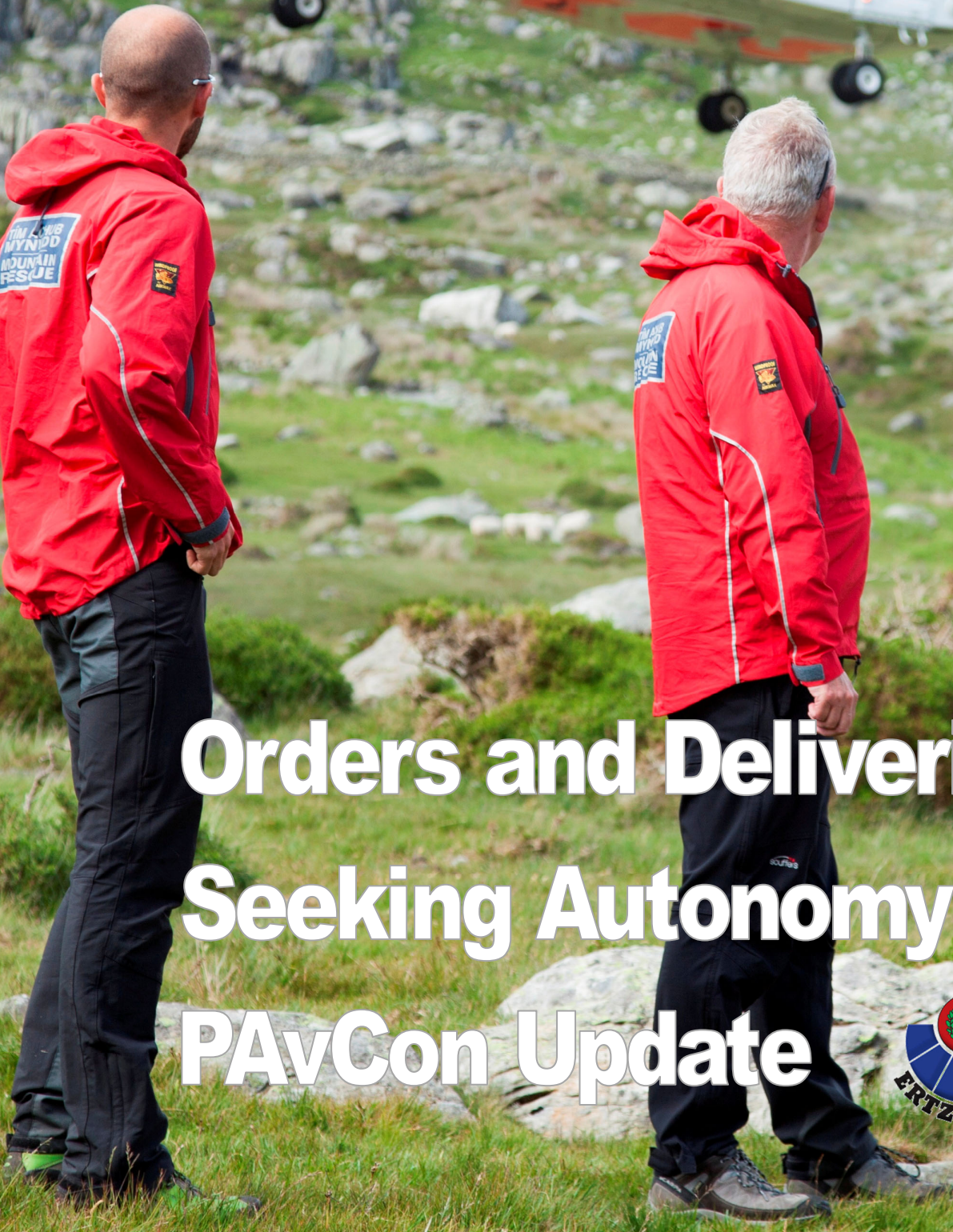


Police Aviation News

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Issue 323

March 2023



**Orders and Deliveries
Seeking Autonomy
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EDITORIAL

This issue continues the seemingly never ending theme of seeking drones capable of operation at Beyond Visual Line Of Sight (BVLOS) in the civil environment. It is coming, but so I am reliably informed, is Christmas.



The stories this month are a study being undertaken by the UK's NPAS and a further flight trial by the UK NHS. Much money is being expended on this highly elusive Holy Grail of Drone technology and much more money will be spent before a truly capable and socially acceptable, safe, BVLOS craft emerges.

The designation of BVLOS may be relatively new but the aspiration of the uninhabited 'pilotless' craft able to do all things without a great deal of human interaction (aka drone) is certainly not new.

Just a reminder of the technology and where it has been quite recently.

In its 2012 report on the Farnborough Air Show PAN exhibited its customary negativity on the 'Uninhabited Pipe Dream' as it was then claimed to be an imminent arrival. The lead aircraft at the time was the BAE Jetstream that was set to prove the all-important 'sense and avoid' technology any day now. That whole project has been quietly pushed into the background and BAE will not discuss it. Clearly it depends on what you call imminent.

In the same timeframe there was the BAE Herti UAV and the so called 'South Coast Project' to patrol the English Channel by means of an uninhabited converted glider - BAE stated that they believed they would have an unmanned craft over the 2012 Olympics. They did not. By then Herti and its larger stable-mate, the twin engine Mantis, had been pushed into the hangar at BAE Warton to gather dust. Herti, the only 'affordable' BAE project likely to be suitable for cash strapped police use, was deemed likely to just fade from view forever. It did, and the 'South Coast Project' went with it. The replacement is the more sophisticated and expensive Portuguese Tekever and that patrols the Migrant routes almost daily. So there was a perceived need for South Coast just no tools to undertake it.



Then there is the yet unanswered question about standards. Many drones are designed, built and maintained by people not certified to accepted aeronautical standards and often not using aviation certified materials. As these craft will be operating in the public domain has anyone yet considered whether they should be any less regulated than other aircraft in the skies. What happens if and when that bubble is burst?

So while PAN will continue to record and comment on the various trials and assessments of uninhabited craft of all types, consider the definite probability that the writer is all too well aware that what did not happen a decade ago is not likely to happen in the next ten years either!

Bryn Elliott



6 -7 June 2023

Bilbao Spain

COVER IMAGE: Signs are that Sikorsky may be giving up on the mighty S-92. It seems that no new airframes have been produced in the last 2-3 years due to the downturn in oil and gas. Replacement gearboxes are said to be difficult to source and other negative rumours. For the new UK Coastguard SAR operation only a couple of S-92s will be required, most of their role being taken by the AW189 and fixed wing. [MCA2015]

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LAW ENFORCEMENT CANADA

NOVA SCOTIA: On February 1 the National Police Federation submitted its pre-budget asks for 2023-2024 to the Government of Nova Scotia, recommending investments in key areas for Members and for the efficient and effective delivery of police services across the province.

RCMP Members in Nova Scotia are deeply committed to serving all Nova Scotians but Brian Sauvé, President, National Police Federation claims that years of underinvestment in the RCMP by all three levels of government have left Members facing unsustainable staffing, financial and equipment challenges.

In Nova Scotia, the lack of adequate resourcing is particularly felt in rural detachments across the province, where there are already fewer police officers. Compounding these pressures is the increasing demand for policing services, in many cases that extend beyond the traditional mandate of policing, such as responding to mental health calls.

The NPF has recommended that the authorities prioritize increasing officer resource levels to address resourcing gaps across the province, discontinue the use of the "per officer" funding formula for billing for RCMP services and conduct a review of the policing resource models to ensure effective and efficient policing across the province, support municipalities to maintain an ideal police strength.

Further they should implement an Emergency Air Support Strategy for the Atlantic provinces and urge the Government of Canada to develop and implement an strategy, to ensure that air support is available to all police services in Atlantic Canada.

The National Police Federation represents 20,000 RCMP Members serving across Canada and internationally. It is the largest police labour relations organisation in Canada: <https://npf-fpn.com/>

GERMANY

BAVARIA: Airbus Helicopters have developed a new configuration for examples of the H145 for law enforcement operators. The first domestic customer for the model is the Bavarian Police. Eight five blade H145s were ordered in December 2021. The helicopters will replace the state's current H135 fleet and will be operated by the two bases of the Bavarian helicopters squadron at the airport in Munich and in Roth, close to Nuremberg. When announced in 2021 it was stated that the first delivery was planned for this year but Flight Global has since suggested that it will now be next year.



Airbus H145 with illuminated MRB [Airbus]

Airbus Helicopters has a number of safety and operational improvements for its H145 light-twin in the works, including a new law enforcement kit that will enter service next year. Developed for the police service of Bavaria, the unique configuration features illuminated main rotor blade tips – incorporating lighting suitable for night vision goggle use.

BUNDESPOLIZEI: The Federal Police Air Support Unit is using the PHOENIX Web Innovation system to support their operational planning. The system was developed by DFS Aviation Services GmbH.

The system's cloud-based radar display has been used in the Federal Police Air Support's five operation centres since 2021. Thanks to the cloud-based and location-independent radar display PHOENIX Web Innovation, reliable air situation information in air traffic control quality can be called up at any time and nationwide, facilitating the stationary and mobile operational planning of the German Federal Police.

Through this innovative tool, police personnel have access to precise position data in real time for all IFR and VFR air traffic as well as their own helicopters, based on modern radar technology.

The German Federal Police Air Support Group has four helicopter squadrons located throughout Germany and carries out flight operations to support everyday Federal Police tasks. This includes, in particular, border, rail and maritime surveillance. The operation of civil defence helicopters completes the daily tasks of the Federal Police Air Support Group. [DFS Aviation Services GmbH]

HESSEN: An unexpected visitor to Bautzen Airfield, an hour east of Dresden, on February 2 was the almost new Beechcraft King Air 250 D-CHEB 'Ibis 8' of the Hessian State Police.



