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## LAW ENFORCEMENT AUSTRALIA

**QUEENSLAND:** In the wake of the recent orders announced in February for new Bell 429s due in 2024 the detail of the reequipment of the police and government air fleet in Queensland continues to be released.

Under the changes the former Government fleet was merged with the police operation. Now the details of the fixed wing element of the new Queensland Police Service Aviation Capability Group fleet have been given. The purchase includes five Beechcraft King Air 360 turboprops which will be based in Cairns, Mount Isa and Brisbane and two Gulfstream G280 jets which will be based in Brisbane supporting for multiple government departments across Queensland including QPS, Queensland Ambulance Service, Queensland Corrective Services, Queensland Fire and Emergency Services, Queensland Health and other agencies.

The utility King Air fleet undertakes a range of duties including life-saving organ retrieval capabilities to locations anywhere in Australia and New Zealand at a rate of around six per month, specialist police operations, general transportation to remote areas and prisoner transfers. The modern turboprops will have cargo accessibility to help transport important supplies during disasters and special police equipment which can be transported anywhere in Queensland or Australia.

The Gulfstream jets replace Citation and Hawker jets which were recently sold after reaching the end of their economic and operational life. They too will have a utility interiors to ensure they are adequate for a range of transportation requirements.

The new fleet will mean a reduction in the number of different aircraft types previously operated, offering efficiencies in reduced pilot and engineering training compared to the old fleet

Meanwhile the new police drone programme set to provide air support in Cairns an area beyond the range of the helicopter patrols, proceeds. The service only signed contracts with two suppliers expected to deliver the capability late in September. When first announced in February the pro-



gramme was described as a 12 month trial. [Queensland Govt/National Tribune]

**COVER IMAGE:** Since 2017 Doncaster Sheffield International Airport—Robin Hood Airport if you will—has played a growing part in the airborne emergency services of the United Kingdom. Both the National Police Air Service (NPAS) and 2 Excel invested heavily in the airport as a base for their public service air operations in support of the police, Coastguard and environmental patrolling. The local government also invested millions of pounds in the airport and its surrounding infrastructure as a freight and passenger traffic hub.

All this has been thrown back in the faces of the diverse investors at relatively short notice and barring a miracle all air activity will cease in the middle of this month.

This months edition has reports on how each of the current airborne emergency services residents is dealing with the loss of very valuable bases at short notice. [composite image NPAS/PAR]

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## CROATIA

**MINISTRY OF INTERIOR:** Bell Textron Inc., announced in late September that it had signed a purchase agreement for two Subaru-Bell 412EPX helicopters to the Republic of Croatia's Ministry of Interior. This marks a significant milestone in the region as the first purchase agreement for the 412 EPX in Europe. The expected delivery date of the aircraft is October 2023.

The helicopter adds increased payload capabilities to the Bell 412 platform, and this agreement continues to expand its reputation. The Republic of Croatia's Ministry of the Interior deals with the tasks related to



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criminal, border and special police activities and other activities related to civil protection, firefighting, fire protection, production and trade in explosive substances and weapons, private protection, detective affairs, and mine action.

"The Ministry of Interior is honored to be the first European customer to sign a purchase agreement for the SUBARU Bell 412EPX," said Ph.D. Davor Božinović, Minister of Interior, Croatia. "We look forward to utilizing its unique capabilities and durability to protect and defend the citizens of Croatia."

Certified in 2018, the Subaru Bell has a maximum internal weight of 12,200 lbs., external weight of 13,000 lbs. and up to 5,000 lbs. of goods with a cargo hook. The aircraft enables large cargo and personnel transportation with its ability to carry up to 5,385 lbs. The 412EPX benefits from a robust main rotor gearbox dry run capability, and increased mast torque output at speeds below 60 knots.

Editor: The Croatian Police reportedly already operates two AW139, three Bell JetRanger's, one AB212 and a pair of EC135P2



**POLICE:** German company SPAES GmbH & Co. KG carried out a glass cockpit project for their customer *PT Indonesia Defence Services*. Analogue gauges were removed and several Garmin systems were installed, allowing the crew to execute a wider range of missions and significantly improving situational awareness.

An existing Supplement Type Certificate for the Garmin G500 system was used as a basis to create several Minor Changes for the installation of Garmin GTN 650/750, GTX 335R, GMA 350, GRA 55 RAD-ALT, GTS 800, GSR56H and for L3 ESI-500.

The installation of the systems was done by *PT Indonesia Defence Services* in their own maintenance organisation. The preparation of the documentation and the supervision was successfully completed from Germany. Commissioning and troubleshooting of the systems were carried out on site in Jakarta. In the end, the certification was issued and the documentation was delivered.

Ten technicians and twenty pilots of *PT Indonesia Defence Services* were trained by SPAES to strengthen the understanding of the newly installed Garmin systems. In a similar manner, six additional helicopters of the customer will be upgraded and transformed from analogue to digital.



The company specialise in tactical mission equipment and medical systems, the portfolio includes products and services, but also design and certification of special equipment, own products and EMS systems as well as their integration and certification in airplanes and helicopters which will be certified in accordance with European aviation norms and standards. Hall 8 Booth 1402 European Rotors, Cologne. [spaes] *Editor: The police in Indonesia have operated the BO105 for over 30 years. The type was in series production locally after MBB issued a license to produce the BO 105 to Indonesian Aerospace (IPTN) as part of a wider agreement to help develop Indonesia's aviation industry. Within ten years, manufacture of the BO 105 had been entirely localised within IPTN's own facilities for military and police users.* 

## SOUTH KOREA

**POLICE:** A further order for locally manufactured Surion helicopters for the police has been announced. Korea Aerospace (KAI) signed a contract with the Public Procurement Service to supply two additional police helicopters.

A few days later a further order for one firefighting helicopter for Gyeongbuk was signed. The three helicopters will be delivered in the second half of 2024. [Instagram/ Helihub]



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### SPAIN

**NATIONAL:** On September 30 Spain's Air Media Service of the National Police announced via Twitter that they have certified the EHang EH216 manned drone, which they named 'Megadron', for law enforcement use. A video uploaded to the Twitter feed shows the "first flight of National Police flying car" in the colours of the service.



This places the National Police of Spain becoming Europe's first police force to fly with autonomous manned drones. The video does not show any flight with people inside, but the press release indicates that "National Police officers successfully carried out the first flights of the EH216."

It's capable of flying for 21-minutes on a single charge and capable of a top speed of 80mph, powered by 16 independent rotors mounted in pairs around a two seat passenger cabin.

To date, EHang Holdings Limited, in China has conducted over 30,000 trial flights, including several that have carried passengers as well as tests in extreme environments like high altitudes, typhoons, deserts as well as fog. The collected data, experience and safe records have been compiled to support demonstration and verification of compliance with various agencies around the world.

The Project Specific Certification Plan has been officially approved by the Civil Aviation Administration of China ("CAAC"). At present, various specified review subjects have been confirmed, including performance and flight, structural strength, design and configuration, ground control station, airborne human-computer interaction, totality, continued airworthiness, etc., and activities for demonstration and verification of compliance are being prepared.

The company is conducting further supplementary test activities and test flights for verification of the data with a view to further promoting the air vehicle for a range of emergency services including law enforcement and firefighting. The current specification allows up to a 21 minute flight, with a need for battery charging of two hours between sorties. [National Police Twitter/Gearice]

Editor: I guess this claim must sit alongside that of the Dubai Police flying motorbike but there is little evidence of exactly why they went ahead with the press release. It appears based on China certification, there is no mention of EASA in any of the stories I have seen.

## UNITED KINGDOM

**DONCASTER:** Early last month Peel Group announced Doncaster Sheffield Airport (DSA) would wind down from 31 October. Later it became known that the shut down would be on November 18, barring some last minute reprieve.

A group of Labour MPs warned the new, often changing, transport secretary the closure of Doncaster Sheffield "will cost lives" due to the move forcing key public services, effectively those of NPAS and 2Excel, to relocate.

Under the Civil Contingencies Act 2004 a government minister has the right to intervene due to the likely impact the closure would have on emergency services and agencies key to national security. In the past month that has not happened. Despite some verbal promises the short lived Prime Minister Liz Truss failed to act before she left office. With a new Prime Minister in prospect the use of this act was the subject of an inconclusive debate in Parliament (Westminster) as late as October 24.



A variety of high profile local authorities, politicians and entrepreneurs were contacted in efforts to provide funding. Sir Richard Branson was approached as part of a bid to form a consortium of aviation industry leaders who could potentially buy or run the airport, it seems that everyone turned down the opportunity.

Into early October the main parties to the development PAN had contacted were holding off on comment until later in the month. Not so with NPAS North East, even as everyone else was apparently doing their best on October 6 they tweeted a video clip of G-PASV UKP155 and a very final sounding "the last time she will depart DSA". She has now been turned over to maintenance support of Gama Aviation and "they will be looking after her until a new operating base is identified. We also say goodbye to three of our staff and contractors who have supported the operation at Donny."

#### November 2022

The two airlines operating out of the airport are Tui and Wizz. They expect to cease operations by the first week of November. There is no information on the other air freight operators using DSA. The flying training school will move out to another smaller airport at Sandtoft where they have a similar operation.

Rumour suggests that NPAS will run down their operation and finally depart in the second week of November with the closure of the airport is set for a few days later on November 18.

It might be expected that other major residents at Doncaster will need to make similar moves to ensure that they can get their aircraft to a 'safe place' before closure. In the case of 2Excel, the suppliers of services to government departments including pollution control and the UK Coastguard, they do not want to be faced with having to a dismantle and transport on a low loader a Boeing 727 simply because it went unserviceable at DSA before closure.

Peel Management have already given charity Vulcan to the sky with their grounded museum piece Avro Vulcan and English Electric Canberra bombers, their marching orders. They turfed them out of Hangar 3 to let 2Excel in during 2017, so not the sign of a good bone in their corporate body it seems. Perhaps the hard done by local authority can slap Peel back by ensuring there are preservation orders on the older hangars. At least it will give the Vulcan somewhere to go.

Although there are numerous employers who are on the airport but have no immediate need for it to be operating as an airport the jobs of 800 workers employed directly at DSA are under threat, with another 2,500 jobs threatened for ancillary services for the airport nearby.

The Manchester based Peel Group, owned by billionaire John Whittaker, is one of the biggest infrastructure, transport and property investors in the UK, with collective investments owned and under management in excess of £5 billion. The company reported profits of more than £30M in 2021 from its operations at Mersey Docks and Harbour Company.

The DSA is reputedly worth £100M a year to the region's economy. In negotiations, Peel referred to the potential value of the DSA site for alternative employment, with speculation it will be used for warehousing and light industry. Large areas close to the airport has been transformed into a hub for low wage online retailers such as Amazon.

Editor: Situations like this are always open to the spread of rumour and false information. In the same week the closure was confirmed the Home Office Border Force was seeking to employ two Border Force Officers in the Doncaster Area at a minimum wage of £25,750. Days later 2Excel were seeking a receptionist. Life goes on when you need staff and face an uncertain future.

#### Meeting the deadlines

It has been a while of course. Regular readers may recall the announcement that NPAS will produce an annual report and will publish its minutes on-line. Even though we are aware of some of the content from the March NPAS Strategic Board minutes through a third party they have yet to be seen. In case you thought it was still happening now, eleven months into the year, is a fair time to mention that there are no published minutes for 2022 on the NPAS website.

Most people who might have written those missing Annual Reports objectively have either retired voluntarily, gone up in the ranks to have great knowledge in other unconnected subjects or have been discarded.

