenance caused a 2022 helicopter crash in New Mexico that claimed the lives of four Bernalillo County first responders as they were returning home from a firefighting mission, according to federal investigators.

Investigators with the NTSB Safety Board issued a final report last month. They noted that a manoeuvre to account for the loss of power was complicated by the setting sun and low altitude and contributed to the crash of the Bell UH-1H helicopter.

Event images © Mark Colborn

8th Annual Energy Drone + Robotics Summit, The Woodlands, Texas June 10 thru 12, 2024

By: Mark Colborn PAN Correspondent

When I meet people and they find out I fly drones, the conversation immediately pivots. Their first question, after telling me that they have thought of purchasing a drone, is "which one should I buy?" This loaded question cannot be adequately answered without responding with another loaded question, "What kind of work do you intend to accomplish with one?" That is where conferences like the Energy Drone + Robotics Summit in The Woodlands, Texas shine, because they provide a great venue to answer the first question.

The mission, or particular use case, determines which drone to purchase. Do you need to detect fugitive gases, map a construction site, find a fleeing criminal or missing child at night, map a construction site, inspect a roof, perform non-destructive inspections on fuel storage tanks, locate objects underwater, provide security for a large oil refining facility, or simply learn how to fly a drone? Buy the wrong drone and the outcome could be expensive, and less than desirable. But luckily, at Energy Drone, there are lots of products to choose from – all in one place.

Naturally, the Energy Drone + Robotics Summit is heavily concentrated on displaying drones, robots, and AI that can be used in the energy and gas field, however, again this year, DroneResponders was back with an excellent full one and one-half day program for public safety professionals. Christopher Todd, Executive Director of AIRT/Drone Responders welcomed everyone to the Texas Emergency Response Forum co-located event of the show with a status report on the state of the UAS public safety sector in America. As can be expected, most of the information conveyed, which I will cover later in this article, centered around how public safety agencies and power companies respond to disasters with UAS here in America, however, a great deal of this information is applicable to public safety operations around the world.

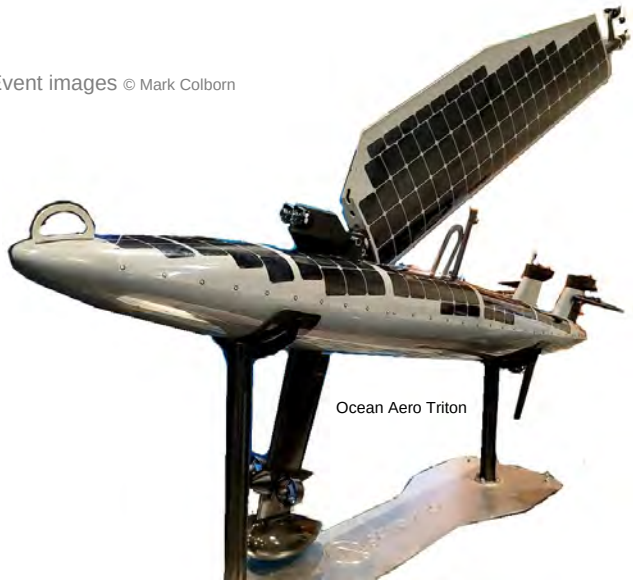
Dancing Robots!

Who doesn't like dancing quadruped robots at conventions? As can be expected, every year these versatile robots (which resemble large, hungry Doberman Pinschers) continue to reproduce, and they were running around all over the expo floor! Joining an MFE Inspection Solution's Boston Dynamics SPOT, Ghost Robotics Vision 60, and the Chinese robotics provider Unitree's GO2 and B2 quads on parade each afternoon, was a Unitree G1 "Humanoid Agent AI Avatar." Essentially a biped robot that looks and moves like a human, with, according to a company brochure, has "flexibility beyond ordinary people." Yes, kind of an eyebrow-raising statement admittedly. But fear not, the G1 is not exactly at the Robo Cop stage yet, but when it can cook my breakfast and wash the dishes, then I might invest US $14,000 on one!

Event images © Mark Colborn

UNMANNED

Event images © Mark Colborn



Ocean Aero Triton

Another unique attraction on the expo floor included a very impressive 4.4 meter long, and world's first and only Autonomous Underwater and Surface Vehicle (AUSV) called the Ocean Aero Triton. It is powered by both wind and the sun, and according to a brochure, is ideal for extended deployment and broad-scope missions, to include site security and surveillance. This autonomous vehicle has solar panels on both the wing sail and top surfaces, has a maximum surface speed of 5 knots, obstacle avoidance, and can submerge up to 100 meters.

Also, on display at the MultiCopter Warehouse booth, was an Anzu Raptor T. The Anzu Raptor series is essentially a DJI Mavic Enterprise. The technology was licensed to Anzu Robotics, an entirely American-owned company based in Austin, Texas, who then found a manufacturer in Malaysia to produce and ship the drone. According to a brochure, their "mission is to provide a world-leading drone technology manufactured in a way to assuage geopolitical concerns and offer safe and secure drones for public safety and enterprise uses across a variety of industries." They partnered with the American software company Aloft to provide the mission software which hosts all shared data on US-based servers, with no data being sent to China. The drone and controller are both painted in a high gloss Hunter Green paint, similar to what you could find in a hardware store. The color grows on you!

Potentially solving a production problem when Chinese products are banned, from Malaysia certainly looks different. The Anzu Raptor Triton

Elephant In the Room

Despite all the great attractions and dancing robots, the elephant in the room and on everyone's mind was a bill introduced into the U.S. Congress to ban all brand new Chinese DJI drones. New York Congressional Representative Elise Stefanik sponsored the Countering CCP Drones Act. This bill would add DJI to the Federal Communication Commission's (FCC) Covered List, essentially prohibiting new models of DJI drones from obtaining FCC authorizations to operate on the U.S. communications infrastructure. On June 15, 2024, this bill was incorporated into the 2025 National Defense Authorization Act, and that bill is now headed to the U.S. Senate for further consideration. Another bill introduced by Stefanik in May (H.R. 8416), would amend the harmonized tariff schedule of the United States to increase the rate of duty on unmanned aircraft imported from China. Americans already pay 20% tariffs on Chinese drones, but this bill would increase that amount another 5% a year until the fourth year (2029), when it jumps to 50% plus $100. Why the extra $100 was included is anyone's guess. Then, by January 1, 2030, no Chinese drones may enter the U.S. if they contain "flight controller, radio, data transmission device, camera, gimbal, ground control system, operating software, network connectivity hardware, or data storage manufactured in the People's Republic of China." Ostensibly, the extra money from all these collected tariffs will be doled back out to first responders, ranchers, and farmers in the form of grants to be used to buy US-manufactured equipment. So, what happens if the language originally in the Countering CCP bill passes?