There are few fixed wing aircraft in use in Germany these days a couple of Cessna singles operate in North-Rhine-Westphalia, mainly in training roles, the earlier 2012 purchase of a Vulcanair P68 by Hessen was followed by this new airframe delivered in August 2021. While the P68 regularly undertakes surveillance the King Air is primarily a transport aircraft undertaking prisoner and executive transportation. [Johannes Herrmann - Facebook]

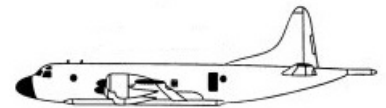
Editor: At the end of September 2020 PAN reported that a six million Euro contract for a twin engine police aircraft was issued to Atlas Air Service AG, in Gandersheim, Niedersachsen. The tender was for a 9 seat police aircraft with 2 propeller turbine engines and capable of flights in known icing conditions. Until it was delivered the type remained generally unknown.

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HAITI

NATIONAL: The Canadian government is escalating efforts to help Haiti’s national police, deploying a long-range military aircraft to provide intelligence on the country’s menacing gangs. The Royal Canadian Air Force aircraft, a CP-140 Aurora four-engine anti-submarine patrol aircraft, was observed in clear view patrolling Haiti’s airspace.



Last October, Haiti’s Prime Minister Ariel Henry made a formal appeal for the deployment of a specialized international force to assist the overstretched Haiti National Police confront increasingly powerful gangs that now control most of the capital. Although the request was supported by the United Nations secretary-general and the United States, political reasons meant they did not want to be directly involved. As a result, the country was visited a couple of times in the intervening months and Canada slipped into the role.

Some 78 police officers have been killed, most of them in gang ambushes, since Henry took office in July 2021, the Port-au-Prince-based National Human Rights Defense Network said. Fourteen of the deaths occurred last month, the deadliest month for the force in recent memory. The deaths were the latest blow to a force already suffering from high-rates of attrition and low morale as they increasingly become targeted by heavily armed kidnapping gangs. [Stars and Stripes]

Ed: In 1984 it was reported that the government had a number of police suitable types, but no link has ever been made to these being used by law enforcement. A few aircraft have been noted in use by the security forces but it appears most of these were short-lived due to poor support.

Haiti has no army or border guard to patrol the 225-mile frontier with the Dominican Republic. At best, a couple of police officers are sometimes on hand at the four legal crossings.



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ITALY

GUARDIA DI FINANZA: Guardia di Finanza (Italy's Police Force, dealing with economic and financial matters, and the only maritime police in Italy) opened its Air-Naval Operations Simulation Centre at Pratica di Mare Air Base (Rome) early last month.

The new centre was developed by Leonardo from 2020 to meet customer requirement of introducing Guardia di Finanza air crews to the most advanced and innovative technologies in the air-naval simulation field.

The new centre, Unique in Europe, integrates advanced network simulation systems at a single location. The simulators mirror Leonardo's helicopters and airplanes, which have recently been acquired by Guardia di Finanza and used for a range of operational roles and on-board mission systems used for surveillance. These add to a scenario simulator which is able to virtually generate the environment where platforms and personnel collaborate on a single mission, a vessel instrument panel simulator which also introduces ships in a maritime environment – developed in collaboration with Cetena (Fincantieri) – and a ground-based command centre that coordinates the operations.

The AW169/AW139 helicopters and P-72B aircraft all-new 'mini motion' simulators, designated Enhanced Training Device (ETD e-Motion), reproduce performance, avionics and cockpits with high fidelity, and are able to deliver an adequate physical feedback to the crews, thanks to the platform integrated actuators. Pilot training is complemented by rear crew training for those using the Leonardo ATOS (Airborne Tactical Observation and Surveillance) mission system for the Leonardo AW139 and ATR P-72B as well as cabin hoist operations thanks to an immersive



virtual reality for SAR missions. Last July the Guardia di Finanza took delivery of its fourth example of the ATR 72 based fixed wing twin.

The EASA approved centre is located at hangar 'L' at the Air Base, and is fully integrated into the Leonardo helicopter Training Academy's global network. [Leonardo]



KENYA

NATIONAL POLICE SERVICE: President William Ruto is under pressure from the National Police Service (NPS) to revoke his predecessor Uhuru Kenyatta's directive on police helicopters.

Police bosses want to regain control of their fleet, a mandate which Uhuru transferred to the National Air Support Department (NASD) under Kenya Air Force. On February 2, the Independent Policing Oversight Authority (IPOA) informed the former Chief Justice David Maraga-led taskforce that they were not receiving enough services since the fleet was transferred to the military. They are also seeking to regain control of unspecified items of aviation equipment lost to the air force at the same time.

The directive rendered over 50 trained police pilots jobless. In August last year, NASD revealed that it had successfully repaired two Cessna 208 fixed-wing planes and four AB206s helicopters belonging to NPS. More recently it has been stated that before air wing operations were transferred, NPS had 13 planes which were serviceable but had remained with only one that is operational. Twelve are grounded with no plan to repair them.

The Inspector-General, backed by senior officers, put up a spirited fight to convince the task force to allow the police to gain full control of the Police Air Wing, arguing that the NPS has not received proper services as anticipated.

The prison service also claims that it lacks planes for emergency operations despite having qualified personnel, some of whom were seconded to the Police Air Wing. [Kenyans]

Editor: The NPS lost control of its air wing two years ago through an Executive Order of the National Se-

curity Council that placed it under NASD, a department within the Ministry of Defence. The department was mandated to manage the operations and maintenance of all aviation air assets owned by all government ministries, departments and agencies, including the Kenya Wildlife Service, the Kenya Electricity Transmission Company Limited, the Kenya Forest Service, the Kenya Pipeline Company Limited, the Ministry of Health and the Department of Resource Surveys and Remote Sensing.

MAURITIUS

POLICE: Domestic Indian manufacturer Hindustan Aircraft (HAL) has delivered an Advanced Light Helicopter Mark III to the Mauritius Police Force (MPF). The contract was signed in January 2022.

Mr Nikhil Dwivedi, General Manager, Helicopter Division handed over the Certificate to Mr A K Dip, Commissioner of Police, MPF in the presence of Mr E P Jayadeva, Director (Operations), HAL, Mr S Anbuvelan, CEO (HC) and others.



Hindustan

The addition of the new helicopter will enhance the aerial capabilities of MPF. HAL would provide all the necessary technical, logistic, and maintenance support for the helicopter. ALH Mk III is a multi-role, multi-mission helicopter in 5.5 tonne category. More than 335 ALH has been produced to date. [HAL]

SLOVENIA

POLICE: Announced at the time of the 2022 PAVCon Europe Police Aviation Conference in Austria, the Republic of Slovenia has taken charge of the latest systems upgrade on its EC135.

Airborne Technologies (ABT) who again undertook the work are now understandably pointing out that it appears 'Once You Go Airborne LINX, You Never Change!'

The overarching Airborne LINX Mission System unites a complete surveillance suite into one design. Along with this, the new ABT Mission Management Unit allows the operator to control the entire architecture on a simple-to-use touchscreen to maximize productivity and effectiveness for highly demanding operations.



ABT



SPAIN

TRAFICO: There are unconfirmed reports that Spanish Directorate General of Traffic (DGT) operating as DG Trafico are seeking to alter the manner of their operation. Although it has so far not been possible to trace such a tender, it is suggested that they are to seek contract pilots to replace those currently directly employed and trained.

The Spanish roads are patrolled by helicopters and light drones. The primary purpose of the operation is detecting and enforcing speeds on main roads in Spain to which end thousands of errant drivers are fined each year. It is a law enforcement agency but in being focussed entirely on traffic matters not seen by many to have much in common with the police.

Over a decade ago, DG Trafico became the first government agency to fit speed cameras on helicopters, the L3Harris Wescam MX-15, for the purpose of issuing automated tickets from the sky. They have been experimenting with drones for a few years now, a primary aim being lowering the cost of airborne speed enforcement. Aside from a high initial purchase price, the hourly cost of a helicopter is massive compared to the purchase and running costs of a small drone. Bringing in drones did however increase the number of staff, 35 drone pilots and 60 camera operators, although they tended to be individually less costly. The last major helicopter fleet renewal was around 8 years ago and there are several others now seen to be nearing the end of their useful life.

It will be no surprise that neither the initial DJI fleet or the larger successors were robust enough to meet an ability to carry speed measuring equipment sophisticated enough to act as a direct replacement for the capable MX-15. The drones were initially used to stream video that proved other less technical offences including illegal overtaking and driver use of cell phones. In 2020 the DGT deployed 11 drones to monitor motorists in Spain. The trial was such a success that the following year they added 28 drones to their fleet as a back up to the dozen helicopters. The only regions that did not use the drones were Catalonia and the Basque country as they are devolved from the mainstream.

In a measure seen as an attempt to drive down costs Trafico have tested the Tecnam light twin aircraft, although the type does not seem to have been adopted. The Tecnam has two 100hp piston engines, offering a six hours/1,000 km range with a fuel consumption of 34 litres per hour from 200 litres of onboard fuel. As far as is known the DGT says it has only made test flights in the last couple of years and has not issued any citations using the aircraft.

The Tecnam airframe used was not modified for police use, a manufacturers demonstration aircraft came equipped with its standard role fit of a multisensor system called MRI (Multisensor Recognition and Identification) developed by Indra, which includes radar, television cameras and infrared. This aircraft has already been used for border surveillance by the European Border and Coast Guard Agency (Frontex) and the Guardia Civil with mixed opinions mainly focusing on its compact size.

Where the Seaspray 5000E radar can locate targets on the ground and in the air but would probably be inappropriate for the traffic role. The EO/IR camera tested on the trials airframe was a Teledyne FLIR UltraForce 275 HD, which can provide a high-definition television image and is ITAR free.

UNITED KINGDOM

NATIONAL: Last month Flight Global announced that UK military procurement officials are facing awkward questions over acquisition policy after it emerged that a small fleet of Airbus Helicopters H135s purchased as replacements for the British Army's elderly Aerospatiale Gazelles used in Northern Ireland has been mothballed before ever seeing active use.

In October 2021, the Ministry of Defence (MoD) awarded Airbus Helicopters a contract for the procurement of five H135 light-twins. They were delivered in 2022. The five have never seen operational service and are instead being placed into long-term storage due to the improved security situation in Northern Ireland which has removed the requirement for military helicopter flights.