**ESSEX:** Volunteer Police Cadets from Welwyn Hatfield were given an access all areas tour of the local emergency helicopter base recently.

Fifteen cadets visited the National Police Air Service (NPAS), where they were able to see a police helicopter and given an insight into its capabilities. During the visit, they were also given a tour of the Essex





and Herts Air Ambulance by volunteers, helicopter crew and medical team, who spoke about the life saving work they do.

The volunteer police cadet scheme is open to anyone aged between 13 and 18 who lives or goes to school in Hertfordshire. As well as learning about police procedures and the law, cadets have the opportunity to work alongside local officers and play a vital role in community events, engaging with members of the public and educating them on crime prevention.

**EASTERN REGION:** A number of neighbouring police forces have teamed up ahead of the hare coursing season.

The rural crime and wildlife teams from the counties of Bedfordshire, Cambridgeshire, Essex, Norfolk and Suffolk police met up to combat this crime. The high profile meet up comes following a pledge, along with Hertfordshire and Kent – the seven forces in the Eastern Region – to work across borders following the launch of Operation Galileo.

This year the seven forces involved say they will be working with the National Police Air Service and using locally operated drones.

Editor: It was not that long ago that NPAS were denigrating, if not actually refusing to get involved with, the whole concept of operating against hare coursing and to a lesser degree failing to provide support to the easter counties. Flights in support of these areas have been very much at arms length often using aircraft based in the midlands (way outside the 20 minute reaction time).



Once again a comprehensive about face as the management in Wakefield Towers alters. Whether the whole project is about baseless scare tactics remains to be seen. NPAS has its own problems in having aircraft available for any tasking even without ensuring there is somewhere to uplift fuel in Norfolk.

In other counties in the west - in the M5 corridor - the police have similarly been undertaking exercises focussed on protecting hares in the recently harvested farmland. In that case they have mainly relied on drones.

This year has seen tougher sentencing and improved powers introduced under the Police Crime Sentencing and Courts Act 2022 to tackle the practice of chasing hares with dogs. Hare coursing is a serious problem in some rural areas. Not only does it involve cruelty to wild animals, it is also associated with a range of other criminal activities, including theft, criminal damage, violence and intimidation. With that providing the impetus it would appear at least likely that NPAS was cajoled into providing a helicopter for the launch event, who might suggest it was the first and last appearance?

### **UNITES STATES**

**NATIONAL:** Tactical Flying Inc., announced the launch of the first of its kind web based training for Tactical Flight Officers and Police Pilots in the Airborne Law Enforcement Industry. This training is available for anyone operating an aerial asset in airborne law enforcement. The training comprised of 15+ hours worth of training and segmented into 17 (approximately 1 hour long) modules.

The Comprehensive Thermal Tactics class can be completed from the comfort of the customers own computer, at a pace they decide. The course covers the fundamentals of police aviation, with a specific emphasis on aviation safety, IR tactics, tactical aircraft positioning and suspect tactics. By using 3D imaging, real-life and practical scenario mission videos, the viewer receives the same in-depth instruction that is taught worldwide to thousands of airborne law enforcement aircrew.

Nick Minx, the owner of Tactical Flying, developed this training during the COVID pandemic when agencies and individuals were limited in attending training courses because of either travel or financial restrictions. "Many agencies needed a way to continue their recurrency training and reached out to us for a way to train remotely. We spent 10 months developing, recording and editing a web based version of our most popular thermal tactics class that would give agencies a solution to continue their training" said Minx.

The course offers a flexible and low cost solution for anyone from an individual LE aviator all the way to the largest of air support units as a way to stay current on ALE tactics. Especially beneficial for large air support units who are unable to operationally stand down their entire unit for multiple days to complete traditional in-person training, the virtual training gives an alternative option for these agencies to be able to maintain their tactical knowledge base.

"Our goal was to make this class informative and easy to watch and as close as possible to the in-person training experience. So far, the feedback has been incredible as to the benefits of a web based TFO/Pilot training course for airborne law enforcement. We're grateful for the opportunity to share our curriculum with those who would have been otherwise unable to attend our courses."

The course was produced by utilizing studio quality lighting, audio and video and taught in front of a green screen. A far cry from a Zoom class, the course offers in-depth content and a professional grade platform in which students receive a completion certificate and unit managers can be provided with metrics to track their employees progress.

The course is on offer to the international law enforcement and military market operating aerial assets. Tactical Flying are well known worldwide and conduct both in-person and virtual traditional classroom instruction. Their instructors are airborne law enforcement professionals with decades of experience in the airborne law enforcement industry. They can be contacted at <u>www.tacticalflying.com</u>. *Editor The latest Hangar Z Podcast is a 2 hour talk with Nick Minx about his training and the San Diego police operation go to <u>https://www.hangarzpodcast.com</u>* 

**GOVERNMENT:** Teal Drones, a subsidiary of Red Cat Holdings, Inc. has been awarded a \$1,046,806 contract from U.S. Customs and Border Protection to provide Teal's high-performance Golden Eagle drones to U.S. Border Patrol.

The award is part of an \$90M agreement signed in late 2021 with five drone companies covering five years. All drones covered by the agreement are on the exclusive "Blue UAS" list of drones approved for purchase by the Department of Defense.

The drones will provide supplemental airborne reconnaissance, surveillance, and tracking capability to

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enhance situational awareness for field commanders and agents in areas that lack nearby traditional surveillance systems or available manned air support. [ASD]

**CALIFORNIA:** On November 12 there will be an American Heroes gathering of rotary wing airborne emergency services units at Hansen Dam Recreation & Sports Complex, Lake View Terrace, in the Central San Fernando Valley, Los Angeles. An invitation has gone out from the organizer Dave Andrews to a swathe of southern California air units. Fees for presentation space are waived for non-profit organizations, community service organizations & recruiting teams with fire / emergency responders / police.

The free public event will run from 9am to 4pm on the day and offer helicopter from law enforcement, fire, EMS/ENG, military / DOJ and homeland security organizations, Career & Recruiting Expo, local Search & Rescue teams, equipment displays, demos and family outdoor safety tactics, animal rescue and emergency / disaster preparedness. There will also be concessions, entertainment and aviation related vendors. Something very American is the goldfish bowl effect of having the newest of U.S. citizens recite



their Oath of Allegiance and become U.S. citizens in front of friends and family. <u>https://www.heroes-airshow.com/</u>

Huntington Beach will have the unveiling of their new MD530F at the Cars and Copters event tomorrow at 10am in the city beach parking lot. HB-1 is sporting a clean new look and has all the bells and whistles. They aren't flying it yet and will be taking delivery of it in the next few months. 1990s



**DELAWARE:** On September 27, the State Police Aviation Unit hosted 12 different agencies at their facility in Middletown DE for a day of training, education, and networking. Those in attendance experienced some top notch training, spoke with industry experts and interacted with aviators and paramedics from allied agencies in the surrounding areas. The Aviation Unit recognises the

aviators and paramedics from allied agencies in the surrounding areas. The Aviation Unit recognises the importance of cross-training and becoming familiar with other aircraft, the crews that fit them, and their capabilities.

Attendees included PA State Police, New Jersey State Police, Maryland State Police, Delaware National Guard, Maryland Department of Natural Resources, U.S. Coast Guard, Anne Arundel County Police Department, Fairfax County Police Department, Christiana LifeNet, Office of the Pennsylvania Attorney General, Horizon Helicopters, Inc., and Baltimore County Police Department. [Facebook]

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**IDAHO:** The Kootenai County Sheriff's Office in Coeur d'Alene, is looking to set up its own air support unit. The state is not renowned for its air support rescue services due to its low population levels. The county is located in north-west of the state adjoining Washington, Montana and the Canadian border and is estimated to have a population of 171,000.

In October 2022 it was announced that the Sheriff was asking commissioners to approve a two-year, donation-funded pilot programme for a helicopter unit. If it takes off, the Kootenai County Regional Air Support Unit would be the first of its kind in Idaho. Over the years there have been just a handful of, often short-lived, units in the state and earlier this year the Legislative budget writers declined the funding of the first-ever helicopter requested by the Idaho State Police.

The unit would operate with volunteer pilots who have at least 1,000 hours of flight time and would focus primarily on search and rescue. Community members have already donated a little more than \$700,000 toward the project. This has led to the purchase and upgrade of a \$500,000 1994 Bell 206 helicopter. The sheriff's office estimates that annual expenses for the unit, including maintenance and insurance, would be about \$71,500. It was proposed that any shortfall can be covered by donations, just as the K-9 unit is.



At the moment Kootenai County allocates \$10,000 annually to Spokane County (Washington) to use its helicopter. In addition Two Bear Air Rescue, based in Whitefish, Montana, has provided the sheriff's office with aerial support for about seven years with their (Bell 429) helicopter. But Two Bear provide similar services to a massive area over four US states – all of which explains their interest in the Diamond DA-62 recently touring the USA.

Kootenai County does not expect an Air Bear aircraft to arrive in under three hours and the rescue service is often occupied with local missions in the Whitefish area. Similarly, because Spokane County prioritises local service calls, the department isn't always able to respond when Kootenai County requests aerial support. The Idaho State Police in Boise are over 350 miles away. A helicopter based in Coeur d'Alene would enable local law enforcement to respond faster and more reliably.





**MISSISSIPPI:** CNC Technologies has delivered a 2009 Eurocopter EC135T2+ N351MS to the Mississippi Department of Public Safety. On hand for the official delivery ceremony were MS DPS Commissioner Sean Tindell and Mississippi Highway Patrol Colonel Randy Ginn, as well as numerous department heads from within the agency and the MHP Air Operations Unit.

The MS DPS EC135 was taken as a trade-in from the Massachusetts State Police and recently sold to MS DPS. The aircraft is equipped with a FLIR Star SAFIRE imager, AeroComputers moving map system, Spectrolab SX-16 searchlight and Troll microwave video downlink system.

CNC staff integrated the aircraft's mission equipment system into the existing MS DPS microwave downlink infrastructure to work alongside the Airbus H125 that is currently being operated by MS DPS. CNC previously installed the H125's MX10 imager, Churchill moving map system and Troll microwave downlink system, as well as a fixed downlink receive site in Gulfport, MS.

CNC also provided mission equipment training to all Air Operations Unit staff. The EC135 was recently painted to match the H125. Both aircraft will be used to support law enforcement operations in coordina-

tion with city, county and other state agencies. [CNC] Editor: The Massachusetts State Police did not announce the new purchase. They bought EC135s to replace the AS355Ns more than a decade ago and are now progressively changing the fleet to H135s. The first of the new aircraft was supplied through CNC and completed by Metro Aviation in Shreveport earlier this year. The FAA record is not yet complete as this issue goes to press but from other sources it appears that N351MS was formerly N822PP c/n 0823 and that was replaced in service by another airframe also marked N822PP but now having a c/n 2150.



## **AIR AMBULANCE**



**QUEENSLAND:** TRU Simulation + Training has signed a deal to build a Beechcraft King Air full-flight simulator for the Royal Flying Doctor Service (RFDS) Queensland Section in Australia.

The level-D simulator—which can be reconfigured for the King Air 250/260 and 350/360—will be housed in a new training facility next to the operator's base in Bundaberg. It is expected to receive qualification by the Civil Aviation Safety Authority of Australia and be ready for training in 2023.