Stefanik, in a June 10th "X" message, stated that the ban will only affect new DJI drones potentially entering the country. Unless that changes in the final bill, the ban shouldn't apply to existing DJI drones already in circulation. If this is the case, public safety entities will be able to continue to fly DJI until attrition – i.e.: trees, powerlines, maintenance and spare parts issues – essentially phases out all our existing drones. At that point, unless U.S. manufactures up their game significantly, we will be forced to buy drones that have half the capability, reliability, and dependability of Chinese drones at a 400% higher price tag. The American drone industry has had over 10 years to create drones comparable to China, and those of us who have watched this industry don't think they will ever catch up. Perhaps if Congress had invested in the American drone industry like China had invested in Frank Wang when he started DJI, we might be in a completely different situation today. Although most police agencies want to buy American, they simply can't afford to operate inferior products.

DroneResponders Survey

AIRT/DroneResponders, according to their website "is a non-profit program created to unite aerial first responders, emergency managers, and search and rescue specialists under a unified organization to help learn, train, and test with one another with the ultimate objective of maximizing drone operations for public safety." DroneResponders has over ten thousand registered members in their program and accepts membership (which is free) from all the following groups: Emergency Management, Fire/EMS, LE, Search & Rescue, and companies or corporations involved in public service/safety. In April 2024, the organization performed a survey in which they received 572 responses from U.S. members. Here are some of the takeaways: 78% of respondents are in government, 57% LE, 27% Fire, 44% Municipal, 30% County, 18% State and 5% Federal. 88% of respondents had a FAA Part 107 Remote Pilot Certificate, and 25% were in specialized units. 63% of respondents have a UAS budget of less than $20 thousand per year, and 73% have 10 or less pilots in their unit, with 80% having less than 10 drones. Again, the main brand of drones used by respondents of the survey is 83% (90% in 2001) DJI. Other brands in service are 24% Autel, 16% Skydio (11% in 2021), 7% BRINC, and 7% Parrot. Many agencies reported having more than one brand of drone in their fleet, which is not a bad idea.

The good news is 74% of respondents believe public perception surrounding their UAS program is positive. And only 24% of respondents believe that special interest groups or others negatively target their programs. Of concern, however, is that 46% of the respondents are unconvinced that negative outcomes from their UAS program may negatively impact other public safety drone programs. As Chris Todd said, this sentiment is not good news for the industry.

Building A Large-Scale Public Safety Program

Jason Day, UAS Coordinator, and Captain Aaron Fritch from the Texas Department of Public Safety (TXDPS) shared their experiences building and operating a large scale UAS program. TXDPS is a huge agency with five separate branches, all having access to drones: Texas Highway Patrol, Criminal Investigations, Intelligence & Counterterrorism, Texas Rangers, and Aircraft Operations. Since 2021, the UAS program has grown exponentially from 100 remote pilots with 100 drones to over 320 remote pilots and 350 drones. The agency to date has surpassed one hundred and fifty thousand flights, and in 2023 logged 52,000 flights. Nearly 60% of all drone operations in the state are now in support of Operation Lone Star, the effort by Texas Governor Greg Abbott to curb the flow of undocumented persons entering the U.S. along the Texas, Mexico border. In fact, Operation Lone Star has logged over 30,000 UAS flights and over 8,500 flight hours. Currently, 10% of all Texas Highway Patrol troopers are UAS pilots. These troopers work 1400 to 1500 fatality accidents on Texas highways per year, and now try to use drones to document each of them. Day related that Standard Operating Procedures (SOPs) are very important to any program and should define the mission of the agency but not limit the agency's operational scope. And recently they had to add a section to their UAS SOP that was not needed before, which was a procedure for removing a pilot from the UAS program. Not everyone is cut out to be a crewed or uncrewed pilot. There must be procedures and evaluation steps in place to ensure fairness during the elimination process.

A good training program is crucial, and the TXDPS has spent the last four years honing theirs. All new pilots are trained at the agency's 300-acre property in Florence, Texas, but before they arrive on site, prospective new pilots complete five on-line modules consisting of administrative policies and procedures, operations material, safety and maintenance, drone laws, and simulator. The simulator builds basic skills

on how to manipulate the controls and utilize the National Institute of Standards and Technology (NIST) Basic Proficiency Open Lane Test, which is the basic test every student must pass in less than 10 minutes to graduate the course. The simulator is also a good indicator of how interested a prospective agency employee is in joining the program. Instructors have found that those who spend an extra amount of time on the simulator tend to be more interested and become better pilots. Next, chosen candidates arrive in Florence for a five-day initial "Zero to Hero" remote pilot course. Scenario-based training is employed. Five scenarios are designed to teach basic skills and develop muscle memory, then students move to productivity exercises designed to not essentially make them experts, but provide a productive environment to build skills. Then students move on to real world scenarios designed to emulate actual situations that they could be faced with in the field. Role-based training is last, and students rotate through multiple roles that focus on airspace deconfliction and communications. Instructors have created a movement-to-contact scenario which teaches pilots the best way to direct ground officers and other assets to a suspect's location. They have also created a team reconnaissance and collaboration exercise which breaks the class up into two groups of about twenty. Each group has to pick a leader and assign roles to each member of the group to achieve the objective. The instructors only get involved if there is a safety concern. And if available, the instructors will request a TXDPS helicopter to the scene during the exercise just to see what the reaction of the remote pilots will be. For instance, will they notice the approach of the helicopter on their ADS-B In indicator, keep flying their drones and not notice, or be so engrossed with what they are doing that they ignore the helicopter? The desired response is to establish contact with the crew in the helicopter and coordinate altitudes and search areas.

Texas Dept of Public Safety Ford F-150 Lightning electric pickup. The front end, above, is strangely short on engine and even the pick up configured rear is more aligned to be a heliport...

Event images © Mark Colborn

Safety and Maintenance Training

Day advised that a safety management system (SMS) is essential to any agency's UAS program. Their UAS SMS was modeled after the agency's crewed aircraft program, with a just culture and incident reporting system that works. Their maintenance and inspection program consists of three levels, plus instructions for unscheduled breakdowns. The first level is performed by the remote pilot-in-command (RPIC) prior to the first mission of the day. A level 2 inspection is performed by the RPIC every three months and documented in their UAS software. And level three is accomplished once a year by the department's maintenance coordinator who is specially trained. RPICs can perform unscheduled maintenance at any time for simple failures, perform updates or change props. If intrusive maintenance is required, the drone is sent to a drone repair company.