Flight state that Defence officials are now considering a range of options for the H135s, which could include a sale or lease back to Airbus Helicopters or a transfer to the National Police Air Service (NPAS), which already operates earlier model H135s. The cost of the H135 purchase has not been disclosed, nor if they have had any mission equipment installed that would make them suitable for immediate donation to NPAS. [FlightGlobal]

Ed: The NPAS conjecture in this article is unexplained. These are military airframes. In a later written statement in Parliament Alex Chalk, Minister of State, Ministry of Defence, informed the House that 29 UKMFTS H135 (Juno) aircraft are maintained and operated from RAF Shawbury (on training). Four other H135 aircraft are stored at RAF Shawbury with a fifth H135 aircraft located at the Airbus Helicopter UK facility at Kidlington.

NPAS: Early in February details of a tender for technical analysis and consultancy relating to future NPAS services was announced on the Construction Index website.

The origin of the presumed 24-month, £400,000 initial request was BlueLight Commercial, the Birmingham based organisation overseeing NPAS purchasing needs.

As previously reported NPAS is reviewing the feasibility of being able to deliver police air support across England and Wales via a combination of Rotary Aircraft, Fixed Wing Aircraft and drones. It is envisaged that drones operated beyond visual line of sight (BVLOS) will be required, they must have the ability to carry multiple payloads of significant weight and with an endurance which permits the completion of typical NPAS operational taskings,. The initial requirement of this project is to conduct a review of a draft NPAS police air support delivery/deployment model. This will aid the understanding of demand and how and where RPAS with BVLOS capability could enhance service delivery as part of a blended fleet.

An initial analysis of historical NPAS operational data will be presented to the preferred bidder (selected through this tender) by NPAS. This data will be overlaid with the performance parameters of potential RPAS capabilities. The result of this exercise will be a list of recommended locations from where future RPAS operated BVLOS could be based. The preferred bidder from this tender process, will then be required to examine the recommended site/area information. Bids close on March 14.

Ed: The project appears to be the creation of a plan of where to place the drones based on 2023 information. However as there is no specification for such a craft in place, or an existing craft that might easily meet the (unspecified) technical needs of such a BVLOS drone.

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This appears to be very much a further case of wasting money in the immediate term, but it might serve to highlight some of the difficult and more expensive elements that an apparently simple BVLOS drone will entail.

Overall though the most difficult to absorb may be financing the level of staffing required and the probable need for secure satcom communications to safely operate a drone at low level any distance from its base. As indicated in the recently published National Strategic Board minutes of a year ago, the organisation knows that no organisation is close to achieving approval from the regulator to operate BVLOS drones in unsegregated airspace. They knew back then that the regulator has not been provided with the level of safety mitigations deemed necessary to advance beyond segregated airspace. But, as ever, PAN had to outguess them.

Any masochists among the readership might want to get up to date with the minutes of the National Strategic Board. Unannounced, six editions of the 2022 minutes have recently appeared on line on the NPAS website. No real surprises in among the text but even back a year ago there was some concern expressed about crew fatigue (as PAN highlighted last month) and the great difficulties being faced in allowing West Yorkshire to divest itself of NPAS. Still no annual report appearing though, although the minutes state that they agreed to produce one last May! www.npas.police.uk/about-us



NPAS SOUTH WEST

The NPAS South West base at the former RAF St Athan in Wales has had a minor upgrade in recent weeks. The base previously consisted of offices in a former house, with an adjoining hangar. There is now a new single storey building extension linking the main building to the hangar [Social Media].

CHINESE DRONES: In terms of world news, the last month has been largely taken up by the Chinese. In addition to the spy balloons that might not have been spying, the will they wont they on supplying arms to Russia, it seems that someone has decided that the high percentage of China manufactured DJI drones in service with the British police is a major security risk.

More than two thirds of drones operated by police forces in the UK are made by DJI a Chinese company that is blacklisted in the USA according to a newspaper report. Other sources are also highlighting the presence of a range of CCTV cameras in and around the police environment in general.

Worries have been expressed about the capability of the drones to take images when not commanded by the operator. The drones do report technical features of their activity back to the manufacturers and they are legally bound under Chinese law to make this available to the security services.

Ed: Strange that it has taken the detectives at Scotland Yard and many other centres of detective excel-

lence so many years to realise that each drone with 'Made in China' on was actually made in one of the two countries that are likely to be the combatant enemies of the future. The other being Russia of course. So the question perhaps we might consider that someone with an ounce of sense might have done a risk assessment on the likely effect of the Chinese Government being in possession of every scrap of information sucked into the average police DJI craft. We might then question the worry. What likely gain might the Chinese get from endless images of green fields as the operator's train, the interior of the occasional dark building search, Mrs Browns untidy front room and kitchen as they check for Mr Brown armed with a knife. The assessment must be whether any of this dross, and more, is likely to keep the Chinese analysts on the edge of their seat.

UNITED STATES

CALIFORNIA: The furore raised by activists over law enforcement air operations around Los Angeles continues. The activists continue to claim that law enforcement helicopters routinely buzz around Greater Los Angeles but, in certain racially sensitive areas, fly in low and loud.

Last month the claim was that this only happened in areas where black, brown or poor families lived. Now that claim has been moderated to state that this was occurring where the areas have a higher proportion of black population. Far from it being a majority of the population being black it now seems that only 40% is enough to prove the adverse (racially biased) activity by police.

The activist groups are now suing the Los Angeles County Sheriff's Department because it has not released records about its helicopter fleet for more than six months. As they do not have these missing number it is 'keeping researchers from better understanding the effects of helicopters on the health of county residents.'

The activists are seeking the fleet's tail numbers, as well as information about how many people work on fleet maintenance and within the department's Long Beach based Aero Bureau. The request was made last July but as not yet been met. In short, they seem to be admitting that they are making specific allegations now when not yet in possession of the full facts.

The median elevation of helicopters was below 1,000 feet, the "minimum safe altitude" for congested areas is set by the FAA. LAX Class B airspace, the two areas outlined in red are Area 1 with a ceiling of 900' MSL and Area 2 with a ceiling of 500' MSL. Area 1 includes Watts. Area 2 is South Central LA. The 500' ceiling puts police aircraft us at 300' AGL. [Media/Facebook]

It is a story that never ceases to thrill! Take a company that is not doing much, make a sale and then tell the world about every nuance! Finally, it seems that MD Helicopters (MDH) handed over the first MD530F N681HB to the Huntington Beach Police Department (HBPD) in early February. The delivery of the first of three MD 530F helicopters to HBPD was at a special ceremony at the MD Helicopters factory, Mesa, Arizona, before the helicopter was flown to its new home in Huntington Beach, California. I suspect that, in the absence of any more positive news for MD, the next two deliveries will be promoted at every turn!

Each HBPD MD 530F helicopter is custom configured with a full law enforcement package, crash resistant fuel tanks, and an advanced NVIS interior designed to enhance safety during night time patrol, surveillance, and tactical operations. Their upgraded glass cockpit avionics feature the Garmin G500TXi Electronic Flight Instrument System (EFIS), Howell Instruments Electronic Engine Instruments and Crew Alert Systems (EICAS), and Garmin GTN 750 Touchscreen NAV/COM/GPS.



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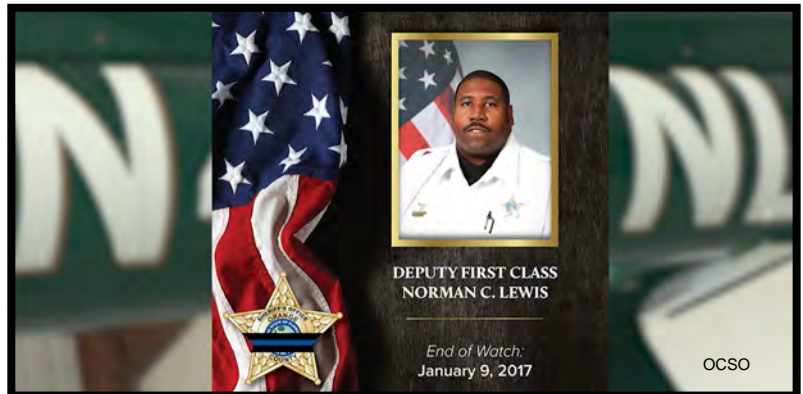
OCSO

FLORIDA: Following an extensive reconfiguration and customizing AeroBrigham, Orange County Sheriff (OCSO) based at Orlando Executive Airport has brought into service a Bell 407 registered N407 NL.

Delivered over two months ago the Bell role fit was undertaken at AeroBrigham main facilities on the Decatur Municipal Airport just north of Dallas/Fort Worth, Texas. Among the many features of the OCSO aircraft is the installation of a HeliSas autopilot, extensive Garmin avionics to include a HTAWS, VisLink HDX 1100 Downlink System, L3 Harris MX10 Thermal Imaging Camera, TrakkaBeam A800 Searchlight, Spider Tracks X Aircraft Tracking and Flight Data Monitoring System, SHOTOVER ARS-700C Moving Map System. An extended instrument panel was installed to accommodate the law enforcement configuration.

AeroBrigham expanded their capabilities last month when they added a 45,000 square foot hangar on the Decatur airport. The current facility will be dedicated to fixed wing support, while the new facility will be utilized solely for helicopter support and will include modern aircraft paint capabilities. [AerobBrigham/OCSO/HeliHub]

Editor: The aircraft registration, N407NL commemorates the service of OCSO Deputy Norman C Lewis who died on January 9, 2017. He was a motorcycle cop who died in a road traffic crash whilst searching for the killer of a colleague.



OCSO



OCSO

AIR AMBULANCE

CANADA

ONTARIO: A new ground level helipad at Bluewater Health in Sarnia, a city in Lambton County, and the largest city on Lake Huron has already been used a handful of times by air ambulance helicopters transferring patients to Toronto and London since it was approved for daytime use in November last year.

The helipad project was launched in 2017, with the county providing \$400,000 of the Bluewater Health Foundation's \$912,000 fundraising target, build the helicopter landing pad on land where a high school track and sports field once sat along East Street, just across a parking lot from the hospital. Construction was completed in October. Other major donors included the Charlotte Eleanor Englehart Hospital Foundation in Petrolia, that gave \$100,000, and funds raised by the current Dream Home Lottery.

The hospital is now waiting for additional approval from Transport Canada for night landings and take-offs and full 24-7 flying.