In 2021, the RFDS (Queensland Section) signed a purchase agreement for four new cargo-door and heavy weight operations package-equipped Beechcraft King Air 360 turboprops. The aeromedical organisation recently acquired two additional aircraft and placed an order for another, which will bring the number of Beechcraft King Air 360 aircraft in the RFDS (Queensland Section) fleet to seven. The new turboprops add to RFDS' already large Beechcraft King Air fleet, which is used to deliver aeromedical retrievals and provide healthcare services to regional, rural and remote Queenslanders.

Ed: TRU Simulation + Training is a Canadian-American manufacturer of flight simulators and training devices for civil and military markets. It is a subsidiary of Textron and was formed in 2014 when previously acquired simulator manufacturers Mechtronix and OPNICUS were merged with part of Textron Systems division.

## SOUTH KOREA

**JEJU:** Airbus Helicopters and Korea Aerospace Industries (KAI) have delivered the first Light Civil Helicopter (LCH) to a local operator, Gloria Aviation, following certification in September this year. Entering

service in an emergency medical services configuration in December this year, this helicopter will be deployed to support critical lifesaving missions in Jeju.

The type, based on the SA365N Dauphin, has been in development since 2015 and is initially aimed at serial production for emergency services roles. It is expected that new variants will be introduced to serve in other roles and enable production of the type to live on in South Korea. [Airbus]



## UNITED KINGDOM

**NATIONAL:** After a three-year hiatus caused by Covid Gama Aviation will be supporting the Air Ambulance UK Annual Conference at Edgbaston Stadium in conjunction with Air Ambulance UK on the 14th November.

With a wide range of contributors from the UK air ambulance and HEMS community the conference will be an excellent opportunity to reconnect with colleagues from the Charities, OEMs and operator supply base. In the evening the Awards of Excellence will be presented, recognising the hard work and commitment of many within the community.

**CORNWALL:** Extension work is underway at the Cornwall Air Ambulance headquarters to help futureproof the charity's operations.

As the service marks its 35<sup>th</sup> year, Cornwall Air Ambulance Trust (CAAT) has been busy planning for the years ahead, ensuring it continues to serve the people of Cornwall and the Isles of Scilly. A major part of this is the extension to the charity's headquarters building at Cornwall Airport Newquay, which is now taking shape.

Over the years as the charity has grown and extended its operations; with the purchase of a AW169 helicopter and increased operating hours from 12 to 19 per day, it became apparent the current building was no longer fit for purpose.

In 2019, CAAT was awarded grant funding of £897,700 from the Department of Health and Social Care towards a proportion of the building costs for a new crew facility. While the Covid-19 pandemic delayed the start of the project, work is now well underway to extend the existing infrastructure.



The new development will provide better training facilities, a significantly improved operations room, and more rest areas for the aircrew. The works, which are being carried out by local firm Brady Construction Services, are due to finish in spring 2023.

**DEVON:** A coroner has described the death of a woman who was blown over by a helicopter at Derriford Hospital, Plymouth, as a 'never event' - meaning a serious incident or error that should not occur if safety procedures are followed.

Jean Langan, 87, a mother and grandmother, died in the incident at Plymouth's main hospital in March this year. She was walking through Car Park B after a hospital appointment with her niece, when she was blown over by the downdraft from an HM Coastguard helicopter landing on the hospital's helipad.

A pre-inquest review into Mrs Langan's death held at Plymouth Coroner's Court on 6 October was attended online by legal representatives from the Air Accidents Investigation Branch (AAIB), the Civil Aviation Authority, Devon and Cornwall Police, NHS University Hospitals Plymouth and HM Coastguard, the crew of the helicopter and the Health and Safety Executive.

Senior coroner Ian Arrow said the AAIB's inquiry would cover a number of elements including the flight of the helicopter on the day, its approach and landing, and whether anything about the flight was 'different to normal'. The inquiry was also looking at the licensing of the hospital helipad for use. The preliminary draft report into the incident is due at the end of March 2023. NHS University Hospitals Plymouth has also commissioned its own review.

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**GREAT WEST:** On September 16, 2022, Bristol's Aerospace Museum opened its doors to the Great Western Air Ambulance Charity (GWAAC) and its guests for the return of the much-anticipated Pre-Hospital Emergency Medical (PHEM) Symposium – an informative and friendly conference for healthcare professionals wanting to learn more about all things PHEM-related.

The first Symposium was held in 2016 but the last two events in 2020 and 2021 did not run due to COVID-19. The venue is a museum that has sprung up next to the former base of both GWAAC and NPAS prior to their move off the former Filton Airfield, among the exhibits is an example of the Concorde SST. During the breaks, attendees were treated to excellent refreshments, an opportunity to look around trade stands and walk inside Concorde itself.

An array of expert speakers from varied backgrounds delivered valuable presentations over four sessions. Topics covered:

Critical care transfers: what is it all about? ECMO: Is it useful in the pre-hospital setting? Pushing Boundaries in paramedicine Claims, inquests and the regulator from a pre-hospital perspective Gardening V carpentry: designing a wellbeing strategy Bumps and bruises: managing pregnant women in a pre-hospital environment Interactive case scenario discussions Great Western Air Ambulance Charity – demonstration by crew Keynote — pre-hospital critical care; where have we come from and where are we going? Manchester Arena Public Inquiry and reflections on the duty of care Hot, wet and high: trauma and extremes

**HAMPSHIRE & IOW:** Babcock and Hampshire and Isle of Wight Air Ambulance (HIOWAA) have announced a three-year contract extension to keep the helicopter emergency medical service up in the sky saving lives.

The new contract starts this month and will allow Babcock, a leading UK provider of specialist air ambulance operations, to continue to provide a high standard of HEMS operations to the charity. Babcock is providing HIOWAA with an Airbus H135 helicopter fitted with the latest Night Vision Goggles (NVIS) technology, maintenance and airworthiness management, engineering and highly trained pilots. . <u>www.hiowaa.org</u>



Photo credit: Tim Wallace.

**KENT, SURREY & SUSSEX:** At the end of September the Air Ambulance Charity unveiled its ambitious Five Year Strategy (2022- 2027) 'Working Together to Save More Lives', created to help take important steps towards realising its vision of an end to preventable loss of life from medical emergency.

With demand for its world-leading pre-hospital Helicopter Emergency Medical Service (HEMS) at an alltime high, KSS has set out ambitious plans to develop its core life-saving service, to build on its Research and Innovation Programme and to introduce new Patient and Family Aftercare and community-based initiatives. Through even closer collaboration with key partners including South East Coast Ambulance Service (SECAmb), the wider NHS, other charities and with the communities they serve, KSS is committed to reaching more patients, improving more outcomes and working together to save more lives.

Following the busiest year in its 32 year history in 2021, during which KSS responded to 3,051 incidents including medical emergencies, road traffic collisions and accidental injuries, 2022 is proving to be even busier. KSS's Five Year Strategy focuses on meeting this growing need through the development of the charity's core service, which takes the emergency room to the scene 24/7 to deliver life-saving care.

The Strategy also enables KSS to evolve and extend its service, with the introduction of innovations and initiatives to save even more lives amongst the 4.8 million people who live in Kent, Surrey, East Sussex and West Sussex plus the many millions more who travel through the region every year.

They intend to develop all weather aircraft operations through performance based navigation, investigating the drone deployment of defibrillators and continuing to develop techniques to deliver advanced medical interventions in the helicopter cabin. This can save time on scene and even better support KSS's patients in transit ensuring time critical arrival at the hospital most appropriate to their ongoing treatment and care.



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Defense

The Kent Surrey Sussex (KSS) air ambulance charity operates out of Redhill Aerodrome in Surrey and is headquartered in Rochester, Kent.

KSS was the first Helicopter Emergency Medical Service (HEMS) in the country to operate 24 hours a day, seven days a week. In March 2020 KSS became the first HEMS to be rated Outstanding by the Care Quality Commission in all five of its inspection key lines of enquiry: safe, effective, caring, responsive and well-led. In September 2020 KSS won the Charity Times Charity of the Year Award (income more than £10M) and in September 2021 KSS won Kent Charity of the Year and CEO David Welch was selected as Charity Times' Charity Leader of the Year Award 2021. <a href="https://www.aakss.org.uk">www.aakss.org.uk</a>

**WALES:** There are plans in place to reduce the current number of bases used by the air ambulance from four to three or even two. There are currently four air ambulances bases in Wales: Llanelli and Cardiff in south Wales, Caernarfon in the north-west of Wales and Welshpool in mid Wales. The aircraft at Cardiff Heliport is used for transfers. The number of aircraft in operation would not be affected.

The move is not universally popular. Already an online petition to save the Caernarfon base which currently has several thousand signatures is under way. It is suggested that the Dinas Dinlle site in Caernarfon could shut along with the Welshpool base and be replaced with a single facility at a former North Wales Police helicopter site in Denbighshire. The location is slightly further north than Caernarfon and Welshpool. A spokesperson from the Wales Air Ambulance charity has said no decisions have yet been made.

It is claimed the reduction in bases would be more efficient and result in two helicopters, two crews, one location.

The proposal is also looking at both the air and ground operation. When the weather deteriorates or an aircraft is otherwise grounded the operation resorts to the use of cars. Current locations mean that patients in north and mid Wales suffer from a lack of this alternative provision as a result of poor road access – unlike their counterparts in south Wales.

The current aviation contract is up for renewal, presenting the charity with a once-in-a-decade opportunity to look at our current service provision. Any service enhancements identified would need to be included as a part of the contract with the successful bidder. Due to the current increase in the cost of goods and services, the charity is expecting an increase in aviation costs, so it's more important than areas where potential savings might be made are considered.

Editor: The former police base which North Wales Police called Rhuddlan was opened in May 2000 and closed by NPAS in September 2015. It is a self-contained, purpose built, helipad, hangar and offices located close to the Irish Sea coast.



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## **UNITED STATES**

**FLORIDA:** The annual US medical get together, AMTC22 event set for Tampa Bay, Florida on October 24-26 was briefly put on hold in late September after the region was severely battered by Hurricane Ian.

Fortunately much of Hillsborough County was spared from infrastructure damage. After an extensive walkthrough, no major damage was found to the Tampa Convention Center or downtown. Tampa Convention Center resumed normal business operations on October 3rd. Tampa International Airport resumed service September 30th.

## FIRE PORTUGAL

It is reported that the grounded Kamov Ka-32 helicopters in Portugal are on their way to the Ukraine.

Six airframes, one of them having crash damage, were acquire in 2006 and mainly withdrawn I 2018. All are now unusable thanks to the International sanctions on all things Russian but it is considered that they will serve Ukraine well enough as either a source of spares or flying airframes.

They cost the State €40 million to purchase in 2006 and then cost €10 million in maintenance for the next 11 years. They have been out of service since 2018 as the country considers whether they were worth repairing.



One of the six has had mechanical problems since 2012, while two others have been awaiting repairs since 2015. Three remaining Kamovs were out of service for maintenance and the "lack of certification" into 2018.

## **SEARCH & RESCUE**

**AFRICA:** The International Organization for Migration (IOM) has assisted the safe return of over 3,000 Nigerian migrants from Libya since January 2022. In a programme assisted by the European Union there is a scheme to return would be migrants looking to cross the Mediterranean Sea to their country of origin.

The challenging security situation in Nigeria has seen many fleeing the country in search of safer conditions. Many would be migrants have been stranded in Libya when they found that they were simply exchanging one conflict for another. Jobs were scarce and the journey onward to the European Union often barred.

The Head of IOM Lagos pointed out that the voluntary humanitarian return flights contribute to achieving safe migration. Prior to their return to Nigeria the returnees underwent health checks including COVID-19 tests and received hygiene kits containing face masks and other protective gear. IOM also provided them with pre-departure counselling services, screening, transportation assistance and additional services.