Day and Fritch advised that transparency in your drone program is essential. Post and share events on social media, host events to showcase the technology and show the public what you can do, attend events like Energy Drone, and engage in STEM activities with your local middle and high schools. Not only does this build support for your program, but it also helps establish a future workforce. Both men have created a UAS training manual that is singularly impressive, and they will gladly share all their SOPs, safety, maintenance, and training programs with other agencies if requested.

A Public Safety Conversation with the FAA

Drones as a First Responder (DFR) is the big buzz term in the police world today. Everyone wants a program. 38% of the respondents in the DroneResponders survey said they are interested in starting a DFR program. Michael O'Shea and Kerry Flemming from the Federal Aviation Administration were on hand to

field questions from Sergeant Robert Dooley, Florida Highway Patrol. O'Shea said anyone wanting to start a DFR program should perform their due diligence. He has seen departments that want to go from zero (no UAS program at all) to full DFR deployment. He shook his head and said something to the effect, "Not going to happen!" He did say that most departments interested in DFR already have a DFR program, which is essentially a police officer with a drone in the trunk of their cruiser, ready to deploy when needed in the field. He recommended building on that achievement. The crawl, walk, run approach to DFR. He said that in many cases departments only need a little extra capability and he recommended the Tactical Beyond Visual Line-of-Sight (BVLOS) waiver. The Tactical BVLOS waiver allows agencies to fly just outside their visual range so they can check, for instance, the back side of a building that is on fire, or pursue a suspect a few extra blocks to make an apprehension. As long as they stay below a certain altitude and can reasonably avoid any crewed aircraft traffic or obstacles, their flights could be acceptable.

Flemming said the FAA looks at the three "A's" when evaluating DFR program requests, airman, airspace, and aircraft. They look for all the associated elements of safety. Has the operator come to the FAA with solutions for collision avoidance, risk management, and safety. BVLOS obstruction shielding is becoming popular in DFR programs. Built on the Tactical BVLOS waiver requirements, it essentially involves flying within 50 feet of existing structures where chances of encountering a crewed aircraft are very low. With radar or camera systems, recent approvals are allowing operators to fly up to 200' AGL and out to 1500' or further without visual observers on the ground. If each use case can be safely mitigated, further distance approvals, according to both FAA reps, could be granted. The Chula Vista PD in California model for example, employs rooftop launches out to three statute miles. A pilot, acting as a visual observer also, is on the roof and has override capability from the command center. The airspace is also being monitored with ADS-B (using Flight Aware, FlightRadar24, etc.) to stay clear of crewed aircraft. They have geofenced people-centric areas and designated them no-fly, have good communications, and issue NOTAMs. And since the program has been in operation for several years and has received a great deal of publicity, most local pilots know to fly higher, or avoid flying over the city.

Oswego, New York, on the shores of Lake Ontario, and Pearland, Texas have both started DFR programs using the uAvionix Casia G ground-based passive detect and avoid daylight visual system to continually monitor the airspace in a 360 degree arc around the DFR drone launch point. Each Casia G node can be networked and can cover (according to a brochure) an area averaging 2126 meters (1.32 miles) out to 3024 meters (1.88 miles). uAvionix recently acquired Iris Automation, the company that developed the Casia G, and combined it with their pingStation3 networkable weatherproof 978/1090 ADS-B receiver to give Oswego and Pearland police departments the DFR airspace protection they need. This correspondent served for over three years on the Department of Transportation's FAA Drone Advisory Committee with Christian Ramsey, former president and current chief commercial officer of uAvionix. The company under his direction has become well known for their ADS-B transmitters and receivers, IFF solutions for defense, and Remote ID broadcast beacons for drones. They have recently moved into the airspace detection space, and I'd watch for radically innovating ideas from them in the future that will make the national airspace system safer and more DFR programs a reality.

FDNY Robotics Program

Captain Mike Leo, Program Administrator for the New York City Fire Department's (FDNY) drone program, shared that his department, strictly by accident, stumbled upon a way to save lives with drones in his city. After a woman was attacked by a shark on August 8, 2023, along the seven mile stretch of Rockaway Beach in the Borough of Queens, New York City Mayor Eric Adam tasked the FDNY drone unit to assess the situation. While searching for sharks, FDNY remote pilots, in one day, assisted in 15 rescues of swimmers caught in riptides. This summer, according to Leo, drone teams are out on the beach every day assisting lifeguards, looking for sharks, and have the capability to drop Personal Flotation Devices (PFDs) to swimmers in distress, giving lifeguards the time they need to swim out to the trapped swimmers. Rockaway Beach is right under the approach path to Kennedy International Airport's Runway 04, with heavy jets flying over the beach between 650' to 1000' AGL, and light aircraft flying over between 150' to 500'. A majority of the beach is within 400' AGL approved LAANC squares, but FDNY pilots are limited to 200' AGL for extra safety.

FDNY Robotics operates out of the Special Operations Command center on Roosevelt Island. The drone unit has four firemen working shifts 24/7 with about 50 individuals total in the unit. They deploy on all two-alarm fires in the city and respond in smaller Sprinter type vans (CTU 1 thru 3). The unit also has for response a Robotics Mobile Command (crew-cab pickup with an equipment box on the back) and GMC Yukon (Car 11X). Car 11X responds to 4-alarm and higher fires, large, technical, and Hazmat incidents. Car 11X acts as the safety officer and supervisor, managing multiple teams, staffing, liaison with Incident Command (IC), and coordination with other agencies. They handle air emergencies and coordinate and

deconflict the airspace. The unit likes smaller vehicles so they can quickly navigate the brutal traffic of the boroughs.

Deploying drones in a city with massive high-rise buildings, according to Leo, is difficult and requires an inordinate amount of skill. Lack of GPS signal and channeled high-speed winds between buildings present unique challenges to pilots. In April 2023, the unit responded to the Ann Street Garage collapse in lower Manhattan. The four-story concrete parking garage collapsed, killing a garage attendant, but first responders didn't know how many people were trapped when they arrived. A robotic dog and drones were deployed to check for victims and assess the damage. The unit even flew drones inside the structure to conduct further searches, fearing the structure would collapse on fire personnel. The real test for FDNY drone pilots came on July 26, 2023, when a 45-story crane operator car in midtown Manhattan caught on fire, causing the car, boom, crane structure, and 18-tons of concrete to collapse, injuring 3 firefighters and 9 civilians on the street. FDNY launched a DJI M30 when they arrived on scene, but first had to disable the 400' altitude cap originally set into the drone. The RPIC flew up to 600' AGL to get an acceptable angle on the fire. Leo said it was nerve-racking, but they all kept eyes on the drone, and it performed soundly. Leo showed an amazing video recorded by the drone of firefighters on an adjacent roof (who could not see the actual fire because of smoke) attempting to hit the fire in the crane car with water streams. With the help of the drone's video stream on the screen of the RPIC's controller, the IC Chief was able to advise crews on the adjacent roof that they were missing the fire completely and correct their aim.