Many parts of rural Canada rely on air ambulances flown by licensed helicopter pilots, but the number of helicopter pilot licences being issued by Transport Canada has been declining over the last decade — raising concerns over what that means for air ambulances services. Transport Canada issued 62 helicopter pilot licences in 2012. But in 2022, that number dropped by 80 per cent to just 12. The drop in the number of licences could be due to several factors including retirements and the lack of new blood being attracted into aviation.

IRELAND

CORK: An Airbus Helicopters EC135, believed to be the Eurocopter EC135T2 Serial 0175 formerly registered *G-NHEM* most recently used by UK Air Ambulances AANI (Air Ambulance Northern Ireland) has been sold by Babcock International at Staverton, Gloucestershire and is now registered in Malta as 9H-SEC. It appears to be the new contract air ambulance in Ireland provided by Qormi, Malta based Gulf Med Aviation. It departed Staverton on February 7 en-route to Waterford, in Ireland. After stopping off there, it landed at Cork, the base for the air ambulance.

In addition, the Airbus Helicopters EC135T3 G-TVAL formerly operated by Thames Valley Air Ambulance is now sold to Malta . It was de-registered on 2 February 2023 and now wears the new registration of 9H-SEB. A photo of 9H-SEB appears on "Airliners.net" website shows that the airframe was photographed at Malta International Airport (Luqa) on January 27 wearing "National Air Ambulance" titles on the side and still retaining the Thames Valley colours.

The air ambulance was set up by the Irish Community Rapid Response (ICRR), a Cork based charity that struggled to raise enough funds to undertake the helicopter mission it set up in 2019 as the Irish Community Air Ambulance. The population in Ireland is just 5 million and arguably insufficient to assure gifted income. As a result the Irish government were somewhat reluctantly obliged to help out with the frequent funding issues.

Eventually this new arrangement, the "National Air Ambulance" was arrived at where the government in the form of the Health Service Executive (HSE) took over sourcing the helicopter and the charity continued to raise funds, apparently returning to supporting its original ICRR mission profile of funding land based paramedics. This led to the existing contract with Sloane Helicopters being replaced by a new one with Global in Malta. That contractual matter is an ongoing dispute between Sloane and the HSE. [JP/MJ/2022/S 241-695135]

Ed: Global operate five EC135 on HEMS contracts in Malta, the Middle East and now Ireland. Currently the two serving Malta as the Gozo Air Ambulance Service, are 9H-GMD and 9H-EMS. Global undertake a range of other onshore, offshore contracts mainly in and around Africa with AW139 and Bell 412 aircraft.

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ISRAEL



An air ambulance operation has been set up to provide emergency service to the north, centre and south of the country by United Hatzalah of Israel. The 24/7 operation has three Lahak Aviation MBB-Kawasaki BK117A-4 helicopters and 30 paramedics.

The helicopters have been role equipped by the Swiss company Bucher Industries and are equipped with the latest medical fit. [Helihub/UHI/Lahak]

SPAIN

CENTRAL: Babcock MCS España has retained the EMS contract for the Spanish province of Castilla-La Mancha in central Spain for the next four years. The company will continue to provide two Airbus H135 and two H145 helicopters from bases at Albacete, Toledo, Ciudad Real and Cuenca. Contract value is around €43M. Two of the four aircraft included in the agreement are required to be available 24 hours a day, and a total of 1,600 flight hours per year is expected.

The operational team consists of 24 pilots, 10 mechanics, 23 doctors, 16 nurses and five meteorologists. The Air Health Transport Service was launched in October 2001. Since then Babcock Spain has operated for more than 20 years.

UNITED KINGDOM

CORNWALL: More UK air ambulance operators have been reciting their operational statistics in the past month. The latest in Cornwall based in the extreme west of England at Newquay Airport.

It has been a busy year for the Cornwall Air Ambulance crew who were tasked to 1,050 incidents during 2022. New figures released by the charity show **462** of these missions were to people injured in trauma-related incidents and **254** were in response to medical emergencies. The team of Critical Care Paramedics were called out to **330** cardiac arrests across the year.

2022 was also the second year that the crew have carried blood products, with 14 blood transfusions being carried out. Seven of these were on the aircraft and seven via the rapid response vehicles.

DORSET & SOMERSET: The HELP Appeal, which is the only charity in the country dedicated to funding lifesaving hospital and air ambulance base helipads, has donated £26,787 to Dorset and Somerset Air Ambulance, for new runway lights, helipad lighting and a new windsock at its Henstridge Airfield base. The air ambulance, Helimed10/HLE10, operates a Leonardo AW169 helicopter.

The new lights, due to be installed in recent weeks, will provide a big improvement in both reliability and performance over the previous system, whilst making night operations safer and more efficient. They will also help the life-saving service as they look to increase their availability in poor weather with a GPS based approach to Henstridge, a former naval base located 7 miles west of Shaftesbury, Dorset and 12.4 miles east of Yeovil, Somerset in South West England.

The lighting of helipad and runways is a regulatory requirement by the Civil Aviation Authority for when flying night missions, signifying the importance of these improvements to Dorset and Somerset Air Ambulance which currently operates 19 hours every day (07.00am - 02.00am).

ESSEX & HERTS: Essex & Herts Air Ambulance have announced that Aeromedical conference will return on Wednesday 7th June 2023, at the Ford Dunton Technical Centre.

More details will follow soon, but for now you can register your interest in attending Aeromed 2023 Official registration will open in March. If you have any questions or are interested in exhibiting at the event please email aeromed@ehaat.org

Ed: Not for me this year, the date clashes with the PAvCon Europe event in Bilbao, Spain.



Despite having a new multi-purpose operational and visitor facility at North Weald airfield the charity continues to make use of the Ford facility at Dunton for its conference. [PAN photo]



MAGPAS: The Huntingdon, Cambridge based air ambulance hosted Her Royal Highness, The Princess Royal at the build site for the Magpas Air Ambulance new airbase late last month.

On February 10 Magpas Air Ambulance staff, clinicians and former patients welcomed HRH to the site, to unveil a cornerstone for the new building which is mid-way through construction. The event, sponsored by Leonardo and supported by Special Aviation Services, had been postponed from September due to the funeral of Her late Majesty The Queen.

The new, purpose-built airbase and headquarters at Alconbury Weald—being delivered by Lindum Group—will boast a dedicated state-of-the-art training centre to train the next generation of pre-hospital emergency doctors and paramedics; be equipped for 24/7 operations with well-being and rest facilities for crew and clinicians; and provide new community and patient facilities on site.



The charity's new home is situated closer to the region's major trunk roads, which will reduce vehicle dispatch times by up to 15 minutes. This improved location that allows co-locating the charity's operations and support staff—who currently work across two sites—will be more efficient; reducing charity overheads and improving environmental impact.

SCOTTISH CHARITY: Demand on Scotland's Charity Air Ambulance (SCAA) continues to grow as the service records its busiest ever year. 2022 saw the country's only charity air ambulance service respond to 967 call outs from its bases at Perth and Aberdeen airports – a 19% increase on the previous year. This service sits alongside the local NHS Government funded Scottish Air Ambulance operating two H145 helicopters and King Air fixed wing provided by Gama Aviation.

Figures just released show that during 2022, the charity airlifted more patients than ever before to often-critical hospital care (+8%). And with traumatic injury cases continuing to dominate SCAA's workload (38%), nearly two thirds of all airlifted patients were flown to the country's four Major Trauma Centres at Aberdeen, Dundee, Glasgow and Edinburgh.

Using both helicopter air ambulances and Rapid Response Vehicles at both bases, SCAA has seen a sharp increase in the number of emergency call outs to road traffic collisions (187). In 2022, these accounted for more than half of all trauma cases and showed an increase of 39% on the previous year. Other trauma emergencies attended included falls (94), industrial accidents (26) and equestrian-related injuries (21).

Throughout the past year, SCAA's helicopters airlifted advanced medical teams directly to the scene of 134 emergencies, delivering critical care as quickly as possible to those most in need.

SCAA was also deployed on often life-saving missions to a record number of cardiac (+35%) and stroke (+73%) patients last year where speed proved critical.

Over 130 vulnerable patients were transferred from remote or island communities to advanced mainland hospital care throughout the year, saving the alternative lengthy road and ferry journeys.

In 2022, SCAA also saw the number of hours flown by Helimed 76 (Perth) and Helimed 79 (Aberdeen) to missions in every corner of the country increase by more than seven per cent, with over 700 hours in the air covering nearly 92,000 miles.

SHEFFIELD: Sheffield Children's has received planning permission to start the build of a helipad at Sheffield Children's Hospital. The new helipad, approved at Sheffield Children's Trust Board at the end of January, has been granted planning approval by Sheffield City Council and will make sure children and young people can access emergency care with dignity, as safely and as soon as possible.



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Sheffield Children's Hospital is the designated Major Trauma Centre for children in South Yorkshire and Bassetlaw and beyond, meaning it helps patients requiring urgent care from around the region. Currently, only some air ambulances can land at Weston Park opposite the hospital and at certain times. This restricts its use particularly in the winter months, with some HEMS not feeling safe to land due to the inadequate landing site. At the current site the patient has to be met by Sheffield Children's specially trained Major Trauma team and transferred across a busy main road to the Emergency Department.

The project has received support from the HELP Appeal, grant making bodies, patients, families, colleagues, corporate partnerships and a whole host of charity supporters, having already raised a huge amount of money, close to the £6M target.

SKY ANGELS: It is perhaps a storyline that is one month early, April 1 being perhaps more apt, but one of the smaller UK air ambulance charities sought to grab the headlines with a story that it was intent on ordering PAL-V Flying Car for its operation.

SkyAngels based at Norwich International Airport has been fund raising for a fleet of Piaggio Avanti fixed wing air ambulance for a while now so the announcement that it wishes to invest in the future with the PAL-V Liberty, a combination of a three-wheeled car and an autogyro, or gyroplane under development by PAL-V of the Netherlands appears not to include the prospect of an imminent delivery.



SkyAngels has come to an agreement with PAL-V in an air ambulance first for a paid provisional reservation and option to purchase - subject to the PAL-V meeting unstated mission requirements of course.