Upon arrival, the returnees are assisted with food and refreshments, and a mobile phone to contact their families and remain in touch with IOM as they receive reintegration support, while vulnerable individuals are provided with non-food items such as clothes, shoes and other essential items.

On return for the first seven days they are hosted at a IOM operated Migrant Transit Centre in Lagos. The centre has been fully operational since May 2022 and offers multiple services for up to 400. So far over 28,000 Nigerians have been assisted to voluntarily return home in the last five years.

Libya has long been an important transit and destination country for migrants arriving from different parts of Africa, the Nigerians making up 5% of migrants in Libya, the country's fifth largest migrant population.

## EUROPE

**FRONTEX:** Planes and drones deployed by Frontex to support EU Member States with fighting crossborder crime and search and rescue have reached the milestone of 1000 missions this year.

Throughout 2022, eight Frontex aircraft took part in various missions in Spain, the Central Mediterranean, the Ionian Sea, Eastern Mediterranean, and the Black Sea. They were also active in the English Channel, the Adriatic Sea, Serbian, and at the Ukrainian border. Activities amounted to 150 missions a month, 800 operations, 100 suspicious vessels detected and 21,000 people rescued

The aircrafts are role equipped with the latest sensors and most are able to stream live video to the Frontex Situation Centre where the images are analysed in real-time to enable information to be given to national authorities to support a fast and effective response to cross-border crime and SAR.

All the operations are carried out in close cooperation with EU countries. This year, the aircraft have already detected 800 incidents, twice as many as in the same period last year; half related to law enforcement operations.

Frontex crime fighting operations serve several different functions not directly related to police activities including illegal fishing and pollution reported to partner EU agencies, the European Fisheries Control Agency, and the European Maritime Safety Agency.

### JAPAN

**COAST GUARD:** On October 19, 2022, the Japan Coast Guard commenced flight operations using an General Atomic MQ-9B SeaGuardian Remotely Piloted Aircraft. The Coast Guard is operating the SeaGuardian from the Japan Maritime Self Defence Force Air Station Hachinohe.

The RPA will primarily perform Maritime Wide Area Search (MWAS) over the Sea of Japan and the Pacific Ocean. Other missions will include search and rescue, disaster response, and maritime law enforcement. *SeaGuardian* features a multi-mode maritime surface-search radar with an Inverse Synthetic Aperture Radar (ISAR) imaging mode, an Automatic Identification System (AIS) receiver, and High-Definition – Full-Motion Video sensor equipped with optical and infrared cameras. This sensor suite enables real-time detection and identification of surface vessels over thousands of square nautical miles and provides automatic tracking of maritime targets and correlation of AIS transmitters with radar tracks.

*GA-ASI's MQ-9B SkyGuardian* and *SeaGuardian* are revolutionising the long-endurance RPAS market by providing all-weather capability and full compliance with STANAG-4671 (NATO UAS airworthiness standard). The type offers an operationally proven, collision-avoidance radar, enabling flexible operations in civil airspace. [GA]

## SPAIN

**SARAGOSSA:** the capital city of the *Zaragoza* Province and of the autonomous community of Aragon, *Spain has modified is SAR contract with Eliance Services part way through its term.* 



The Servicio de transporte sanitario y de emergencias mediante Helicotero en el ámbito de la Comunidad Autónoma de Aragón contract is for 36 months. A need for additional works, services or supplies by the original contractor/concessionaire have been identified and this has led to a €200,000 increase in the original contract price to €7,815,764 +vat. [2022/s 137-392732]

## UNITED KINGDOM

**SAR CAPABILITY DISRUPTED:** One of the companies in line to be severely disrupted by the closure of Doncaster Sheffield Airport is 2Excel Aviation based at Sywell and Doncaster. A varied fleet ranges from light aircraft to airliners so for much of the fleet retreating to the grass airfield at Sywell is not an option.

As soon as Peel announced the closure of DSA it was time to talk to them and set up the plan B of alternative locations. Talks continued into October and were facing a set closure date of November 18. They were faced with considering around 14 alternative locations that appeared to offer airport facilities similar to those at DSA. For the 2Excel range of missions supporting such as the Coastguard in SAR and environmental departments with the pollution control Boeing 727s there is a need for a good standard of runways and landing aids.

It would seem that the most difficult aspect is finding a suitable landing ground with available hangars. The two main operations co-located at Doncaster since 2017 had the luxury of the large 55,000sq ft former V Bomber hangar. The expectation is that the DSA fleet will have to be broken up as so far no one location has been identified as able to take the whole operation in one go.

Getting the larger airframes off site before November 18 may well be the primary aim but the 2Excel engineering operation could linger using the airport as a private unlicensed airfield just for maintenance followed by positioning flights. That scenario needs confirming as getting it wrong would require some very expensive ground transport alternatives.

There is also likely to be a significant problem with staffing. Over recent years the 2Excel DSA site has been a prolific employer, there are several vacancies currently on offer, but it is unlikely that many of the staff would want to relocate if the solution is too far away.

Editor: Although times are hard, good quality hangarage remains at a premium. NPAS need a location with space for four aircraft but 2Excel has a much greater need in that they have several large aircraft and many light twins currently in a very large former V Bomber hangar. Both need the site with high specification 24/7 aids, a hard runway and substantial hangarage. Not something there is a surplus off. NPAS had to build their own at Doncaster. With both organisations seeking similar outcomes it is probably the 2Excel money that will prevail. That may lead to the NPAS Vulcanair P68R fleet setting up at existing police air wing site at least temporarily.



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#### November 2022

**SAR CAPABILITY PENDING:** When I was young Britain's seaways were defended by several squadrons of Avro Lancaster bombers converted to the maritime patrol role and several other squadrons of the Short Sunderland flying boat. By the early 1950s these aircraft with strong wartime links were briefly supplemented by new lend lease US Lockheed Neptune aircraft until replaced by new British aircraft - early models of the Avro Shackleton, itself something of an extreme development of the wartime Lancaster. They served UK SAR and anti-submarine patrols for decades but their numbers dwindled from hundreds to tens as Britain's Empire needs shrank.





Avro Shackleton

The jet age came in the early 1970s on the back of the Hawker Siddeley Nimrod, itself an extreme development of the De Havilland Comet airliner. Nearly 50 of them were built and served in the role for forty years. An advanced variant, the MRA4, of which 21 were to be built was cancelled without replacement in 2010.

In 2016 nine Boeing P-8A Poseidon MRA1, a patrol aircraft based on the Boeing 737 airliner, were ordered from the USA with deliveries starting in 2020. That left a ten year gap where only C-130 transport aircraft stood in on the SAR role and the anti-submarine role was undertaken by the rest of Europe when they had time. Just one more bad message to the Kremlin.

So, in less than a lifetime, the fleet of aircraft watching over the Western Approaches (and much more besides) has dwindled from hundreds to nine, not yet fully operational, airframes.

Nine is not enough and other aircraft types continue to 'meddle' in the task of SAR in British waters, leaving those too few P-8A aircraft to perhaps watch over the Russian submarines. There is a war on remember.

This only came to light last month when the UK Ministry of Defence put out a story and video footage of an Atlantic rescue where two large and expensive to operate aircraft were involved. The video showed two Royal Air Force aircraft went to the rescue of a distressed sailor after his yacht lost its mast in stormy seas - 700 nautical miles away from land in the Atlantic Ocean over the 15-16 October.

RAF crews located the sailor midway between the UK and Greenland as his stricken yacht struggled in six -metre-high waves, before dropping specialist rescue equipment including an inflatable life raft and survival gear, by parachute.

Two RAF aircraft took part in the rescue mission including an Atlas A400M transport aircraft from RAF Brize Norton, and a P-8A submarine hunter aircraft from RAF Lossiemouth which is equipped with surveillance and search and rescue equipment. The P-8A found the sailor but, it appears, needed the Atlas to drop the Air Sea Rescue Apparatus (ASRA), which comes equipped with inflatable life rafts and survival equipment, near the yacht through a rear ramp drop, where it landed in the sea via parachute. This was the first mission where the A400 employed the ASRA equipment in action.

There is nothing to new and exciting about the equipment – they may say it is ASRA but many still call it Lindholme Gear which was developed at RAF Lindholme by Group Captain Waring during the 1940s to provide a simpler rescue system than the air dropped lifeboats then in use. The Lindholme Gear is five cylindershaped containers joined together by lengths of floating rope. That is exactly what was ejected from the back of the Atlas transport aircraft last month.





#### November 2022

The rescue pack was retrieved by the yachtsman who remained under the watchful eye of the Poseidon aircraft while the Atlas returned to RAF Brize Norton. Merchant ships sailed 120 miles off their planned route to recover the sailor, who had to remain with his stricken yacht overnight until the ships could reach him, with the Poseidon assisting the ship's crews to locate him. [Forces Net/MoD]

Editor: The worrying aspect of this otherwise perfect rescue is that despite it being at the heart of long range UK SAR the P-8A is simply not yet fit for service. It is an American aircraft and is normally equipped with ordnance and equipment favoured by the USA – anything that is of a British preference has to be tried and tested on the new airframe.

Earlier this year it was disclosed in Parliament that the only weapon cleared for use on the aircraft in British service is the Mk 54 Torpedo, a US weapon. Currently, no British weapon has been cleared for usage on the aircraft and clearly the all important SAR Lindholme Gear is to be added to the shortfall in capability.

That shortfall, and others no doubt, means that until these items are cleared for service, any rescue will require two aircraft to undertake a mission traditionally undertaken by one for the past 75 years. Of the aircraft delivered to the RAF it might be expected that only three might be available at one time, three on maintenance, the other three extracted for trials work and training. Overall leaving very little undertaking a primary role of hunting 'Red October.'

The UK responsibility for maritime, aeronautical and land SAR lies within the UK SAR Region covers approximately 2 million square miles.

As a matter of interest, RAF Lindholme was a wartime bomber base located a few miles from Doncaster. Many of its features have been incorporated in a prison now occupying the site.



## INDUSTRY

The consortium led by **Airbus** and **Capgemini** was selected by the French Ministry of the Interior and Overseas territories for the role of Package 2 integrator for the Réseau Radio du Futur (RRF – radio network of the future), the secure and resilient broadband network for domestic security and emergency rescue forces.

This pioneer project, led by France, is key to modernising domestic security forces. More than ever, this contract reinforces Airbus' position as European leader of critical communications, as well as that of Capgemini as trusted partner in the modernisation of emergency rescue and security forces, and provision of sovereign services.

The Réseau Radio du Futur will be a national, secure and highspeed (4G and 5G) priority mobile communication system, with a high level of resilience in order to guarantee the continuum of security and emergency rescue missions on a daily basis, including in the event of a crisis or major event. RRF intends to equip up to 400,000 users in the security and emergency rescue forces, such as the national gendarmerie, the national police force, firefighters and other civil security forces.



It will allow these users to benefit from many new data-centred services, such as video, in particular. With the notification of the RRF construction contract to the selected manufacturers, the Ministry of the Interior was to begin construction of the future network in September 2022. The construction and then the tests of a first version of the RRF will extend over a period of 19 months, making it possible to secure the technical robustness of the solution and its appropriation by future users.

From 2024, the RRF will become the backbone of operational communications for security, emergency services and crisis management actors.

Editor: The race is on! In another place I found that the French expect their Emergency Services Network [ESN] to be operational in 2024, a mere 4 years before we might expect the British ESN to surface. However, the French may yet face problems. The last time they upgraded to a digital system from scratch they produced the system more or less on time and at a far cheaper cost than the 'rival' UK Airwave system.