All training is done in-house. Candidates must already have an FAA Remote Pilot Certificate. Then they attend a 40-hour public safety basic operator course, 40-hour public safety advanced course, PIX 4D mapping course, and a night operations course. One full-scale exercise is conducted each quarter with daily, weekly, and monthly recurrent training.

UAS 4 Disaster Response Forum

The last day concentrated on planning and coordinating emergency response to disasters with UAS. Heath McLemore with Florida Power and Light (FPL), and Tim Hadaway with Southern Company, discussed how their companies use drones to maintain their power transmission infrastructures and respond to natural disasters. The panel discussion was moderated by Chris Todd, DroneResponders. Since large hurricanes cause so much damage, a federal response is generally required, therefore the Federal Emergency Management Agency (FEMA) steps in. FPL and Southern Company then fall under FEMA's Emergency Support Function #12 (ESF-12). ESF#12, a construct within the National Response Framework, helps manage the resources required to support energy infrastructure systems, and private and public service resources. The emergency support function unifies the community and coordinates capabilities, services, technical assistance and engineering expertise during disasters and incidents requiring a federal response. ESF#12 collects, evaluates, and shares information on energy system damage and estimations on the impact of energy system outages within affected areas. Additionally, it provides information concerning the energy restoration process such as projected schedules, percent completion of restoration, and geographic information on the restoration. FPL alone, has over eighty thousand miles of power transmission lines and in recent years has been replacing conventional wooden poles with steel, especially in areas prone to hurricane damage. McLemore related that after hurricanes, the poles are still standing and only the lines must be restrung. It saves his company time, money, and gets the power restored quicker. In 2019, FPL started an in-house group to support the logistics of their pilots on staff and outside contractors. They have a network of over 200 outside pilots that they can pull in to help assess damage after a storm. They use a checklist that is activated 72-hours before a storm is forecasted to affect their areas. They can estimate how much the storm will impact the area and how many customers will lose power. Then they allocate and position personnel and resources around the state in advance to respond after the storm clears. FPL has 50 employees in-house to handle logistics. One person deals directly with the FAA for Special Government Interest (SGI) requests. These SGI requests are required to fly in damaged areas where the FAA activates Temporary Flight Restrictions (TFR). And TFRs are needed after a storm to restrict air traffic to only those who have a direct need to fly over the storm damage.

The power companies set up staging points and have a list of 30 predetermined locations around the state. These staging areas usually cover a circular area out to 30-miles, and company drone pilots are sent to these staging areas well in advance to map the locations. The company will send them again 40 hours in advance to take aerial photos and ensure there are no issues with occupying the site. At the 48-hour mark before the storm, they reach out to vendors for pilots and either leave them at home or place them in Category 5 storm hotels. They also advise them to conduct geofencing unlocks on their drones in advance if required. The pilots are on their own for the first 24 to 48 hours after the storm passes, so the focus for both companies is to ensure everyone has supplies and proper personal protective equipment

(PPE). Since communications, and especially pushing data, can be a problem in these first few days, pilots will shoot storm damage photos and video in lower resolution. Internal pilots are equipped with Starlink satellite communications, so contract pilots can link up with them and upload their inspection data at the end of the day.


Event images © Mark Colborn

Hadaway mentioned that in recent years storms are blowing up faster than in previous years, and it makes the planning process more difficult and much more important. Sergeant Robert Dooley, a twenty-two-year veteran with the Florida Highway Patrol stated that he has responded to several hurricanes in his career. Since highway patrol officers live near the areas they patrol, if a hurricane hits, they are already in the thick of it. Dooley said troopers, if assigned to other areas in the state, often end up sleeping in their cars while responding after a hurricane. No hotels are generally available. An attendee asked how they handle drone deconfliction in disaster areas. Dooley said that if a USAR (search & rescue) team is in the area, it's generally a total rebuild and FPL and Southern Company will not be there. Both McLemore and Hadaway stated that all UAS operations should be line-of-sight, so there should not be a risk of collision. They did, however, recommend establishing verbal contact with other pilots in the area if feasible.

The Texas Department of Emergency Management has created an air coordination plan for disasters that defines roles and responsibilities, identifies communications policies, standardizes data and reporting, defines a Mission Ready Package, and safely integrates UAS into disaster response. Day remarked that this (and ESF#12) is the TXDPS's playbook for disasters. This air coordination Basic Plan is backed up by a well-defined incident command system activated for disaster events that ensures coordination across all responding government and civilian entities. The State Operations Center (SOC) in Austin manages the entire event and sees the big picture, and all assets listed below, in order of succession, report to the SOC. The Air Operations Center is in control, and flow, of all information from aviation assets. The Joint Air Ground Coordination Team is responsible for the mission deployment of aviation assets. The UAS Coordinator is responsible for coordination, dispatch, and airspace deconfliction of UAS. UAS Team Leads handle field coordination of UAS assets and are responsible for tasking, logistics and crew coordination. RPICs are responsible for conducting UAS assigned missions and airspace deconfliction. When deploying assets to complete assigned missions, Fritch stated that UAS crews must have a clear understanding of what the mission consists of, and not stray outside the mission parameters. He cannot put RPICs in a situation they are not comfortable with. And everyone must understand that safety is always the primary goal, with the RPIC having the final GO/NO GO authority. If there is a possibility of an airspace conflict between a UAS and crewed aircraft, Fritch recommended using natural barriers for deconfliction. A video, shot by a UAS at the same altitude, was presented to the class showing a TXDPS Airbus H-125 helicopter hoisting a victim from a riverbank. The UAS was operating on the opposite side of a large power transmission line, a great example of using natural or manmade barriers for clear separation.