Assuming that all the certification hurdles are overcome, Sky Angels state that the PAL-V flying car will operate as a fast response flying vehicles. Flying / driving advanced paramedics and doctors to the scene faster. This is the first of a potential order of ten for the UK. [Sky Angels]

Ed: The PAL-V Liberty is a gyrocopter with rotors which unfold from its roof for flying, then becomes a car for road use. PAL-V stands for 'Personal Air and Land Vehicle'.

The company opened a new base at London Oxford Airport late last year. The craft seats two people in a fully enclosed cockpit. It can transition between road and air transport modes inside six minutes with its rotors secured into the vehicle. www.pal-v.com Whether there is sufficient funding for full public transport certification of this craft is another matter.

According to the UK Charity Commission, SkyAngels Air Ambulance was formed to provide the United Kingdoms with its first national air ambulance fixed-winged aircraft service, an extra air ambulance option bringing the UK in-line with all other developed countries. At present it works with regional airlines to help transfer patients by air with medical escorts. In 2021 Sky Angels had income of £66,000.

THE AIR AMBULANCE SERVICE: Air Ambulances UK (AAUK), the national organisation championing, supporting and representing the lifesaving work of the UK's air ambulance charities, has welcomed its newest member The Air Ambulance Service (TAAS).

Since starting in 2003, TAAS now operates the national Children's Air Ambulance and two local air ambulance services, the Warwickshire and Northamptonshire Air Ambulance (WNAA) along with the Derbyshire, Leicestershire and Rutland Air Ambulance (DLRAA). It has two AgustaWestland 109SP helicopters that, in 2021, flew 1,559 missions for a total of 591 hours. Until now TAAS was one of a handful of operations always set against joining the National representative organisation. TAAS is now lead by Acting CEO Emma Peake.

In a separate move, on January 3 TAAS announced that its controversial chief executive of 18 years, Andy Williamson, had resigned in November. Williamson left the charity, which operates across the midlands, with deputy chief executive Emma Peake acting as chief executive while recruitment for a permanent replacement begins. Williamson was known to be vehemently against membership of the AAUK and its predecessor, the AAA. At times his activities and opinion drew criticism from colleagues and industry and for some time he was under investigation for misuse of funds.

Although it appears that the charity let it be known internally that Williamson had gone in mid-November it appears that they were less open to local and national media, and this led to a significant delay in the story getting out.

The Air Ambulance Service was registered as a charity in 2003 and its latest annual accounts report its total income as £30.6m. [Chronicle/Civil Society]

Ed: It is a very muddy field. Readers wishing to read further might want to look up the article on the resignation produced by Helihub on February 23. <https://helihub.com/2023/02/23/ceo-steps-down-at-the-air-ambulance-service/>

WALES: The Wales Air Ambulance Charity has confirmed that its new aviation partner will be Gama Aviation Plc, following the conclusion of contract negotiations. Gama was announced as the preferred partner for the seven-year contract late last year. The contract commences in January next year.

The decision has been made by the Charity's Trustees following an extensive 18-month procurement process which included input from both aviation and medical professionals. The Gama contract, valued at £65M, covers the operation and maintenance of a primary fleet of four Airbus H145 helicopters, operating from the Charity's current sites in Dafen, Cardiff, Caernarfon and Welshpool. It additionally includes a backup H145 helicopter to ensure service continuity during periods of maintenance for the primary fleet.

As forecast, the global increase in costs relating to goods and services, along with a new long-term aviation contract, will result in a significant increase in the funds needed to deliver the lifesaving service. The target to maintain the air operation, alongside the rapid response vehicle capability, will rise from £8M to £11.2M per year.

Trustees have agreed that three of the aircraft in service will be directly leased to the Charity. Therefore, Gama will operate and maintain four aircraft, plus a backup helicopter, on behalf of the Charity but the Charity will be the direct leaseholder for three of them. The charity will extend its contracts with Caernarfon Airport and Welshpool Airport, where two of its operations are currently based, until at least 2026. [WAA]
*Editor: The announcement comes during an independent review of the Charity's NHS medical partners, the Emergency Medical Retrieval and Transfer Service (EMRTS), which is being undertaken by the Chief Ambulance Services Commissioner. This has been reflected in the new aviation contract, which can adapt to potential future service delivery changes if required. These changes may affect revised base locations after 2026 (there was a suggestion that there was interest in the former police air support base in North Wales), revised operational hours, enhanced after-dark flying.
A further comment on this ground-breaking contract is to note that just the other side of Covid Gama held a press conference at their Farnborough offices to announce that they intended on shaking up the air ambulance industry in the UK. They now have most of Scotland and all of Wales in their portfolio along with other smaller deals, so their intent seems to be blossoming. [Issue 288 April 2020]*

YORKSHIRE: Over at the UK Airbus Helicopters in Oxford it is reported that the second new H145 helicopter for the Yorkshire Air Ambulance (G-YORX) has arrived for role fit and completion later this year. The first of the new fleet is G-YAAA. [YAAT]



UNITED STATES

OHIO: The Air Medical Transport Conference (AMTC) is seeking fresh, interactive and dynamic presentations for the AMTC23 in Columbus, Ohio - October 23-25, 2023. Submissions are due by March 21. Attendees are emergency medical and critical care professionals from both hospital and independent providers of air and ground medical transport services—CEOs, programme directors, medical directors, physicians, nurses, respiratory therapists, paramedics, pilots, communication specialists, Part 135 operators and aircraft manufacturers.

Bell Textron Inc. has announced that Life Flight Network, the largest not-for-profit air medical operation in the USA, will add four additional Bell 407GX helicopters. These aircraft will bring Life Flight Network's current operating fleet to seven Bell 407GXs, remaining the largest air medical operator of the Bell 407GX in the Pacific Northwest and Intermountain West.

Life Flight Network's total Bell fleet will consist of four Bell 429s and 25 Bell 407GX-series helicopters, providing critical care transportation to those in need. The organization continues to be a leader in the air ambulance industry, with 27 rotor-wing bases, 10 fixed-wing bases, and two neonatal and pediatric bases across Oregon, Washington, Idaho, and Montana. The operator also has a large fleet of Leonardo A119 Koala helicopters in service. For over 44 years, Life Flight Network has been providing ICU-level care to patients in need of emergency medical transport, supporting local hospitals and EMS to bring the highest quality emergency care to the communities and patients who need it most.



Bell Textron has received a purchase agreement for three additional Bell 407GX aircraft to Global Medical Response (GMR) with delivery expected to be completed by the end of 2023. The three Bell 407GXs will join GMR's exclusive 220 Bell helicopter fleet used for emergency medical operations throughout North America.

FIRE

In an effort to respond to the ever-growing wildfire challenge, leading aerial firefighting companies have joined together to form an industry association that will serve to foster safety and standardisation in the aerial firefighting community. The United Aerial Firefighters Association (UAFA) was founded at the end of 2022 as a non-profit association with the goal of informing policymakers, legislators and the public about important issues concerning the increasingly critical nature of aerial wildland firefighting matters.

Headquartered in Washington, DC, UAFA exists to bring together industry experts for education, collaboration and advocacy to provide a unified voice for the industry when speaking to state and federal stakeholders, fire agencies, and the public about wildfires and issues impacting the aerial firefighting community.

UAFA membership is open to companies who own or lease and operate aircraft, both fixed wing and rotary, UAVs/Drones, or provide aerial delivered suppressants/retardants under contract with federal or state governmental entities for aerial firefighting services. Companies who support the aerial firefighting industry by providing products and services, or those interested in getting more involved with issues regarding the impact of wildfires, are encouraged to join as well. In addition to these entities, there will be free membership offered to non-profits, state and national agencies who are interested and/or engaged in the wildfire community.



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INDONESIA



On February 19 a police Bell 412 carrying eight people including the local police chief undertook an emergency landing into jungle at Jambi on the east coast of central Sumatra, Indonesia. Everyone survived the landing but the terrain was difficult to reach and first aid and food supplies had to be airdropped to the crash site. Meanwhile rescue teams were flown to near the spot before trekking into the crash site including this joint police and SAR team transported by a Mil Mi-171C PK-BST of the Indonesian National Search and Rescue Agency (Basarnas). [Jakarta Post/Jambi Police]

SEARCH & RESCUE

THAILAND

SAR: Thales Alenia Space, the joint venture between Thales (67%) and Leonardo (33%), has signed a contract with prime contractor Appworks to provide Thailand with a complete Search And Rescue (SAR) operational system based on the COSPAS-SARSAT MEOSAR Service.

The solution will make it possible to detect and locate distress signals from COSPAS-SARSAT beacons on land, in the air and at sea instantaneously, over a radius of 2,500 km centred around Bangkok, mainly using the Galileo satellite positioning system. This solution also includes delivery of a Mission Control Centre (MCC) dedicated to managing and distributing alerts, and a Rescue Coordination Centre (RCC) to manage all search-and-rescue activities for armed forces, coastguards, sea rescue and other services.

Thales Alenia Space's innovative MEOLUT Next product, which employs a phased array antenna, will give Thailand unrivalled performance. Where conventional MEOLUT systems rely on six large parabolic antennas covering an area about the size of a football field and are only capable of receiving signals from six satellites (one per antenna), the MEOLUT Next solution, with its compact antennas taking up less than 6 square meters, tracks up to 30 satellites, thus significantly enhancing distress beacon detection and expanding coverage. MEOLUT Next is capable of detecting distress signals from up to 5,000 km away.

The solution is already operated by the main users of COSPAS-SARSAT (USA, Canada, France, the European Union, and Togo) and is today helping to save lives, as recently demonstrated in the Indian Ocean.

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UNITED STATES

MICHIGAN: The US Coast Guard has been training with local volunteers in Manistee a city in the U.S. state of Michigan with a population of 6,259.

The training simulated a rescue after a snowmobiler had gone through the ice and crews needed to have a two-pronged approach by way of water and air. The training was a type that hasn't been done in a while and it paired the Coast Guard Station Manistee on the ice with the Coast Guard Air Station Traverse City. At one point in the training — which took place on February 1, there were nearly 30 vehicles parked as people gathered to see what was happening at Man Made Lake. Coast Guard Station Manistee covers 270 miles of shoreline and 4,485 square miles of Lake Michigan.