I guess we can blame a long line of Home Secretary's but I think it may be a bit closer to the coal face than that. Perhaps Whitehall for incompetent management and industry for a mix of lying about the very real challenges about introducing the product.

In answer to a question from the Shadow Minister for the Home Office (Labour) for the costs associated with continuing to pay for use of the old Airwave digital radio system Jeremy Quin Minister of State, Home Office stated:

From 2016/17 to 2021/22 the [cost of the] Airwave System has averaged approximately £370M per annum, which includes network and devices for the three emergency services. With the impact of inflation, the projected annual costs for the Airwave System were anticipated to be approximately £450m per year in the July 2021 Full Business Case. To note that there are other Airwave users beyond the three emergency services that are invoiced directly and are not captured in these costs.

There are a number of elements that may impact the overall delivery cost and time. This includes highlighting of Motorola's dual role as owner of Airwave and supplier on the programme and any extension to the Airwave shutdown date beyond the end of 2026. The goal remains to work to deliver ESN as swiftly and safely as possible. [extracted from a written answer to Questions in Parliament 24/10] *Editor: The digital Airwave system was predicted to be replaced by ESN in 2016/17 and is currently ex-*

pected to overrun that by at least 10 years, partly due to the slow provision of new aerial towers for ESN in remote areas.



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At the recent AMTC event held in Florida **Airbus Helicopters** recounted its continuing success in the US HEMS market.

More than 35 new single and twin-engine Airbus helicopters were sold in the US air medical market over the past 12 months.

Highlights include Atrium Health, which will enhance its MedCenter Air emergency and critical care patient transport services in the Carolinas with the addition of three new twin-engine H135 helicopters. These air-craft will join the company's existing H135 fleet.

Global Medical Response (GMR) has opted to add two new H135 aircraft to their fleet this year, on top of their existing fleet order from 2021. The operator flies a variety of Airbus products, including the H125, H130, H135 and H145 family helicopters due to their proven reliability, and continues to grow their fleet in partnership with Airbus.

These H135 additions come on top of orders for the helicopter by Stat MedEvac and North Memorial Health, both announced at Heli-Expo earlier this year.

New orders for the five-bladed H145 helicopter were placed by air medical operators located in the Northeast and Midwest United States. For example, Boston MedFlight placed a multi-year order for six H145 helicopters this year. The operator was the first air medical provider in the U.S. to place an order for the five-bladed H145 as announced at Heli-Expo.

OSF HealthCare will add one H145 to its current fleet of four H145s serving Peoria, Bloomington, Peru, Galesburg and Rockford, Illinois. Mayo Clinic recently ordered two H145s to complement the one ordered in 2021.

Another highlight is the purchase of a single-engine H125 by the Daniel R. Sayre Memorial Foundation, which will be donated to the Hawaii Fire Department to enhance their emergency medical services. This is the department's first Airbus product and will also be used for search and rescue missions.

**TAG Maintenance Services** has been rebranded as Dassault Aviation Business Services (DABS). Despite the name change, the company said it is "reconfirming its commitment" to supporting business aircraft manufactured by competing OEMs.

Customers will see a new name, but the commitment to applying advanced technology and the ultimate in service quality will remain the same as ever. Since the acquisition by Dassault, the operation has invested heavily to expand to new locations and upgrade facilities.

Dassault acquired TAG Aviation's MRO operations in 2019 and renamed it TAG Maintenance Services. The division later expanded to include the business jet MRO operations of Ruag in Switzerland.

DABS offers full-service operations in Geneva and in Farnborough, England, as well as facilities in Basel, Lugano, and Sion, Switzerland; Paris Le Bourget; Lisbon, Portugal; London Luton; and Luanda, Angola. The unit of Dassault also operates an FBO with locations on the north and south aprons of Geneva International Airport.

**QinetiQ GmbH,** a provider of airborne special mission operations, based in Mönchengladbach, Germany, recently took delivery of their second brand-new DA62 MPP (Multi Purpose Platform) at Diamond Aircraft's headquarters in Wiener Neustadt, Austria.

Equipped with the newest technology, the DA62 MPP special mission aircraft will support QinetiQ's delivery of training and reconnaissance missions, thanks to an exceptional period of time that the aircraft will be able to spend in the air.

Textron has teamed up with California-based **ZeroAvia** to develop a hydrogen-electric powered Cessna 208 Caravan. The companies want to get an STC for the design, which will carry hydrogen in a wing tank to run ZeroAvia's ZA600 powertrain in place of the PT6 that powers standard Caravans. The two companies said in a joint release that carrying the hydrogen under-wing leaves the fuselage free for its normal passenger and cargo load. Performance projections were not included in the release but the duo hopes to have the plane in service by 2025.

The ZeroAvia project has several business locations across the UK and USA including Hangar C2 Cotswold Airport, Kemble, Cirencester, and The Office Group, 20 Eastbourne Terrace, London W2 in the United Kingdom and 90 Skylane Dr, Hangar 1, Hollister, California and 111<sup>th</sup> Street SW, in Everett, Washington.

A new contract has been let to cover the support of **Airbus Helicopters** SA330 Puma's based in New Celedonia, a French territory comprising dozens of islands in the South Pacific. The two year framework agreement covers periodic inspections and level one maintenance of the SAF-RAN engines. [2022/S 199-567485]

In Spain an existing contract for the hire of helicopters and crew to service the air ambulance needs of the L'Hospitalet de Llobregat in Catluna has been modified to take into account earlier contract modifications, price adaptions and inflation.

#### November 2022

The four year, €18.8M contract between Sistema d'Emergències Mèdiques, SA, Servicio de helicópteros sanitarios (HEMS) contract and **Eliance Helicopter** (operating as Habcock Aviation) Cataluña, has now inflated to €19 36M plus VAT.

A cross-departmental team from **Leonardo** in Yeovil has successfully undertaken high altitude trials, which were completed on schedule with the Norwegian AW101 helicopter in the US. The aircraft completed its 21-day trial plan in just 16 days. The AW101 Performance Improvement Programme certifies increased engine power and raises the Main Gear Box (MGB) torgue rating to 117%. The aircraft was put through its paces in Colorado at Buena Vista and Leadville, which is 1 mile above sea level, to expand the high-altitude element of the take-off and landing envelope that will contribute to the overall 117% capability. The testing at the high-altitude locations demonstrated safe landing and recovery techniques in the event of an engine failure, which pushed the aircraft's capabilities to a certifiable-solution status. Power consumption testing future-proofed the aircraft for impending certification requirements. Leonardo customer engineers, known as Field Service Representatives (FSR) – led by Mark Davies, rebuilt the Norwegian AW101-612 All-Weather Search and Rescue (AWSAR) helicopter on the East coast of America, in Baltimore, after it was shipped to the US by sea. The Leonardo aircrew then flew 1,600 miles West across the US to the world's highest airports for the handling, performance, and certification testing in Buena Vista and Leadville. The aircrew then optimised the test scope and sequencing against the weather to exceed the plan. Demonstrations to team members from the Italian Secretariat General of Defence and National Armaments Directorate validated the aircraft's expanded capabilities. Material, logistical, and shipping support from Leonardo in Yeovil. The aircraft then went on a self-ferry back to Leonardo in Yeovil, UK, via Canada, Greenland, Iceland and Scotland. The Norwegian AW101 NAWSAR helicopter will then continue its journey at the end of year for delivery to the Norwegian Ministry of Justice and Public Security

The world's first multirole tiltrotor programme, designed to redefine a range of commercial and public services, set a major milestone with the maiden flight of the first **Leonardo** AW609 production aircraft. This aircraft introduces unprecedented capabilities under a dedicated 'powered lift category' civil certification now under development. Designated AC5, the aircraft took to the air at Leonardo's Philadelphia-based site on 13th October performing as expected the initial in-flight evaluation of systems and general handling.

The first production aircraft joins a prototype based in the US and two more located in Italy, all currently involved in the last stages of testing activities ahead of (Federal Aviation Administration) FAA certification. AC5 will be retained by Leonardo contributing to customer demonstrations, mission capability evaluation and expansion, and supporting the manufacturer and the operators in the transition from the developmental to the operational phase once on the market. Currently, three customers' production aircraft are on the dedicated final assembly line at various stages of construction in Philadelphia.



Earlier this year the AW609 launch customer in the United States, Bristow Group, participated in a demonstration flight in Philadelphia marking an important milestone as Leonardo and Bristow collaborate to introduce the AW609 aircraft into service. Also, in March 2022 the AW609 user base was further expanded with the addition of an undisclosed long-established European operator of Leonardo's helicopters who will aim to introduce four tiltrotors to carry out a range of passenger transport missions supporting its point-topoint operations worldwide.

To date, the programme has logged nearly 1,900 flight hours in the US and Italy. Users will be provided with comprehensive support and training packages, primarily headquartered at Leonardo's new Training

**2Excel Aviation** is moving closer towards taking delivery of two new DA62 Multi-purpose Platform aeroplanes to strengthen and modernise its fleet of Special Missions aircraft.

Two of **2Excel Aviation's** company pilots have visited Diamond Aircraft Industries at the Weiner Neustadt facility in Austria for training, whilst senior personnel travelled to Sweden to visit Trakka Systems to sign off specialist Electro-Optical/InfraRed camera turrets that will now be fitted to both aircraft.

Next year the pair of DA62 MPPs will join the company's existing fleet of 28 aircraft across five types servicing a range of industries including defence and security, engineering, events, and disaster response. Matt Tones, 2Excel's Head of Search and Rescue, said: "The efficiency and handling of the DA62, together with the optical technology from Trakka Systems will further enhance our capability, and the UK search and rescue region will benefit from innovation and advances in technology to help save more lives at sea."

#### 2Excel Aviation has chosen the DA62 in alignment with the company's fleet upgrade strategy, and its commitment to the reduction of carbon emissions as part of a wider carbon reduction and ESG strategy. 2Excel Aviation Special Missions delivers a wide range of contract air services across the world, including aerial dispersant and surveillance operations for the oil and gas industry, and training for military forward air controllers. The division delivers a fixedwing Search & Rescue service for the UK Government, as well as border and fisheries patrol missions. The diverse fleet allows the company to fly a full range of technologies, from synthetic aperture radar, electro-optic and infra-red turrets and cameras, to lasers, datalinks, and a wealth of antennas across the radio frequency spectrum, Special Missions pro-



vides specially designed solutions to clients' needs across a breadth of operations.

As part of the comprehensive evaluation of the extent of damage caused by **Hurricane lan**, the National Oceanic and Atmospheric Administration (NOAA) was flying Special Mission Beechcraft King Air aircraft over stricken areas to collect assessment imagery in coordination with state and federal partners.

November 2022

In the case of Sanibel, Florida, evacuated residents were able to watch the storm unfolding from afar thanks to traffic and other cameras but eventually all communications ceased as Hurricane lan caused significant damage to the Sanibel Causeway, cutting off access to the island community.

Éventually NOAA posted high-definition images taken by an airplane during four different flyovers of the area along with Cape Coral, and Fort Myers Beach.

Aircraft such as the Beechcraft King Air are vital in supporting responses to catastrophic events such as Hurricane Ian. NOAA's King Airs are equipped with special mission equipment to capture high-definition images of areas affected by storms or other disasters. The Federal Emergency Management Agency (FEMA) and other state and federal partners use these images to assess the damage and plan the response.

The King Air has a long history of being used for this purpose. In fact, NOAA used King Airs to capture imagery of the Joplin, Missouri, tornado devastation in 2011.