Getting data back to the SOC is a primary goal. Crews can utilize a hardline or cellular if available. They can set up mesh networks when cellular is not available and this is good for smaller scale events. Satellite is quickly becoming a viable option, especially when cellular is down or other networks are congested. Another big consideration is logistics – how long can you stay in the fight? Do you have enough batteries to sustain a long-term mission? Crew resource management can become a major issue during a disaster response. Do you have enough UAS teams, are they getting proper rest, and enough food and water? Do you have enough UAS vehicles and are they equipped properly with view screens, inverters, two-way radios, etc.? Are there enough UAS to support the mission, with backup displays, cables, etc.? A good rule of thumb is two is one, and one is none! Another consideration is the support staff, do you have enough individuals to handle and process the influx of data the crews will be sending in. This is where good SOPs and action plans, with checklists, come in handy. After the completion of any disaster response, Day highly stressed the importance of conducting a good after-action report. Debrief all UAS teams to gather mission details, good and bad, to present to event leaders. A debrief should also be conducted with manned

UNMANNED

and unmanned leadership teams. Do a gap analysis to identify areas that could be improved, then figure out a way to implement those improvements. Also, Fritch said, all equipment should be fully inspected, cleaned, and properly stowed immediately after the incident to insure it is ready for the next event.

Each year the Energy Drone + Robotics Summit gets bigger, and this was the biggest and best yet, with over 1500 attendees. Special thanks again to Sean Guerre, Julien DuPont, LaDonna Pettit, Megan Horn, Sylvia Ibarra, and the rest of the team at Stone Fort Group and Innovate Energy for hosting this amazing conference. Next year's summit will be held again at The Woodlands Waterway Marriott Convention Center on June 16-18, 2025.

Mark Colborn is a Retired Senior Corporal with the Dallas Police Department Air Support Unit. Mark served in the Helicopter Squad for 30 years, starting as a Tactical Flight Observer and progressing to Pilot and Instructor Pilot, then finishing up his career as a unpaid reserve officer and UAS pilot with the UAS Squad. He is also a retired CW4 and UH -60L Blackhawk Standardization Instructor Pilot, serving in the Texas Army National Guard. A 40+ year aviator with over 13,000 hours. Mark is also a FAASTeam Drone Pro and enjoys flying drones for recreational and commercial purposes, and religiously follows the current trends in police aviation, both crewed and uncrewed.

Mark Colborn © Linked In

PEOPLE

Loft Dynamics, the global leader in qualified virtual reality (VR) flight simulation training devices, has appointed **Ray Lamas**, a 20-year aviation veteran, as the North American Vice President. Lamas, who has extensive experience as an aviator and executive, including several years leading Global Customer Training for Bell, will facilitate Loft Dynamics' rapid North American growth. The growth is expected to accelerate in 2024 as more customers receive simulators and the Federal Aviation Administration (FAA) conducts its qualification process. Lamas will help to facilitate this growth by driving strategy and securing new partnerships across the continent.

Lamas is a graduate of the U.S. Naval Academy who spent over a decade flying jets in the Navy, where he developed a thorough appreciation for the necessity of effective aircrew training. As the leader of Bell's Global Customer Training segment, Lamas served customers across the rotorcraft industry in the United States and worldwide. Lamas also engaged with regulators in multiple jurisdictions on the role of flight simulation in improving pilot training—invaluable experience at a time when high-quality simulators have never been more critical to addressing the growing pilot shortage.

The long running disaster that was the last Aviation Lead for the National Police Chiefs Council (NPCC) in the UK is thankfully over and a new person is in post.

Firstly, to deal with the last incumbent, Chief Constable Nick Adderley of Northamptonshire did not last over long and was soon suspended for inappropriate behaviour after being reappointed in his highly paid role. The point though was that he had served 32 years police service and was clearly well regarded.

The chief constable who had lied and exaggerated his naval rank, length of service and achievements was finally dismissed for gross misconduct on June 20. He had been suspended on full pay since October 2023. He had claimed he had reached the rank of lieutenant in the military and that he was a military negotiator in Haiti in the 1980s and the allegations against him led to a five-day gross misconduct hearing.

The allegations came to light when doubt was cast over the Falklands War medal that Mr Adderley had worn on his uniform since 2009, despite only being 15 at the time of the conflict. Originally it was said to have been a medal correctly word by his brother but it later emerged that it was a fake.

In September 2023, it came to light that a member of the public – it turns out that it was his ex-wife - had contacted the then Police, Fire and Crime Commissioner, Stephen Mold, to complain about Mr Adderley's wearing of medals and military service record. The complaint was referred to the Independent Office for Police Conduct (IOPC), which began an investigation and brought to light the blatant lies that he had somehow shrouded in secrecy through an induction process and 32 years of police service with successive promotion boards that sought to attest to his competency to hold the most senior rank in the land.

Chief Constable Nick Adderley of Northamptonshire © Handout

I could add to many that say 'it is about time that a Senior officer was exposed for lying, deceit and covering up the truth, and the ease with which he was able to do this for so many years.' But I have been in a similar position here many times before – and that relates primarily to he police aviation sector. It seems that our 'anti-hero' was also a senior officer in Greater Manchester Police when Peter Fahy was Chief overseeing the scandal that was #Rochdale and in the time that they were described by an eminent barrister as corrupt.

I endorse the suggestion that it could be that the whole system is there to protect these institutions and those at the top of them. Several police Institutions, post office, crown prosecution service, government etc etc.

Well now we have a new face in this seemingly never ending roundabout of people with the post of NPCC Aviation Lead.

Laurence Taylor has been a NPAS National Strategic Board member for several years now and was lately the NPCC lead for Events Policing. The NPAS website lists him as Deputy Assistant Commissioner, Laurence Taylor, Metropolitan Police Service. Linked in shows he became a Temporary Assistant Commissioner two months ago.

In terms of responsibility in the air police he took over the Police Lead on drones from the Sussex ACC in January 2022.

Worryingly his public domain record shows that he went to the Norwich School between 1982 and 1990, then Durham University from 1991-94. At this point he goes off record only to re-emerge in 2008 as a Chief Inspector with Sussex Police. Fortunately other sources provide additional detail.

He began his police career with Sussex Police in 1996 as a Police Constable based in Hastings, East Sussex. The majority of his career has been spent in operational roles. With Sussex he held a range of different roles including many years on their firearms teams as a Specialist Firearms Officer, followed by command roles as a tactical and specialist strategic firearms commander.

He transferred to the Metropolitan Police in July 2018 taking on responsibility for the Operations portfolio within Met Operations. This saw him responsible for a number of specialist areas supporting policing across the MPS including Firearms, Public Order and Resourcing, specialist capabilities including the Marine, Dog and Mounted Units, Roads Transport and Policing Command, Criminal Justice (Met Detention and Met Prosecution) and the MPS Contact and Control Centres.

DAC Laurence Taylor is the latest NPCC Lead © Linked In

He has been the NPCC Events Policing Lead and NPCC Lead for Drones, and the lead for London region on police aviation.