All the pilot knew when they took off from Traverse City was that he was doing this mock search and rescue case in this area and then when he arrived he was presented with a scenario of a rescue dummy staged out on the ice as if the station had just extricated someone from the water and awaiting a medevac. The Manistee team communicated with the pilot to say they had recovered a person through the ice after a snowmobile crash with the person unconscious and in need of medical transport. The flight acted as a check ride for a new pilot.

The air crew came in, did their passes all their checks, came into their low hover, dropped the rescue swimmer, dropped the stokes litter (similar to a stretcher) and hoisted him back up and flew away.

In a public relations turn-around previous training flights were not announced but invariably picked up by interested parties using scanners to listen in to such as Manistee County 911 Central Dispatch. These days, the Coast Guard has worked to have a tighter relationship with better communications by alerting dispatch each time they have a training exercise, this has produced a larger audience to proceedings. In turn this led to something of a competition between covering photographers who are now invited to submit (by July 16) their best efforts in a competition. Winning entries could receive a private boat ride and tour of the unit, coast guard memorabilia or just a certificate. Photos must be of Coast Guard vessels, personnel or stations and taken between Jan. 1 and July 15.



Provided photo/Chris Franckowiak via Coast Guard Station Manistee

INDUSTRY

At this time of year news can be hard to come by. In a few days time the annual HAI Heli-Expo opens its doors in Atlanta, Georgia, USA and attendees regularly hold back on news in order to provide material for the usual feeding frenzy by the media. Usually the press room at the Heli-Expo is over full, but Covid and its fallout may alter that as far as this year goes. I know of a large number of foreign correspondents that have now 'found' early retirement or simply just had other things to do just now.

Radio Frequency (RF) solutions manufacturer **SPX CommTech**, part of [SPX Technologies](#), announced a strategic partnership in Europe. Aviation sales and service provider, Global Aviation Systems will cover German and Switzerland exclusively as well as Austria, Czech Republic and Slovakia. The new agree-

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Police Aviation News includes materials produced for it by Ian J Commin of Insight Design of North Burnham, Slough SL1 6DS. This includes the banner titles and the PAVCon logo. In addition from time to times images specifically altered by Insight Design and others but originally produced for McAlpine Helicopters [now Airbus Helicopters UK], Oxford, will appear with permission of the original owner. In some cases it may not be possible to indicate the source of this material directly associated with the images used, or such information may have been lost. Such images may be marked 'File' or 'PAR Collection'.

ment is part of the company's initiative to drive growth and bolster in-country support for its Tactical Data Link portfolio, particularly for aircraft and Unmanned Aerial Systems (UAS).

Jackson White, Business Development Director at SPX CommTech: "In response to growing demand for proven innovation in the aviation and security spaces, we're expanding European operations via a new partner network. This is a strategic move to allow a greater number of end-user customers and key system integrators to access SPX CommTech solutions, which are already helping to create a smarter, more secure future all over the world."

Combining decades of technology innovation and expertise, SPX CommTech's Tactical Data Link portfolio – developed by Enterprise Control Systems (ECS) – allows a range of aviation, security, military and emergency service teams to securely and reliably transfer video and data between enabled-aircraft and ground teams over long distances for airborne Intelligence, Surveillance, Reconnaissance (ISR) requirements. The ECS Evenlode system is operationally proven and provides its users with secure long range video and bidirectional TCP IP data transfer of up to 20 Mbs.

Based in Germany, Global Aviation Systems will now provide SPX CommTech Tactical Data Link solutions, granting in-country technical support to its customers.

For more information on SPX CommTech Tactical Data Links visit www.enterprisecontrol.co.uk

The Honourable Company of Air Pilots presents awards each year to mark achievement and excellence within the aviation industry. These prestigious awards are presented in Guildhall, London, either by a member of the Royal Family, The Lord Mayor or a distinguished individual from the aviation industry, and in the presence of approximately 700 members of the Company and their guests involved in aviation, who travel from around the world to attend this event.

The readership of PAN are invited to submit for the attention of the Trophies and Awards Committee, nominations for awards to be presented at the Banquet in October 2023.

The awards cover a broad spectrum of achievement within the aviation world encompassing commercial, military, and general aviation.

The Company depends entirely on receiving nominations in order to judge and justify the presentation of each award to the most deserving recipient based on a timely, sincere and well-drafted citations in support of nominations for the awards.

Nominations, together with supporting citations, should reach the Company's office by May 31, 2023 at the latest. Citations can be submitted by email or by post, and it is suggested that the narrative should be around 500 words.

There are many leaders in aviation who may be in a position to make nominations. If you are aware of such people, I ask that you forward this information to them for consideration and, hopefully, submission of nominations.

The calling notice was from Commodore Chris Palmer CBE FRAeS FCMI RN, Chairman, Trophies and Awards Committee. Replies and submissions should be directed to The Honourable Company of Air Pilots, Telephone +44 (0)20 7404 4032 office@airpilots.org 52a Borough High Street, London SE1 1XN

There are 28 categories of nomination, each listed in full at www.airpilots.org

They include such as The Award of Honour recognising a Lifetime Contribution to the Aerospace Industry, several awards recognising acts of courage or devotion to duty in the air, seven awards covering Flight Operations (including the Sword of Honour awarded to NPAS a few years ago), two flight test awards, and others covering a variety of specialist subject including Flight Safety, Training and even writing about aviation.

The FAA issued a final **Airworthiness Directive** (AD) February 23 on potentially improperly installed crankshaft components of certain Continental Aerospace Technology engines. Continental recently identified a potential safety of flight issue for aircraft equipped with Continental 360, 470, 520, 550 series engines and replacement crankshaft assemblies.

As the parts manufacturer, Continental reported this to the authorities and released a Mandatory Service Bulletin (MSB) on February 13, 2023. MSB23 pre-emptively advises that an inspection should be performed to confirm that the crankshaft counterweight retaining ring was properly installed in new and rebuilt engines assembled between June 1, 2021, and February 7, 2023. This advice also applies to replacement crankshaft assemblies manufactured between June 1, 2021 and February 7, 2023. Continental advises that all flights powered by the aforementioned engines with less than 200 operating hours be limited to 5 additional hours with the essential crew to position the aircraft at a maintenance facility.

Continental engines with over 200 hours may continue normal flight operations. [Adams Aviation]

Although readers will already be aware of the fact thanks to the recent article on 2Excel in the February edition of *Police Aviation News*, **Smith Myers** have now confirmed that their ARTEMIS Mobile Phone Location and Communications system has been selected by Nova Systems to be integrated into the Nova Systems airborne mission system that will be fitted onto the helicopter fleet deployed on UK's second-generation SAR (Search and Rescue) program — known as UKSAR2G. The contract builds on the exist-

ing UK Maritime Coast Guard Agency (MCA) programme with the addition of fixed-wing and unmanned aerial systems (UAS) services.

ARTEMIS will be installed across the fleet of rotary and fixed wing aircraft in what is a world-class innovation programme.

This new 10-year contract combines existing rotary and fixed wing services into fully integrated, innovative solution led by Bristow Helicopters Ltd (Bristow) that will ensure continuation of critical lifesaving search and rescue aviation services across the whole of the U.K. well into the next decade.



In addition to providing a mixed fleet that will include the six 2Excel Aviation King Airs (including the B350, B350ER and a B200) and a Schiebel Camcopter S-100 UAS, the composition of the rotary fleet will also change. Bristow will be using a fleet of 18 helicopters, including nine AW189s and three S-92s, along with six new Leonardo AW139s.

ARTEMIS has been in active service saving lives around the world since 2017 with the lead customer The Royal Norwegian Airforce on their Leonardo AW101 Search & Rescue Helicopter Program. The growing global customer base includes programmes in the UK, Europe, North America, South America, and the Middle East.

Tecnam announced last month that has completed the production of two P2012 *Sentinel* Special Mission Platform that are now ready for mission system installation. The two aircraft completed factory acceptance flights in December 2022 in Tecnam headquarters in Capua, and are now undergoing mission system installation prior to entry in service.

After a rigorous evaluation process, the undisclosed customer, has chosen the P2012 Sentinel to replace an ageing fleet of Britten Norman BN2 Defenders.

The main drivers for the P2012 selection among other special mission platforms were the twin engine design, latest avionics, wide and constant cabin section, two full size hatches, generous mission power, superior payload allowance and low acquisition and operating costs.

A P2012 Sentinel equipped with full mission equipment, allows room for up to seven crew members (pilots, operators, observers, and mission commanders) and at its maximum take-off weight of 3680 kg, provides up to 9 hours' endurance.



Late last month the Japanese Ministry of Land, Infrastructure, Transport and Tourism (MLIT) accepted a type certification application for an aircraft under development from **Volocopter GmbH**. This is the third type certification application for an eVTOL in Japan and the first for a European manufacturer. The MLIT and EASA will be working together towards certification of these air mobility craft. Volocopter is already undergoing a type certification process by the EASA of its VoloCity aircraft aiming at showing compliance of the type to EASA regulations. [EASA]

Milestone Aviation has expanded its agreements with Bristow following the lease of two Leonardo AW189 and four Sikorsky S-92 helicopters for Search and Rescue (SAR) missions. Milestone complete a purchase-leaseback with Bristow for its first SAR-enabled AW189 aircraft, as well as a lease extension to convert the second AW189 helicopter to a SAR configuration. These are the aircraft in the Netherlands. The helicopter finance and leasing company also placed three Sikorsky S-92 helicopters to be deployed on SAR missions across Norway, with a fourth S-92 to be delivered later this year.

RVL Aviation based at East Midlands Airport, Derby, UK are seeking experienced Task Specialists for their air operations.

The role has responsibility to represent the customer's interests onboard the aircraft, and on the ground, to ensure that mission objectives are achieved. Operations cover a broad range of missions, including combatting major oil spills and efforts to prevent pollution incidents through enforcement and monitoring, locating persons missing at sea and those that use the sea as a domain for criminal activity reconnaissance for fisheries regulation, and maritime security.

Specialist Operations undertaken by a range of fixed wing aircraft including the Reims F406 and Beechcraft King Air include aerial survey and surveillance using large format cameras, imagers, EO/IR and LIDAR and the airborne delivery of chemical dispersants.

The Air Patrol Squadron of the **Finnish Border Guard** have issued a tender for flight crew helmet procurement worth approximately €300,000.