The NOAA imagery was shared and allowed the evacuees to assess the state of damage to their home prior to returning to them.

After setting up fixed wing air ambulance operations in 2021, the Belfast, Northern Ireland-based SERE Holdings is providing further medical aviation transport services to the NHS and patients throughout the UK.

Funded by Paragon Bank, a new specialist Pilatus PC-12/47E NGX aircraft G-ISJE/2176 has been awarded a Blood and Transplant Transport contract by the NHS. Belfast International airport-based 247 Aviation, a part of the SERE Holdings group, is able to transport organs and teams of medics and other healthcare professionals throughout the country. Already equipped with a Bombardier LearJet 40 G-



FEMC, 247 Aviation's air ambulance service fleet is also now capable of providing specialist transport worldwide. [SERE]

The PC-12 outside the facility of the aircraft owners, Ravenair Aircraft Ltd (Cheshire Flying Services) based in Liverpool.

As this edition goes to press there is late news from Leonardo that a contract has been signed for 20 AW119Kx helicopters for the delivery from next year. More details on that next month and on the commencement of Airbius Helicopters H135 to the Spanish law enforcement agencies.

## **ACCIDENTS AND INCIDENTS**

**15 October 2022 Beechcraft King Air 350C JA781B** Japan Coast Guard and a Bell 206B of Japan Aviation Academy Network (JANET) involved a runway incursion incident at Noto Airport. While the King Air was taxiing on the runway to the apron after landing on runway 07, the Bell took off from the same active runway after receiving "Runway clear" from the Aerodrome Flight Information Service There were no damage to either aircraft but being treated as a serious incident.

**26 October 2022 Eurocopter AS355F2 9M-SSW** Medical operations. Aircraft owned by Layang Layang Aerospace Sdn Bhd with six people on board crashed near Tana Rata in the Cameron Highlands, 200km north of Kuala Lumpur, Malaysia. Those on board included the pilot and five people who are believed to be Health Ministry staff members.

The aircraft was 40 minutes into a return flight in bad weather after a routine flight. The airframe came down in the rainforest and remained largely intact, on its right side with the tail partially detached. There was no fire. All of those on-board were injured but one is reported to have serious injuries. Layang Layang operates in the general aviation sector in Sabah and Sarawak especially in supporting the government initiatives of providing medical care to the rural people in providing Flying Doctor and Emergency Medical Air Evacuation services. [Media]

## UNMANNED

Early is October it was announced that Schiebel was awarded with the iSAR Research and Development programme, which builds on the current Camcopter® S-100 Unmanned Air System (UAS) with the aim of further developing its maritime Search and Rescue (SAR) capabilities, offering a higher level of automation.

The scope of this multi-million Euro contract includes the further development and delivery of the Camcopter® S-100 UAS, including the integration of the latest high-tech sensors, allowing the detection and identification, both day and night, of castaways, drifting objects and polluting substances in the high seas: as well as monitoring toxic and hazardous atmospheres, emissions from ships and sea surface pollution. This project includes a data collection and distribution system combining information from the S-100 sensors, the manned AW139 and CN235 helicopters, as well as sensor data from two ships.

The S-100 payloads will include an Overwatch Imaging PT-8DN Oceanwatch, a Trakka TC-300 EO/IR sensor, an Aeromon BH-12 Emission Measuring Device, and a set of SENSIA Gas Imaging Devices. The innovative payload suite allows the S-100 to perform all requested missions simultaneously, without the need of having to change the sensors. For the integration and fulfilment of the contract Schiebel partnered with a number of technology leaders, including the Spanish technology business group GMV Innovating Solutions, which is responsible for the network infrastructure.

#### VERTICAL AVIATION SAFETY TEAM (VAST) 2022 GLOBAL CONFERENCE Hurst Conference Center (Texas) October 4 - 6, 2022

#### By Mark Colborn

Chances are you have never heard of VAST, but most likely you have heard of its predecessor. The organization was originally started in late 2005 in Montreal, Canada, by a group of safety professionals concerned about an unacceptable 2.5% per-year worldwide rising helicopter accident rate. The International Helicopter Safety Team (IHST) – later renamed the International Helicopter Safety Foundation (IHSF) – was founded to help stem this alarming accident trend. The IHSF was rebranded last year as VAST, to in-





crease collaboration with the Advanced Air Mobility (AAM) or Urban Air Mobility (UAM) sectors—which are quickly becoming players in the vertical aviation field. VAST is an all-volunteer, unfunded organization. But it does receive support for outreach efforts from industry and aviation governing bodies across the globe.

Before the pandemic, a similar international safety seminar was hosted by the Federal Aviation Administration's (FAA) Rotorcraft Directorate – for several years in a row – at the Hurst Conference Center. These events were co-hosted by IHST/ISHF, Helicopter Association International (HAI), and other international helicopter safety organizations with a primary function of reducing not only the overall worldwide helicopter accident rate, but especially the fatal accident rate. The organization's biggest challenge has always been getting the word out on safety and managing risk, and thus the main reason I penned this report.

The inaugural edition of the VAST three-day event focused on collaboration. Plus, it was the first face-toface meeting our core group of safety professionals and champions has had since the start of the pandemic. It was refreshing to network with fellow individuals who have been a part of this important safety initiative for the past 17-years.

#### VAST conference – First Day

We were fortunate to have many key professional personnel in the industry, including Randy Rowles – Founder of the Helicopter Institute in Fort Worth, Texas, and Francois Lassalle – CEO of HeliSGI in Indonesia. Randy and Francois welcomed participants to the conference.

John Franklin –Head of safety promotion for the European Union Aviation Safety Agency (EASA) and Jim Viola – CEO of HAI. John and Jim gave an exuberant overview and introduction to VAST.

Nick Mayhew – Industry co-chair, United States Helicopter Safety Team (USHST), outlined priorities for the upcoming year.

Lirio Liu – FAA Executive Director for Aircraft Certification, delivered the keynote address and spoke of the challenges, expected direction and progress of aircraft certification rules and procedures in the U.S.

Randy Rowles led a panel discussing worldwide VTOL safety improvements featuring Jim Viola, John Franklin, and Mel Johnson – FAA Director of Aircraft Certification Service (compliance and airworthiness division).

Commander Brian Wetzler - US Coast Guard (retired) topped off the morning sessions. We were en-

#### November 2022

thralled by a riveting first-person account from Commander Wetzler, who survived a catastrophic loss of situational awareness in a Coast Guard Dauphine crash in the Gulf of Mexico.

Following a delicious catered lunch, we entered the next phase of the program. Lee Roskop – FAA Rotorcraft Directorate (Fort Worth) and USHST's unofficial statistician, and John Franklin, presented reports on US and European helicopter accident statistics and trends.

Scott Shappell, Ph.D. – Embry-Riddle Aeronautical University, Professor and Chair of Human Factors and Behavioural Neurobiology, spoke about his experiences as an accident investigator. He said that even though accident investigators arrive at the scene to discover the how-and-why an accident occurred – with the goal of preventing further accidents – they are still perceived as the bad guys wearing black hats. He outlined for participants some ideas on how to change this perspective while in the field during an investigation.

#### VAST conference – Second Day

Participants had a choice of attending three separate all-day focus areas: Operations, Maintenance, or VTOL.



Maintainers had the chance to earn FAA AMT Wings credit while they participated in "prevalent maintenance issues and how to fix them," from Schweizer, Bell, Airbus, Leonardo, and Sikorsky. A number of classes in the operations section allowed participants to earn FAA Wings credit also. The VTOL sessions were packed with interesting speakers from NASA, the National Renewable Energy Laboratories in Australia, and other industry experts. Among them: Rex Alexander with Five – Alpha, is arguably the foremost expert on heliport/vertiport design in the USA. Rex led most of the discussions throughout the day. Steve Hanvey – HS Diversified Solutions ended the day with a presentation on how hydrogen-powered VTOL's will work, and their impact on the industry.

#### VAST conference – Third Day

On the morning of the third day, we looked at SMS systems for small operators, a synopsis of the new FAA Heliport Advisory Circular, and some of the new equipment and technology either available, or in development, to improve visibility and situational awareness for pilots...followed in the afternoon by a study of VTOL issues with global perspectives on safety. Of particular interest was a panel discussion moderated by Rex Alexander on the challenges facing AAM vehicle builders – where they are now and where they are headed. On the panel were several safety directors: Pedro Carleial – Archer, Ife Ogunieye – Joby, and Collin Russell – Lillum. Pedro encouraged the AAM industry to collaborate on safety issues and lessons learned. He also stated, and-the panel agreed, the aircraft designs they are flying today are probably not going to be the same they will be flying when they ultimately receive type certifications. Improvements, advancements, and design changes will be made because, he said, we are trying something new and there are a lot of unknown knowns and known unknowns!

The next panel discussion gave the following speakers a chance to outline their respective organization's priorities for the next year: Peter Bunce – President and CEO of General Aviation Manufac-



turers Association (GAMA), James Viola – HAI, Christian Muller – Chairman of the European Helicopter Association, and Mike Hirschberg – Executive Director of the Vertical Flight Society.

The last two sessions highlighted the ongoing safety challenges and successes realized in South America and Europe; and the audience received an update on the initiatives and progress of VAST working groups around the globe.

This inaugural VAST conference was a hybrid event. Many of the sessions were recorded and eventually will become available on the VAST website for those who could not attend.

The History Behind VAST

Elements of initial IHST initiatives in 2006 included the introduction of four important documents:

- □ Safety Management System Toolkit
- □ Helicopter Flight Training Toolkit
- Helicopter Flight Data Monitoring Toolkit
- □ Maintenance and Risk Assessment Toolkit

Organizers knew these items could help to immediately reduce the accident rate if implemented by operators. However, up until that point, helicopter flight hours flown per year, worldwide, were unreliable or misreported. Manufacturers were asked to come to the table and share actual yearly flight hour figures, and they did. Several safety analysis groups were also created across the world and those groups began analyzing commercial helicopter accidents, to build a baseline and get an accurate idea – with the help of more accurate flight hour reporting – of the actual accident rate per 100,000 flight hours. Organizers also



knew why helicopters were crashing, but the analysis helped to define in greater detail the who, where, how, and why helicopter pilots were crashing. In other words, you must have accurate data to begin tackling the problems, set goals, and initiate intervention or prevention programs. Initially, to address accident reduction, the IHST set a goal of an 80% decrease over 10 years—by 2016.

All these efforts eventually paid off and the goal was met. The IHST's Joint Helicopter Safety Analysis Team (JHSAT) – which I joined in 2006 – analyzed three years of National Transportation Safety Board data (523 accidents in fiscal years 2000, 2001 and 2006) to gain an accurate baseline for U.S. based commercial helicopter accidents. The results were as predicted, but our group also made several interesting discoveries, which later drove additional ISHT/IHSF's prevention and outreach initiatives. The United States Helicopter Safety Team was created in 2013 and decided to analyze three more years of commercial US helicopter accident data (423 accidents in fiscal years 2009, 2010, 2011) to see if there were any significant changes from the earlier data set. Unsurprisingly, the data closely mirrored the dataset from the earlier period. *\*Note: these compendium and comparative reports are available at ushst.org on the Repository page.* 

In 2016, the USHST decided to change direction and focus on reducing the fatal helicopter accident rate. The group met at HAI headquarters in Alexandria, Virginia to strategize. Other regions in the world had also created individual safety teams, under the IHSF umbrella, and undertook similar initiatives. The USHST spent three days analyzing 104 fatal accidents from fiscal years 2009 to 2013, and later came up with 22 safety enhancements to help reduce the fatal accident rate in the United States.