Editor: The NPCC have not confirmed whether he still holds the responsibility for drones, in fact overall they only seem to know that he has the job and no more. In view of the previous line of lacklustre incumbents I have the dubious honour of writing about I would have thought they would have been a little more knowledgeable about the latest limp attempt at public service excellence! Lets just hope he stays a while.

MOVE ALONG THERE

In New Zealand, a woman with a history of assaulting emergency services personnel has been sentenced to supervision after she kicked and punched a constable as he stopped her from walking into the path of the spinning rotors of the BK117 Nelson Marlborough Rescue Helicopter. The helicopter had been called to remote Golden Bay to fly her to Nelson Hospital.

Aikiko Minematsu, 51 years old, was warned by the police last October regarding her assaulting them, then added a doctor to the list of her victims.

On May 2 this year, Minematsu was taken by an ambulance to the Golden Bay Community Heath Centre for reasons which have been supressed on mental health grounds.

Minematsu lay unresponsive in the back of the ambulance while the ambulance crew discussed calling a helicopter to take her to Nelson Hospital. She suddenly leapt up, ran to the ambulance door and started

kicking it, demanding to be let out. The ambulance crew let her out and she lay on the ground in the ambulance bay of the health centre as attending staff comforted her and draped a blanket over her.

The doctor she asked for was a short distance away, and as he was pointed out, Minematsu got up, ran straight towards him and tried to punch him.

She missed as the doctor ducked to avoid her, but she then kicked him and scratched his hands, causing one of them to bleed. As the doctor defended himself in the struggle, his gown was ripped from his waist to his armpit.

The police were then called and arrived at the same time as the rescue helicopter to take her to hospital.

Minematsu was sitting in a chair, not moving, but suddenly got up and tried to escape by walking rapidly towards the helicopter that had just landed on a nearby road.

Emergency services asked her to stop, but she refused and continued walking away at speed.

The attending senior constable had to grab her arm to stop her from walking into the spinning rotor blades.

She then turned and kicked the officer twice in the leg before punching him in the chest.

Minematsu was sentenced to nine months of supervision and a requirement to undertake counselling and treatment as required, if she continued to assault people trying to help her, a firmer approach would come next.

[nz herald]

An enquiry into the background surrounding the fatal crash of NH Industries MRH90 Taipan helicopter (a variant of the NH-90) in Australia has heard of an element of distrust between the Queensland Police Service (QPS) and the Australian Defence Force (ADF) during the enquiry into the July 2023 crash and subsequent withdrawal of the NH-90 helicopter fleet from the ADF inventory late in 2023 several areas of friction were discussed of which the police aspect was just one.

The inquiry heard of trust and communication issues plaguing the relationship between the ADF and QPS during the initial investigation and recovery.

Senior Constable Christian Troeger, a Forensic Crash Investigator involved in the recovery mission, told the inquiry. That his experience of working with the ADF amounted to "…. like a daily head-banging against the wall."

There was a lack of information sharing and distrust over whether the contents of the crash recorder would ever be disclosed to the police team.

Earlier witnesses had raised concerns about the integrity of QPS's handling of the investigation. Despite only undergoing a basic training course on air crash investigations, Troeger was sent to assist in the recovery operation four days after the incident.

The ADF was said to be dismissive of police expertise. The officer told the enquiry that although the QPS had no in-house capability of downloading the information from the flight recorders they thought that the army should not have access the equipment and its crucial evidence in case they did not disclose it to the police team.

"We had concerns that once the technical information from the flight recorder had been surrendered to the ADF, that information would not have been received by us," Troeger said.

First it was the USA, then it was the UK and now it is France that have found itself embroiled in elections, events that in each case are destined to make life in the emergency services that much harder to undertake. Each precipitated by different pressures.

Amazingly in the USA within a population half as large as that of Europe there are only two rich old men able to contest for the Presidency, there money speaks above all.

In France and the UK it seems that the problem is more pride. The French President and British Prime Minister are by chance persons with money [it is less of a pre-requisite to be well heeled to make your way into power in Europe] but they, like most politicians, do not understand that a good performance is a pre-requisite of politics. Whatever happens we are in for big changes in several countries in a matter of months.

NEW GOVERNMENT, NEW IDEAS?

INTRODUCTION

Historically, the number of illegal migrants, those crossing the English Channel in small boats from France to England, will increase between June and October. Moreover, the new generation of very large inflatable boats, built in China and imported into Europe through Turkey, are so badly constructed, so unseaworthy that they have been described by the UK National Crime Agency as 'death traps'. They can only be used in near perfect weather with light winds and a calm sea. Nevertheless, they do carry 60, or more passengers with a record of 84 migrants crossing the Channel in one boat!

In the first 6 months of 2024 the number of illegal migrants crossing the English Channel in small boats has gone up when compared to the same period in previous years. The number of landings in the UK in the first 6 months of 2024, is 13,272 up to and including the 29 June. This has exceeded the number of those migrants landed in the same period in every year since the first migrants crossed the Channel in 2018. In mid-June, on Tuesday 18th, after 4 days of adverse weather, the people smugglers, the organised criminal groups (OCGs) took advantage of a light breeze and a calm sea. In one day, 882 migrants were landed in the UK, at Dover, from 15 boats by the UK Border Force and by the Royal National Lifeboat Institution (RNLI), an average of 59 migrants per boat. This was the greatest number in a single day in 2024. Then, 3 days later, on the 21 June, a further 331 migrants were landed at Dover from 5 boats, an average of 66 migrants per boat. On the 23 June, 257 migrants were landed from 4 boats, an average of 64 migrants per boat.

In the last week of June there was a change, with a smaller number of boats carrying fewer migrants. On the 24 June, in perfect weather, there were no crossings. On the 25 June, 144 migrants crossed the Channel in 3 boats, followed, on the 26 June, by 150 migrants in 4 boats with an overall average of just 42 migrants per boat. No crossings took place on the 27 and 28 June. Then, on the 29 June, in perfect weather, just 77 illegal migrants were landed in the UK from one, large inflatable boat. Is there a shortage of the very large inflatable boats, those capable of carrying 60 migrants, or more? Are the supply chains being disrupted with covert police operations taking place in Belgium, France and Germany? Or, are the migrants waiting for a change in government in the UK, with the promise that the plan to deport illegal migrants to a third, safe country, to Rwanda, will be scrapped by a new, Labour government? The Refugee Council has predicted that a further 27,000 illegal migrants will cross the Channel in the second half of 2024. The estimated total for illegal migrants crossing the English Channel in 2024 now stands at 40,000.