The helmets are used by pilots, flight engineers, rescue swimmers and paramedics. The buyer expects to be able to carry out a field test to helmets. The evaluation board consist of selected helicopter crew members. Acceptance of tenders will close on March 17. [TED]

Last month the **Armed Forces of Malta** awarded a €2.8M contract for the mid-life upgrade of the sensor suite in their fleet of Beechcraft King Air Maritime Patrol Aircraft to Aerodata AG. Based in Braunschweig, Germany. For technical reasons there was only one bidder in the competition.

The King Air 200s entered service with the AFM twelve years ago.

When the first of the aircraft for the AFM was displayed at the 2011 Paris Air Show it was noted that the Mission System was designed by Aerodata AG and utilised the L3 Wescam MX-15 as its prime EO/IR sensor.



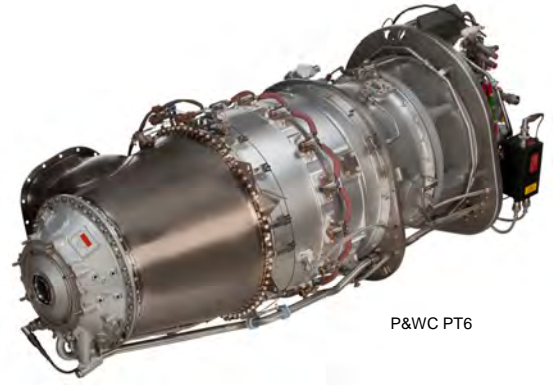
From the Global Aviation Systems GmbH Linked In Social Media account at is this illustration of the Honeywell VXP—the only manufacturer approved rotor track and balance system for the H145 D3. Honeywell by way of Diagnostic Solutions International, LLC [Global photo]

Pratt & Whitney Canada has announced that the PT6 engine family – the most prevalent and versatile in aviation – is now celebrating 60 years of excellence and innovation. It has been embraced by fixed-wing and helicopter airframers around the world. With more than 64,000 PT6 engines produced since its introduction in 1963, it powers over 155 different aviation applications. The PT6 is unmatched in engine performance, reliability and dispatch availability, having reached 500,000 million flying hours.

Today's PT6 is up to four times more powerful, has a 50% better power-to-weight ratio and up to 20% better specific fuel consumption compared to the original engine.

The latest engine family, the PT6 E-Series™, is the first with a dual-channel integrated electronic propeller and engine control system in general aviation.

The PT6 is also the only turboprop engine in the world to be approved for single-engine instrument flight rules (SEIFR) in commercial passenger flights in Europe, North America, New Zealand and Australia.



P&WC PT6

Airbus Helicopters is deploying a H175 helicopter on a week-long maiden flight demonstration tour in East Malaysia and Brunei Darussalam, with the support of Hornbill Skyways and HAS International. As part of the tour, the helicopter is travelling to Miri, Brunei Darussalam, and Kota Kinabalu, where Airbus will conduct product briefings for invited guests and perform demonstration flights. This particular model features a comfortable layout of 16 seats in an offshore transport configuration.



With more than 170,000 flight hours logged since its entry in service, the H175 is a reliable platform for rugged multi-mission capabilities such as offshore crew change, law enforcement, search-and-rescue, emergency medical services, as well as private and business aviation.

The aircraft is equipped with Helionix, Airbus' integrated suite of advanced avionics and 4-axis autopilot and with the Rig'N Fly mode. They offer enhanced situational awareness and improved operational safety by helping to reduce pilot workload and can also

provide fully automatic oil platform approaches.

ACCIDENTS AND INCIDENTS

1 January 2023 Pilatus PC-12/45 N399AM Air Ambulance of University of Utah AirMed, Salt Lake City, Utah, USA. Operated by Metro Aviation. An in-flight emergency occurred while landing at Santa Monica, California. While on final approach to the airport, the pilot experienced an airspeed indicator failure and the medical crew noticed the smell of overheated electrical components but, no smoke was present. The pilot relied on the co-pilot's airspeed indicator to complete the landing without incident. It was discovered the airspeed indicator was "stuck" at 175 kts. It was discovered that the pitot static line had rubbed through the insulation and made contact on the air conditioning return (hot) line which caused the line to be melted shut. The aft horizontal de-ice line was also found to have a hole caused from the heat. Both lines were repaired and rerouted for better clearance. It was also discovered that the A/C compressor electric motor had burned out. [Concern]

15 January 2023 Pilatus PC-12 N247N. Air ambulance of Classic Air Medical, Salt Lake, Utah, USA. The aircraft experienced a runway excursion after landing on 2 inch deep snow at Stevens Field (KPSO) in Pagosa Springs, Colorado. Just after touchdown and as the aircraft began to roll out, the aircraft began to veer to the left. The pilot reported that the aircraft was unresponsive to his inputs which resulted in the left main tyre being grabbed by deeper snow on runway shoulder. This resulted in the aircraft leaving the runway. The aircraft came to a stop and there were no injuries reported. The aircraft sustained damage to the prop as well as gear doors. The engine has been removed and sent out for inspection and repair. A subsequent investigation confirmed that there was no flight manual restriction on runway contamination or snow depth. It remains unconfirmed whether reverse pitch was engaged, this might reduce the effectiveness of the vertical stabiliser/rudder. [Concern]

27 January 2023 Airbus Helicopters EC145e N110HN Air ambulance Health Net Aeromedical Services operated by Air Methods Corporation in Charleston, West Virginia.

The patient was involved in road accident where a car collided with a house. Upon flight team arrival the patient was appropriate with no complaint of injury other than right knee and rib pain. Prior to loading the patient in the helicopter a family member reported possible suicidal tendencies that might explain the acci-

dent. The patient was loaded without incident. There were no issues during the flight until approximately three minutes from the receiving facility at which point the patient stated, "I am the Antichrist" and started assaulting staff using his hands and elbows and then freeing himself from the stretcher. After several tussles between the crew and the patient in which attempts were made to open the doors in flight the patient was sedated with Fentanyl and the aircraft landed safely. [Concern]

30 January 2023 (AS350 N) A Los Angeles Police Department (LAPD) helicopter made an emergency landing at the football field of the Golden Valley High School Robert C. Lee Parkway, in Santa Clarita, California. The reason for the landing was that it was precautionary following a cockpit warning light. No damage and no injuries reported. [KHTS radio]

6 February 2023 Boeing 737 300 N619SW Waterbomber Firefighting aircraft of Coulson Aviation operating out of Busselton Airport at low altitude over a fire in Fitzgerald River National Park, Hopetoun, Western Australia crashed. Crew survived and taken to hospital. Airframe destroyed. [Media]

11 February 2023 Air Tractor AT-802A CC-API fire fighting aircraft of the Corporación Nacional Forestal (CONAF) in Chile. crashed and burned at Chamizal zone, Hualqui whilst performing fire fighting operations. Large sections of airframe not consumed by fire but wrecked. The pilot was rescued unhurt and taken to hospital by helicopter. [Bulnes]

19 February 2023 Bell 412SP helicopter. Indonesian National Police. The helicopter carrying five passengers and three crew Indonesian members made an emergency landing in the jungles of the Kerinci Forest, Jambi, Sumatra, Indonesia in bad weather. All passengers, including Jambi Police chief Insp. Gen. Rusdi Hartono, survived. to reach and that a first aid kit and food supply had to be airdropped to the crash site. The police spokesperson said some members of the rescue operation could soon reach the crash site.

SAFETY

On February 23 the UK CAA confirmed the temporarily grounded all Astro Freely drones following an as yet unexplained in flight software failure. The original grounding by the manufacturer took place early in the month. The quad rotor is manufactured in Woodinville, Washington, USA and it sells in Europe for around £16,000/€18,000.

On February 7 2023, A customer flying Astro had an in-flight software failure, resulting in a crash. The Freely team is conducting a thorough investigation to determine the root cause of this crash. As a precaution and given the severity of the issue, the manufacturer *advised* that all Astro aircraft should be temporarily grounded effective immediately, until further updates are provided by Freely.

The investigation revealed that a logging thread on the flight controller failed to write to the SD card prior to the event. Post-recovery, the flight controller appeared operational based on telemetry data, and resumed control over the vehicle. This failure affecting the flight controls should have been prevented by the system design, but it failed in this instance, requiring further investigation.

At its website Freely says its team has now done a thorough code review and that the new firmware package, v1.1.18, addresses both the issues in the software.

UNMANNED

HevenDrones, a leader in the development and commercialisation of actionable drones, launched today its first hydrogen-powered drone for commercial use, the H2D55. With 5-times greater energy efficiency than traditional lithium battery-powered drones, the H2D55 is capable of flying for 100 minutes with a payload capacity of 7kg. The new drone model - H2D55 - is the first in Heven's product line of hydrogen-powered drones, tailored to a wide range of commercial and defence use-cases, from reforestation projects to emergency response, last mile delivery and longer intel-gathering missions.

The launch of HevenDrones' hydrogen product line addresses the challenge of flight endurance and payload capacity associated with lithium battery-powered drones as well as the long term environmental im-



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pact linked to lithium mining. Without the need to frequently replace batteries, hydrogen fuel cells will also lower long term ownership costs for organizations implementing drone technology at scale.

Schiebel and Thales have been awarded the Uncrewed Air Systems (UAS) contract "Peregrine" by the UK Ministry of Defence. This contract award will deliver the Camcopter S-100 UAS, fitted with a powerful naval surveillance sensor suite, to provide a comprehensive maritime capability protecting Royal Navy ships on operational tasks.

Schiebel, together with system integrator Thales, will provide the operationally proven S-100 with a range of high precision Intelligence, Surveillance and Reconnaissance (ISR) sensors and systems. The Thales I-Master radar, an EO/IR camera, and an Automatic Identification System (AIS), all fused with the CarteNav's AIMS Mission System enables an all-weather detection and identification capability of unknown targets.

Thales will act as the lead systems integrator for the system that brings together a combination of proven UAS capability from Schiebel and a range of high-precision intelligence, surveillance, and reconnaissance sensors and systems from Thales.

The S-100's sensors, supported by an Automatic Identification System and fused together with the CarteNav AIMS Mission System provide the operator the ability to detect and identify unknown targets quickly. The system is similar to that supplied to the French Marine Nationale as the Serval.