Several of those enhancements have already been completed – with ongoing outreach – but efforts continue with most of the safety enhancements the group implemented. The ultimate objective of the USHST is zero accidents, but realistically, in 2020, the group adopted a goal of reducing the fatal accident rate to 0.55% per 100,000 flight hours by 2025. Despite all the outreach efforts the group has made in the past 16 years, the fatal accident trend is not going down as hoped. One fatal accident is too many, no matter where in the world it occurs. Therefore, VAST needs your help to get out the word. If you are in the helicopter community and take safety seriously, please visit https://vast.aero/ and volunteer some of your time to a regional safety team in your area of the world.

Editor: It appears that the FAA are rejigging the make-up of the Advisory Committee (formerly the Drone Advisory Committee). After last month's meeting on October 20 Mark Colborn is off the team and apparently replaced by individuals who have a different agenda. Currently assumed to be leaning more towards AAM/UAM issues.

*Changes too on the other side of the Atlantic where the* UK's drone association *ARPAS-UK is shuffling its executive team* to support growth of the commercial drone sectors and to realise Government-backed research that predicts drones could contribute an additional £42 billion in economic growth and 650,000 potential new jobs by 2030.

ARPAS-UK has announced new Directors, Chair, and CEO in a move to support the UK's fast-developing commercial drone sector, across a spectrum of industry applications. The appointments include Aleks Kowalski and Chris Daniels as new directors. In addition, new roles to support the industry focus on growth and further develop ARPAS-UK are as follows:

**Graham Brown** is appointed as Chairman of the board. Graham has been CEO for over four years and has relentlessly promoted ARPAS-UK's position as the unique trade association and voice for the drone community in the UK with a broad range of stakeholders.

**Stuart Keenan** is appointed as Vice-Chairman. Stuart has served as Chairman and will continue to support the organisation to drive the industry forward. Head of Frazer-Nash's UAS Centre of Excellence.



**Anne-Lise Scaillierez** is appointed as CEO of the organisation. Anne-Lise has been a director since 2018 and has played an active role as Director of Finance and in providing fair and balanced intelligence to national stakeholders to support the drone community's recognition. Partner at The Drone Office. **Rupert Dent** will continue to support the organisation as Director, Policy and Regulations. Rupert plays a vital role in advocating proportionate regulations and standards and acting as a respected regulation counterpart to the authorities and members alike. Managing Director at Bridgeway Aerial Ltd.

Aleks Kowalski has joined the ARPAS-UK board of directors. Aleks looks at the longer-term strategic importance for ARPAS in bringing together all UAS pilots, large and small, and the ecosystems around them. Chief Operating Officer at Neuron Innovations and various advisory positions to businesses in the drone sector.

**Chris Daniels** has joined the ARPAS-UK board of directors. Chris is a strategic advisor on commercialising start-ups and scale-ups, focused on aerospace & defence and Machine Learning and Big Data Tech. Chief Commercial Officer at Flare Bright.

ARPAS-UK was founded in 2013 to support members from start-up businesses to larger established operations, operators, manufacturers, software and service companies through promotion of innovation and best practice.

## MOVE ALONG THERE

#### DRONE OVER COOKED

Thousands of people were left without power after a food delivery drone crashed into powerlines on September 29 in what has been described as a "first" by Energex the power supplier in Australia. The company has long been used to all sorts of items being entangled with their overhead lines – they quote kites, umbrellas, sticks and even toilet seats, but this was new to them.

They had to shut down the network temporarily after a crew was called to the incident in Brisbane, the immediate surrounds lost power after a drone carrying food landed on top of 11,000 volts overhead wires and short circuited the system. The voltage tracked across the drone, and it caught fire, broke up and fell to the ground.

Energex restored power for about 2,000 customers within 45 minutes, while 300 customers in the immediate vicinity of that drone were without power for three hours.

Apparently, the food was still hot inside the drone's delivery box when the power crew arrived on scene – perhaps a tad overcooked by then.

There was no long-term damage to the wires so the power company will not be requesting the food delivery company to cover the damage. [The Age]

#### POLICE GOING SICK? IS THAT NEW?

I guess we were the supermen and women of our time. Not that we thought so.

In a report from the London Assembly, it seems that there were 371,988 Metropolitan Police working days lost due to mental health in four years figures reveal. Official data shows numbers are up nearly 25,000 per year, from 81,576 in the 2018/19 financial year to 106,412 in 2021/22 - a 30% increase. Days off taken by police officers for issues such as stress, anxiety, depression or post-traumatic stress disorder (PTSD) increased by more than 10,000 in the same period – a 15% jump. While days Met staff were

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signed-off work for psychological illness more than doubled – a 107% increase. Labour's London Assembly Policing and Crime Spokesperson Unmesh Desai AM, who obtained the data, wants better training, support and pay for officers and staff to combat the "worrying" rise.

As of August 2022, the Metropolitan Police Service (MPS) employed more than 43,000 officers and staff, including 33,843 police officers, up from nearly 39,500, including 30,445 police officers, in 2018. Those numbers compare with around 28,000 police officers from the mid-1960s to the mid-1990s. In the latter half of the last century there were relatively few civilian staff.

Earlier times were different of course, the term stress was simply not in currency at the time. Fewer officers meant fewer sick notes of course but there were times when they had had enough and so the officers in the period simply 'fell' down steps or suffered from a convenient cold or flu. Now 'had enough' has a wholly new cover name called stress



and that hides behind an once taboo illness called "mental health issues". Forty years ago no-one would declare themselves to have mental health issues. Self diagnosis was not a done thing anyway! A record 13,263 police officers were signed off work last year due to mental health issues across England and Wales, according to a recent Police Oracle report. This compares to 8,450 in the previous year – a 57% increase.



So hopefully the police in Wales will find enough officers to drive their latest gimmick – examples of the three-wheel tuk-tuk vehicle from the Far East. The four tuk-tuks will be used during the day and night, driven by officers and 'ambassadors. They were rolled out in Newport and Abergavenny as 'safe spaces' for those residing or visiting Gwent are now available to provide crime prevention advice, report incidents to and seek help from if you are feeling unsafe.

The tuk-tuks will be used to patrol parks, walkways and other public spaces across the area.

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I am aware of several people who make it their lifes work to write to politicians while they are in positions of great status to offer them unsolicitated advice on how to their job. Unfortunately, in the current political situation in the United Kingdom those high flying politicians who seem to be getting on with the job quite well then suddenly resign before they are able to reply to the letters.

The latest passing was of the Home Secretary Suella Braverman. It seems she was doing very well until she decided to follow the lead of that great US politician Hilary Clinton and sent a file using her private email. Unlike Hilary she resigned immediately. It did not last long however as she is now back in post in the new administration so she may yet reply to that letter.

#### COMPETITION

A man from London has set himself the adventurous challenge of crossing the English Channel on a stand -up paddleboard to raise money for Cornwall Air Ambulance Trust (CAAT).

Charlie Beamish is taking on the task in November alongside his friend Major Jen Price, who is taking part in a series of 12 extreme endurance challenges across 2022, to raise money for the Veterans' Foundation. The distance is 25 miles as the crow flies, Dungeness to Boulogne-Sur-Mer, but they will be paddling just under this due to restrictions around crossing shipping lanes.

Charlie decided he would join Jen and raise money for Cornwall Air Ambulance, after a colleague's son was airlifted several years ago.

Harry, who was five at the time, was on a family holiday in Cornwall when a trip to the coast turned into a lifechanging experience.

He was excitedly heading towards Trevone Beach when he suddenly fell over the side of the cliff and six metres onto rocks below. Luckily, he landed on top of his bodyboard, but he suffered a serious head injury in the fall.

Emergency services were called to the scene, including the Cornwall Air Ambulance helicopter, which airlifted Harry to Treliske Hospital. He was later transferred to Bristol Children's Hospital for emergency surgery and further specialist treatment. Doctors told the family to prepare for the worst as they were unsure whether he would survive his injuries.

Harry underwent a four-hour operation, which his parents were told could leave him with cognitive issues or personality changes. He spent eight days in a coma and in the months that followed he had a titanium plate inserted to reconstruct the damaged part of his skull. Luckily, Harry has since made a full recovery.

#### A BK IS ALWAYS A BK

Thirty years ago, in September 1991, the British police were being demonstrated an example of the MBB BK117B2C (G-HMBB). More used to far smaller helicopters, most of the forces on the trial thought that the BK was way too large for them. Some of the forces included in the list might be written off as unlikely customers, a handful including Norfolk, Lincolnshire, North Wales, Kent, Avon & Somerset and Dorset, were unable to demonstrate any prior use of regular air operations, let alone sufficient funding to support such a large ten-seat helicopter. It was all fantasy stuff, but the world was ever ready for the most unlikely scenarios. Thirty years on, as the Airbus Helicop-



ters H145 the latest developed version of the BK117 is now the BK117D3 a sought-after police and air ambulance helicopter. Who would have thought that was likely?

#### **CHOOSE YOUR FRIENDS CAREFULLY**

I am pretty sure that most readers will be aware that Russia is in a bit of a pickle as far as weapons of war go. For a Superstate like Russia to have to buy in multitudes of drones from Iran suggests problems.



Now it seems they are accused of theft. Around one hundred speed cameras around Sweden have been stolen over the last few months, according to the Swedish Transport Administration. The same type of cameras have been seen in Russian homemade drones used in the war in Ukraine.

In a film published by the Ukrainian Ministry of Defence, a Russian drone that crashed in Ukraine is taken apart. In it sits a Canon camera attached with velcro to a small steel plate, the same model of the missing Swedish speed cameras, an £800 Canon EOS 800D DSLR equipped with an 85mm lens.

News reports highlight the fact that the thefts are taking place and that authorities in Ukraine are explaining them in such a bizarre manner. And that it is happening just as Russia is apparently being forced to improvise on the battlefield

to cover up for an outdated weapons arsenal. [UAS Vision/Aftonbladet]

#### **GOTCHA!**

That wish to fantasize about what the future may hold might then explain the actions of one reporter with the "prestigious" Mail on Sunday newspaper. He picked up a story he had heard first hand and reported the exciting news that the police in Avon & Somerset were actively pursuing the use of remotely piloted vehicles [RPV] in the furtherance of police duties.

Relying on this first-hand information, mention was made of the fact that the unidentified "doodle bug helicopter" cost £50,000 each and were to be used for controlling crowds. An Avon & Somerset spokesperson was found to provide an initial, non-committal, reply that suggested that the RPV story had some basis. Later, after the matter was properly investigated by the police, an emphatic denial was issued - all of which served to underline the clear secrecy involved in the project.

Coming to light immediately after a war in which the RPV and missile had played a major part, the story was quite plausible and little more than a few steps beyond the camera carrying aerostat. It was perhaps fortunate that not everyone was aware that over ten years prior the police in Manchester had asked the manufacturers of the unsuccessful Short SkySpy RPV for details of their craft.

The reporter was the victim of an innocent spoof. The bare bones of the story were made up by two police officers holding a private conversation about the relative merits of kit built model helicopters. One of the pair noticed that a man standing nearby was taking undue notice of their hushed discussion and, after alerting his companion, "improved" the content significantly. Once the unknown stranger was "hooked" embellishment was added wholesale and publication of the story was assured. The pair always maintained that they were unaware of the true identity of their uninvited audience.

Nothing changes, thirty years later we are still talking up BVLOS Drones.