AIR POWER

There are many good reasons, not least a lack of results, as to why light observation aircraft, sometimes called 'spotter planes', should be deployed to help to 'stop the boats', those carrying illegal migrants, from crossing the English Channel. The alternative to 'spotter planes', large, very expensive multi-million pound aircraft, for example, the deHavilland Dash 8, on charter from PAL Aerospace in Canada, are simply not making a difference. Since this aircraft arrived at Lydd airfield, in Kent, the number of migrants crossing the Channel in 2024 have gone up, not down! I'm not surprised! During a career in the Royal Air Force spanning 41 years in the regular air force and in the volunteer reserve, a career which included 2 extended tours of duty flying the BAe Nimrod, the 'Mighty Hunter' with No 51 Squadron and No 201 Squadron, I was fortunate to gain a good deal of hands on experience of those operations which require the gathering of Intelligence, Surveillance and Reconnaissance (ISR). Moreover, it was a former immigration minister, The Rt Hon Robert Jenrick MP who highlighted the fact that the 'goal line', the last line of defence to close the sea route for illegal migration, is not in the middle of the English Channel, but on the beaches of northern France.

The DHC1 Chipmunk served in the Royal Air Force for some 50 years as an elementary training aircraft. It was also used for photographic reconnaissance in Germany during the 'Cold War' and it had a 'war role' in Cyprus as an air observation aircraft, as a 'spotter plane'. The role led to many emergency services officers being trained as 'War Duty Observers' - the predecessors to the modern Tactical Flight Officers. MoD

Air Clues
circa 1960
© HMSO

I also had the pleasure of flying some of the RAF's smaller aircraft, the DHC1 Chipmunk, the Scottish Aviation Bulldog and the Grob Tutor T1. The Chipmunk was in military service as an elementary training aircraft for some 50 years. This aircraft was also used for ISR in Germany, in Berlin, during the 'Cold War', and it was successfully re-roled as a 'spotter plane' in Cyprus in the late 1950's to help defeat the EOKA terrorists hiding in camps in the Troodos Mountains. Whilst still in the RAF, as a member of the RAF Reserves, I also flew the ubiquitous BN Islander for both the police service in England, yet more ISR, and for the Scottish Air Ambulance Service.

After EOKA terrorist camps were located by the crew of a Chipmunk 'spotter plane' sections of infantry were deployed using RAF Bristol Sycamore helicopters.
This type of military helicopter also saw use in Aid to the Civil Power joint training with the Royal Ulster Constabulary Air Ministry

There is no doubt that the aircraft in use today by the UK Border Force and HM Coastguard, the deHavilland Dash 8, the Diamond DA62 and the Beechcraft King Air, all have tremendous capability with the addition of an electro-optical camera turret, with radar and, if not yet available, then soon to be added, a means to locate mobile telephones using a system called Artemis. Nevertheless, 'walnuts and sledge hammers' spring to mind when, on paper, the task is quite simple; to stop some big rubber boats, those full of migrants, travelling just over 20 miles from A to B, from France to England! Or, more likely, just over 10 miles before being 'rescued' mid-Channel by either the UK Border Force, or the RNLI.

On the French side of the English Channel the European Border and Coastguard Agency (FRONTEX) has also, in the past, deployed a wide range of large, very capable aircraft including an ATR 72, of similar size to the Dash 8, the Bombardier Challenger and the Dornier 328. Although, the French Police Aux Frontiere have, on occasion, also chartered a much smaller, Cessna 182, a 'spotter plane', based at Le Touquet, to patrol the coast between Dunkirk and the Baie de Somme, More recently, a light twin-engine aircraft, a Vulcanair P68 Observer has been based at Lille in northern France. Nevertheless, one of the most bizarre images is that of a very large Airbus A400M Atlas transport aircraft belonging to the RAF, showing the crew scanning the sea with a pair of stabilised binoculars! This is, most probably, the largest 'spotter plane' ever to be deployed to patrol the English Channel to look for small boats, those boats carrying migrants.

The RAF's largest and most expensive 'spotter plane'. An Airbus A400M Atlas transport aircraft equipped with a pair of stabilised binoculars. MoD

PROPORTIONAL, AFFORDABLE AND EFFECTIVE
Whilst it may be agreed that improved airborne ISR capability alone will not close down the illegal cross-Channel route, it may also agreed that any response, to defeat the organised criminal groups (OCGs), must be proportional, it must be affordable and it must work! It simply beggars belief that there have been occasions when not just one, but 3 aircraft, the Dash 8, the Diamond DA62 and a Coastguard King Air have all been seen patrolling the Channel at the same time, in a 'stack', in mid-Channel, with each aircraft separated by height, whilst, at sea level, the migrants are 'rescued' by the Border Force and the volunteer crews of the RNLI.

We should never, ever underrate the proverbial 'eye in the sky', the airborne observer. Although the RAF's Nimrod MR2P was a highly capable maritime patrol aircraft with, in the day, the superb Searchwater radar, matched only by a suite of 'state of the art' acoustic, underwater sensors, there were several occasions when, with all active sensors switched to stand-by, the crew of the aircraft would locate a submarine by simply looking out of the windows and spotting the tell-take wake, the 'feather' created by a periscope breaking the surface of the sea. If a submarine's periscope can be spotted from the air, how difficult can it be to spot a very large inflatable boat, together with 60, or more, migrants milling around on a beach in northern France?

LOW AND SLOW

How would 'spotter planes' flying 'low and slow' over the beaches of northern France deter the migrants from crossing the Channel in a large inflatable boat? The fact is, that with persistent air patrols the migrants would soon realise that if they can see the aircraft, then the crew of the aircraft will see them. Once spotted from the air the extra police officers, paid for by the British government (£678M since 2018) would quickly arrive, possibly by helicopter, as they did in Cyprus in 1958. Boats will be disabled, the outboard engines will be broken and lives will be saved. Moreover, the current tactic of mid-Channel air patrols, with the Dash 8 and other aircraft, sends out the wrong message. It gives the migrants the confidence to embark on a perilous journey, in good weather, knowing that after travelling a few miles, within a couple of hours, followed by a telephone call to HM Coastguard, they will be spotted by a patrol aircraft and then 'rescued' by the Border Force, or by the RNLI, before being transported in relative comfort for the second half of their journey and landed in the UK, at Dover.