In a further expansion of unmanned cargo flights by light drones the Northumbria Healthcare NHS Foundation Trust is partnering with Apian, a company which has come through the NHS Clinical Entrepreneurs Programme, to explore the use of Uncrewed Aerial Vehicles (UAVs) to carry chemotherapy drugs, blood samples and other items between sites.

Following a UK Civil Aviation Authority (CAA) approval process, test flights will be taking place from February 13, to May 12, along a route from Wansbeck General Hospital at Ashington up to Alnwick Infirmary and onto Berwick Infirmary.

It is hoped that given Northumbria Healthcare's large, predominantly rural patch across Northumberland and North Tyneside, using drones could reduce delivery times, make efficiencies and cut carbon emissions. The trial will collect logistical data

and assess the impact on patient experience, staff resources and the environmental benefits.

The project will use fully electric aircraft, which can take off and land vertically like a helicopter before flying horizontally like a plane by combining fixed wings with rotors. The UAVs, which are managed by Skyparts Drone Services, can carry up to 3kg of payload and have a maximum speed of 110km/h (almost 70mph).

There will be six flights per day at the beginning of the trial, increasing to up to 15 flights per day at the end of the trial, delivering chemotherapy medication to Alnwick and onto Berwick Infirmary. Return flights from Alnwick and Berwick will deliver pathology samples to Wansbeck. Other items that may be delivered include blood packs, prescriptions, medical equipment and mail.

There is still much work to be done before drones can operate autonomously in non-segregated airspace, the Apian operations are compiling more information to lead to the final autonomous operations BVLOS sought by many. A period of community engagement about this project is taking place alongside the test flights.

Ed: At a time when the NHS is struggling with staffing and financing this low key operation pitting the economics of drones against 'white van man' with a BVLOS aspirations but none of the technology this is probably an inappropriate but pre-funded activity. To make this work there are alerts out to other aviators

and air exclusions announced. To reduce the risk of embarrassment caused by a sick drone landing unannounced in someone's back yard the routing is placing the drone out over the sea for most of its length. The theme that seems to run through these drone projects, carrying very small quantities of medicines and blood samples between hospitals, is that there's no figure for the cost of an individual flight, no number for the people involved and no comparison cost for the alternative, 'the man in a van', or a dispatch rider, potentially using electric vehicles, should being 'green' be an important factor.

Naturally there's no mention of the limitations created by the weather, cloud base not below 1,500 ft, not too windy etc., nor the lack of 'see and avoid' technology during 'beyond visual line of sight' operations, with the consequence of closed Class G airspace and temporary danger areas. This TDA is EG D598A/B/C. from Blyth, along the coast, to Berwick upon Tweed. Naturally the media were lapping up the story but there was disappointment for one camera crew from the BBC when the weather closed in and saw the demonstration deferred. On that occasion white van man had his revenge.

One image promoting the system showed this replacement for one man and a small van showed a team of 12 people and a large especially equipped, and therefore potentially expensive, van. It probably has a fossil fuel powered generator on board to ensure the electric flight vehicle remains fully charged.

THE HOLY GRAIL – BVLOS

Pioneering companies in the emerging uncrewed aviation industry have joined forces in a forum established by air traffic control leader NATS, to break through the barriers to the UK industry's development. The BVLOS Operations Forum, which includes the UK's leading beyond-visual-line-of-sight (BVLOS) operators, brings together organisations at the cutting edge of drone flight to learn from each other's experiences, collectively improve their operations, and jointly develop solutions to the challenges faced.

The ever-increasing number of operators believe there are huge potential benefits to achieving routine BVLOS flights – including increased connectivity, decarbonisation, and economic opportunities for all parts of the country. Because innovation in this sector has moved so quickly, regulations have not yet caught up, meaning BVLOS flights are still restricted to specific areas.

Some progress has been achieved and the Forum has actively supported recent policy initiatives which set out a positive direction from the Government and the regulator.

The BVLOS Operations Forum has given those seeking to operate a platform to work together, and a means for driving change and establishing a safe and workable regulatory regime that will benefit the industry as a whole.

The founding members of the Forum include ARPAS-UK, Blue Bear, Callen Lenz, Flylogix, Maritime & Coastguard Agency, NATS, Network Rail, sees.ai, Skyports and Windracers, all of whom are actively involved in developing BVLOS operations, and some of whom are already operating BVLOS flights commercially.

The shared goal is to achieve routine BVLOS operations, outside of restricted areas and integrated with other traffic, making uncrewed aircraft a safe and effective option in the aeronautical toolbox.

At the recent IDEX event in Abu Dhabi Tekever, the Portuguese UAS manufacturer has successfully added GAMASAR to its AR5 UAS. GAMASAR is a Synthetic Aperture Radar (SAR) designed and built by TEKEVER to support Aerial and Space-based Earth Observation, which is now available on both AR5 and AR3 systems to support the most demanding maritime and land missions. Developed by TEKEVER's Space division, GAMASAR has the ability to detect multiple types of objects in all-weather conditions, making it the perfect tool to support maritime and land-based wide-area surveillance missions.

The integration of SAR payloads typically imposes a significant tradeoff in operational capabilities, especially in smaller UAS platforms. By having an integrated design approach between GAMASAR and its UAS product-lines, and having an extremely deep level of integration between the sensor, the platform and the rest of its sensors, TEKEVER is now able to offer unprecedented capabilities for both AR3 and AR5 in their respective UAS classes.

By adding GAMASAR to its payload package, the TEKEVER AR5 can now offer users a vastly increased operational performance, and the ability to effectively detect targets under any weather condition, day and night, over extremely wide areas. www.tekever.com.

Ed: The twin engine Tekever AR5 is regularly undertaking sea patrols off several European countries including the United Kingdom. Production numbers remain relatively low but the craft can regularly operate beyond radio line of sight (BRLOS) with high-capacity satellite communications and carry reasonable payloads. In terms of a potential model for a future BVLOS it is probably the most promising but SATCOMS is perceived as expensive at the moment.,.



MOVE ALONG THERE

Nationalities across the globe regularly notice that the media and population in the United States is a bit behind in education. They regularly fail to appreciate the niceties of non-USA history and geography and much of it is put down to poor instruction in schools. It is not a major item and it is not likely to change soon.

It does some way to explain the latest howler from USA based The Defense Post when they ascribed the sale of drones to the UK Royal Navy to an Australian firm called Schiebel.

Unfortunately it was not just a typesetting error, the wrong country (it should of course be Austria) featured in the headlines and throughout the text. After a couple of days it was all repaired.

Back to school!



Preserve us all from a repeat of the story emerging from New Zealand last month. It was all about the world's longest flight to nowhere.

On February 16 an electrical issue and small fire in JFK Airport's Terminal 1 closed the terminal to all flights, resulting in what may be the longest flight to nowhere ever. Air New Zealand's ANZ2 flown by Boeing 787-9 Dreamliner ZK-NZQ was about 7.5 hours into its flight to New York, and more than half way to the California coast, when it turned back to Auckland.

As the airline explained, diverting anywhere else would have put the aircraft and crew out of place for multiple days with no guarantee of speedy onward travel for the passengers.

For the luckless passengers having endured 15 hours in the sky there was merely the prospect of another.

[Flight Radar 24]

UPCOMING EVENTS

PAvCon Europe Bilbao 5-7 June 2023

If you check on the PAvCon Europe website just now you should find it greatly upgraded and with additional information.

Since last month revisions have been made to the Event Guide and sponsorship options. The bookings have continued but the event is far from full and there remain plenty of spaces for would be exhibitors in the hall. Compared with the last time PAvCon was in Bilbao there are many additional exhibiting spaces and many more interested companies.

There are still three months to go and already we have Airbus Helicopters confirming as one of the major sponsors of the event, they join other recent signatories Airborne Technologies, Centum Research, ECS, Global and SVP to lay claim to 16 of the 40 exhibitor spaces so far configured.

The first day, a Monday will be a training day and the day when exhibitors need to be setting up their exhibition.

The training day will primarily be run by Harald Brink of the Netherlands Police air operation in Amsterdam. They have regular training days at their facility through the year and invite police air operations from across Europe to join them. Some of these events use invited guest speakers from the USA.

On this occasion the training will be held at the conference room in the Durango police base and will focus on Crew Resource manage-



09 - 10
October 2023
Venue: Oman Convention & Exhibition Centre
Muscat, Sultanate Of Oman

Organized by:



Conference Partner:



ment for Tactical Flight Officers from across Europe.

The main conference and exhibition days will be the Tuesday and Wednesday (6-7 June). The cost will see only a small rise on the 2022 exhibitor prices to meet growing inflation across Europe.

On the PAVCon Europe website you will find booking forms for Exhibitors and Visitors in standard format. In addition this year we can offer Exhibitor links to an e-format PDF from the website or via this [link](#).

Or you can just give the office a call on +44 7778296650



Celebrate!

Atlanta, Georgia, USA

14-16 March 2023 Security & Policing - the official UK Government global security event. Held at Farnborough International Exhibition & Conference Centre, Farnborough, Hampshire. Hosted by the Home Office's Joint Security & Resilience Centre (JSaRC), Security & Policing offers a world-class opportunity to meet and discuss the latest advances in delivering national security and resilience with UK and overseas Government officials and senior decision makers across the law enforcement and security sectors. Contact securityandpolicing@adsgroup.org.uk +44 207 091 7835

3-4 April 2023 Aerial Fire Fighting – Pacific Northwest Wildfire Conference and Exhibition, Seattle, Washington, USA Organised by Tangent Link. Chilterns House Business Centre, Eton Place, 64 High Street, Burnham, SL1 7JT UK. t: +44 (0) 1628 660 400 www.tangentlink.com

25-27 April 2023 World Border Security Conference, Skopje, North Macedonia (Balkans). The Republic of North Macedonia is a landlocked country in the South-eastern region of Europe known as the Balkans. It gained independence in 1991 as one of the successor states of Yugoslavia. In March 2020, North Macedonia acceded to NATO, becoming the 30th member state and accession process to join the European Union remains ongoing. The World Border Security Congress is a high level 3 day event that will discuss and debate current and future policies, implementation issues and challenges as well as new and developing technologies that contribute towards safe and secure border and migration management. www.world-border-congress.com



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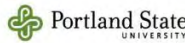
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