## **ENGLISH CHANNEL UPDATE**

Whilst the numbers of migrants crossing the English Channel to enter the United Kingdom without permission, continue to rise, now more than 38,000 in 10 months, there have been significant political developments.

#### POLITICAL DEVELOPMENTS

First, the Home Secretary, The Rt Hon Suella Braverman KC MP offered her resignation to the former Prime Minister, Liz Truss and then, within a week, was reinstated by the new Prime Minister, The Rt Hon Rishi Sunak MP. In his acceptance speech, on the doorstep of No.10 Downing Street the new Prime Minister reaffirmed his commitment to border security, *"I will deliver a stronger NHS, better schools, safer streets, control of our borders....."* 

In his first speech, as Prime Minister, The Rt Hon Rishi Sunack MP reaffirmed his commitment to controlling the UK's borders.

Lingering in the background though are some mind boggling costs in providing the means by which the tide of humanity can be deterred from making the crossing of the English Channel.

In an earlier statement the Home Secretary Braverman also reiterated her commitment to border security, "The time for talk is over. We will only stop the boats crossing the Channel if we can actually pass vital legislation to limit the impact of Modern Slavery laws, the Human Rights Act and the European Convention on Human Rights. We will only have a sustainable solution if we have a good relationship with the French and the EU in cooperation across the Channel. We will only stop spending £6M a day [£2.4billion per annum] on asylum-seeker hotel accommodation if we have a co-ordinated and rigorous plan of delivery."

#### HOME AFFAIRS COMMITTEE

Coincidentally the Government Home Affairs Committee quizzed Home Office (Department for the Interior) officials at a meeting that took place on the 26 October. One of these officials was Mr Dan O'Mahoney who has the title, 'Clandestine Channel Threat Commander'. When asked how many migrants had arrived in the UK without permission, after crossing the English Channel in a small boat, his answer was 38,000 in 936 boats, an average of 41 migrants per boat. He then explained that the French were doing really well and had stopped 28,000 migrants and destroyed 1,072 boats.

However, when quizzed by a member of the 'Committee, Mr Tim Laughton MP, Mr O'Mahoney agreed that 28,000 could be 1,000 migrants who had made multiple attempts on 28 occasions, the previous day, the previous week, or even the previous month! The French do not arrest, detain or process migrants who are launching small boats from the beaches of northern France. Equally alarming is that the 'hit rate' by the French has actually fallen from 50% in 2021 to 42% in 2022, despite the financial support provided by the British Government.







#### FACTS AND FIGURES

According to Mr O'Mahoney the cost of patrolling the English Channel in the current financial year was £50M. This paid for 5 passenger carrying crew transfer vessels, in addition to the Border Force cutters and coastal patrol vessels, 2 small drones, a land based network of surveillance towers, together with a Royal Navy River-class offshore patrol vessel and a flotilla of Archer-class fast patrol vessels based at Ramsgate.

Mr O'Mahoney failed to mention the Coastguard patrol aircraft, a King Air and a Piper Navajo currently based at Doncaster, also, the Belgian registered Diamond DA62 MPP which is based at Ostend, but operates from Lydd in Kent. The lifeboats of the Royal National Lifeboat Institution (RNLI), particularly those based at Dover, Dungeness and Ramsgate, were not mentioned either. The true cost of the land, sea and air operations is, most probably, closer to £100M per annum. *Other support costs are more worrying.* 

Another alarming fact is that between 2020 and 2022 the number of migrants arriving from Albania has risen from 50 in 2020 to 800 in 2021 and this year, 12,000, of which 10,000 are single males. Albanian gangs are now known to have a foothold in northern France. When quizzed about how many applications for asylum had been processed, by the Home Office, the figures were equally alarming. In 2021 there were 96% of asylum applications awaiting completion. Of the 4% completed, 85% were awaiting a decision. A ridiculous low number, a 'log jam' on an epic scale! Even more alarming is the fact that the total numbers of migrant arriving has outstripped readily available hotel accommodation. The temporary detention facility at Manston in Kent, designed to house 1,000 migrants for 24 hours, for processing, currently has 2,500 detainees with one Afgan family living in a marquee for 32 days and other families living in buildings for over to 2 weeks. No prison in the UK is that big! The chief inspector of borders and immigration, Mr David Neal was so alarmed, he recently described Manston as, "*A really dangerous situation.*" So dangerous, that he immediately arranged to speak to His Majesty's Inspector of Prisons and also wrote to the Home Secretary.

#### **ENTENTE CORDIALE**

Border control in the UK is bad, very bad and the Home Office has been described as the most dysfunctional government department in Whitehall, in London. Nevertheless, the new Prime Minister has, within a week, had a conversation with French President, Emmanuel Macron and, in press release, stated, *"The Prime Minister stressed the importance for both nations to make the Channel route completely unviable for people traffickers. The leaders committed to deepening their partnership to deter deadly journeys across the Channel that benefit organised criminals. The Prime Minister and President Macron look forward to meeting soon, and to holding a UK-France Summit next year."* 



Within a week of taking office Prime Minister Rishi Sunak has spoken to President Emmanuel Macron. The leaders committed to deter deadly journeys across the Channel that benefit organised criminals.



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The author, Squadron Leader Tony Cowan MBE is a former RAF maritime patrol pilot and aircraft commander. Also, a former member of the North East Air Support Unit, a premier regional police air support unit which preceded the UK's National Police Air Service. He was also a pilot with the Scottish Air Ambulance Service.

Squadron Leader Cowan has, since 2018, advocated the use of joint Anglo-French land, sea and air patrols on the beaches of Belgium and northern France with light 'spotter' aircraft being used fly persistent air patrols within an 'air power' policy of 'deter and detect'.





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## UPCOMING EVENTS EUROPE

Next month **European Rotors**, returns to Cologne, Germany on November 8-10. An editorial in last months edition of Police Aviation News will serve to shoehorn you into the event... this month I have reports on several of the attending exhibitors.

Back in June this year you will have been able to visit with both Smith Myers and FlySight as they exhibited at the PAvCon Europe event in Austria. In recent days Smith Myers have announced that they are working with FlySight in a joint project.

**Smith Myers ARTEMIS** announces integration with **FlySight** Open Sight Mission Console software. The Global roll out of the ARTEMIS product suite focused on the SAR role continues with FlySight collaboration. You can meet with the Smith Myers team at European Rotors 2022, Hall K\_H8 / 1610 and FlySight also in Hall K\_08/1214.



The Smith Myers Artemis Mobile Phone identification, geolocation and communication sensor is now available as an integrated airborne search solution with Flysight Open Sight Mission Console software.
The agreement, announced ahead of the show, combines OpenSight-mc

The agreement, announced ahead of the show, combines OpenSight-mc and Artemis for deployment in SAR/ISR missions, where the augmented reality engine can be used to optimise search results.

Designed to work with any FlySight hardware options Artemis can detect a phone at extended ranges and provide unique capabilities such as massmapping and geofencing to minimise crew workload.

**FLYSIGHT** Artemis turns any mobile phone into a rescue beacon, only requiring two antennas to generate a latitude/longitude fix at up to 19 nautical miles (35km), offering a radical and effective alternative to traditional airborne sensors:

(35km), offering a radical and effective Texting and calls in no service areas

Possible automatic cueing of EO/IR (Electro -Optical/Infra-Red)

Deployment as a stand-alone with embedded mapping or integrate with leading mission system providers Making missions in low light/ IMC (Instrument Meteorological Conditions) safer and increasing the odds for a positive outcome

Available in several SWaP configurations for manned/unmanned platforms

The collaboration is the first between Italian-based FlySight and UK-based Smith Myers, both deployed with customers globally across SAR and ISR applications, across rotary and fixed wing aircraft. Artemis has been in active service saving lives around the world. The global customer base includes deployment with the Royal Norwegian Airforce for Search and Rescue duties with the Leonardo AW101 SAR, and has received many international awards, including the coveted Royal Aeronautical Society Silver medal.

A presentation of **expertise from** almost 50 years of air rescue, spanning helicopter maintenance, type ratings for pilots and hoist rescue – **DRF Luftrettung** will be showcasing its services at **European Rotors.** Along-side flight and HEMS operation, there will also be a focus on the options for corporate clients from the fields of technology and training.

DRF Luftrettung will be sharing details of how they are continuously driving progress in air rescue and implementing innovations. One example in the area of technology is the service bulletin retrofit to upgrade the BK117 D2 to the D3 (five-bladed H145), which DRF Luftrettung carries out in its own EASA Part-145 organisation. They have already performed five successful upgrades to the new five-bladed rotor system for their own H145 fleet since the start of 2021 and offer this service to external customers too.

#### Hoist rescue pioneers

DRF Luftrettung will also be highlighting another of its core competencies – hoist rescue – with an H145 with five-bladed rotor and hoist at its stand in Hall K-08. Whether for missions in mountainous terrain, populated areas or over water, the DRF Luftrettung Group can deploy a helicopter with hoist at nine HEMS bases. Pilots and trainers will talk about the challenges of hoist operation with specific mission profiles and in disaster situations and will explain how customers can benefit from the huge expertise of DRF Luftrettung, for example as part of individual hoist training sessions.





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**Heliservice,** a leader in Offshore Transportation, Hoist Operations, Helicopter Maintenance and HEMS, will be attending.

With their focus on offshore helicopter transportation, maintenance for Leonardo and Airbus helicopters and HEMS (Helicopter Emergency Services), and with their over 30 years of experience, HeliService is one of the world's leading helicopter companies in its segment. Transporting maintenance personnel by high-performance helicopters to Offshore Wind Farms offers numerous advantages: The transport by helicopter is vastly weather-independent, minimizes the considerable transport times of maintenance personnel and emits significantly less CO2 per passenger than if transported by vessels. Lastly helicopters enable reduced downtimes of Offshore Wind Turbines through a vastly faster and more reliable deployment of maintenance personnel. In our Offshore Business segment HeliService conducts Crew Change Flights and Helicopter Hoist Operations (HHO) in which passengers are hoisted directly to vessels or Wind Turbines.

HeliService has established Base Maintenance locations in the North of Germany, in Emden and in the South of Germany in Munich. In England they are looking forward to serving customers as of Spring 2023 out of Lincoln. With Taiwan and the US, they further expanding their maintenance setup. They will be able to offer Maintenance Services in the Taiwan and Quonset, Rhode Island next summer.

## UPCOMING

12 November 2022 American Heroes gathering of rotary wing airborne emergency services units at Hansen Dam Recreation & Sports Complex, Lake View Terrace, in the Central San Fernando Valley, Los Angeles. The free public event will run from 9am to 4pm on the day and offer helicopter from law enforcement, fire, EMS/ENG, military / DOJ and homeland security



organizations, Career & Recruiting Expo, local Search & Rescue teams, equipment displays, demos and family outdoor safety tactics, animal rescue and emergency / disaster preparedness. There will also be concessions, entertainment and aviation related vendors. <u>https://www.heroes-airshow.com/</u>

16-18 November 2022 NIST sUAS Standard Test Methods Proctor Training Course – Basic. Savannah, Georgia, USA Register on-line at <u>www.publicsafetyaviation.org</u>

5-7 December 2022 Tampa, Florida. The Airborne Thermographer Certification Course is an in-depth study of airborne thermal imagery use in the areas of tactics, technology and theory. The course offers certification as an Airborne Thermographer to qualified students who attend all 24-hours of training, pass the written exam and demonstrate proficiency on the use of a static airborne thermal imagery system. The Airborne Thermographer Certification portion of the course is presented by Mr. Brian Spillane, Teledyne FLIR, who is a Certified Thermographer Instructor.