Search and rescue aircraft such as the deHavilland Dash 8, on charter to the Home Office to patrol the middle of the English Channel, are sending the wrong message. The number of illegal migrants crossing the English Channel has increased in the first 6 months of 2024 compared to previous years. Home Office

The people smugglers, the OCGs can only be defeated on the beaches of northern France, either by adverse weather, by cutting off the supply of the inflatable boats, or by direct, preventative action on, or close to the beaches. In this respect, the French police have a distinct advantage over the criminal gangs. First, the large inflatable boats, together with large groups of migrants, are easily spotted, from the air. Moreover, the new tactic of turning an inflatable boat into a 'water taxi', picking up migrants by sea from a designated beach, also plays into the hands of the police. The response, by the police, requires no more than a fast police boat with a shallow draught, with water-jets rather than propellors, a grappling hook and a halberd (1). The inflatable boat would be dragged into shallow water and disabled, with the halberd, before the migrants have been embarked.

There's no reason to doubt the determination and the courage of the French police in the face of violence from migrants and the organised criminal groups. AFP

ENTENTE CORDIALE

If the Home Office, together with the Border Force could be persuaded to try some new ideas and if the French could be persuaded to commit to 'entente cordiale', then where would the 'spotter planes' come from? Not just one, or two, but in sufficient numbers to mount persistent air patrols in good weather, in the same good weather that sees hundreds of migrants crossing the Channel? Based on former experience, the armed forces would be the first port of call. The RAF's Grob Tutor T1 elementary training aircraft could be re-roled as a 'spotter plane', in the same way as its predecessor, the DHC1 Chipmunk was

in years gone by. Also, if this became a Frontex operation then the Saab T-17 Supporter elementary training aircraft of the Royal Danish Air Force (RDAF) would have greater utility than the Bombardier Challenger, also belonging to the RDAF, which, in the past, was used without much success to patrol the beaches of northern France.

The RAF's elementary training aircraft, the Grob Tutor T1 could be re-roled as a 'spotter plane', as was its predecessor, the DHC1 Chipmunk. MoD

A VOLUNTEER AIR CORPS

If the armed forces in the UK and in Europe cannot provide light aircraft in sufficient numbers then a UK volunteer air corps, based on the model of the US Civil Air Patrol, the US Coast Guard Auxiliary (Air) or, closer to home, the Swedish Volunteer Air Corps, the FFK would be a viable, cost-effective alternative. All of these organisations use an army of volunteers to support the armed forces and the police with light observation aircraft, with 'eyes in the sky'. In fact, the US Civil Air Patrol completes some 80% of all overland search and rescue operations on behalf of the US Air Force. Moreover, in France, in close proximity to the English Channel, there are flying clubs at Calais, at Le Touquet and at Merville, as well as at Lydd in Kent. Despite being recommended to successive Home Secretary's and to the Home Office since 2020 the tactic of persistent air patrols with light aircraft, with 'spotter planes' flown by flying instructors and former military pilots, has yet to be properly tested, on the coast, in northern France. Nevertheless, light aircraft, 'spotter planes' could, very soon, prove to be the key to successful, affordable border control in both France and in the UK. Will a new government, a Labour government control the UK's borders by supporting the emergency services with volunteers, with members of the UK's voluntary sector; on land, at sea and, most importantly, in the air?

A Cessna 182 of the US Civil Air Patrol, crewed by volunteers, carrying a electronic-optical camera turret, including a thermal imager, under its port wing. US CAP

James A Cowan MBE

Note:

Halberd

1. A halberd is multi-bladed, a two-handed pole weapon designed by the Swiss, for their infantry in the 14th Century. It is carried by the Swiss Guard, at Vatican City, and, in the UK, by the Ceremonial Bodyguard of The Right Worshipful The Mayor of the City of Durham.

UK Voluntary Sector

2. The 'voluntary sector' and volunteering are part of the British DNA. The Royal National Lifeboat Institution (RNLI, formed in 1824, is a volunteer lifeboat service in the United Kingdom and the Republic of Ireland. Today, there are 238 lifeboat stations with 9,700 unpaid volunteers crewing 400 all-weather and inshore lifeboats

3. Also, within the UK's 'voluntary sector' are the mountain and the lowland rescue teams. Mountain rescue teams were first formed by the Royal Air Force in 1943 to locate and rescue aircrew who were reported as missing in remote, upland areas. Today, the mountain rescue service is mostly civilianised, with volunteers belonging to 47 teams in England and Wales. In addition there are 24 teams in Scotland, together with 3 teams.belonging to Police Scotland. The RAF retains 3 teams, one in England, one in Scotland and one in Wales. There are 29 Lowland Rescue Teams in England, Wales, Northern Ireland and the Channel Islands.

4. His Majesty's Coastguard has 3,500 volunteers belonging to some 300 Coastguard Rescue Service (CRS) teams. Search and rescue helicopters, together with a small number of fixed-wing patrol aircraft are deployed at 10 bases throughout the UK. Other 'voluntary sector' organisations within the UK include the British Red Cross, St John Ambulance and numerous community and youth organisations.

5. Despite the number of volunteers at sea and on land, with the RNLI, with the mountain and lowland rescue teams, together with HM Coastguard Rescue Service, there is, in the UK, no equivalent of the US Civil Air Patrol, of the US Coast Guard Auxiliary (Air), or, closer to home, the Swedish Volunteer Air Corps, the FFK. This is surprising when the lack of security of the UK's borders is taken into consideration. In the south east, in Kent and East Sussex, 127,617 migrants have now entered the UK without permission after crossing the English Channel, from France, in small boats. Will a new government, a Labour government control the UK's borders by supporting the emergency services with volunteers, with members of the UK's voluntary sector; on land, at sea and, most importantly, in the air?

EVENTS THIS MONTH & NEXT

July & August 2024 Summer Olympics Paris

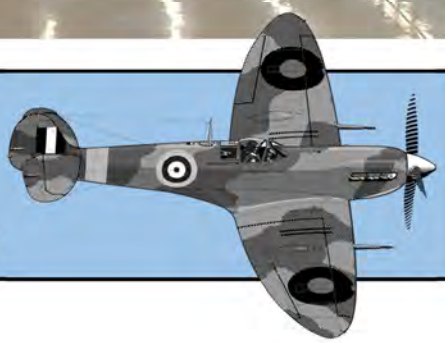
19-22 July 2024 Royal International Air Tattoo, Fairford, Glos.

22-26 July 2024 Farnborough International Air Show

29 July 2024 to 3 August 53rd APSCON Back to Houston, Texas for the 2024 event, the dates being July 29 to August 3.

18 -23 August 2024 Optical Engineering, San Diego, California, USA

Twenty years ago (2004) UK industry ran its own promotional and conference events . This one at Police Aviation Services, Staverton © PAR



Déjà vu! Off Brighton beach in the English Channel an AW139 of the Coast Guard operating with the RNLI. SAR event 2015 © PAR