

Police Aviation News

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Issue 296

December 2020



CHANNEL PATROL UPDATE

Another £30M poured into the sea



*Sûreté du Québec takes H145
First police Airbus H160 order
LAPD go ahead for downlink
Epi Shuttle in the Canadian north
Ireland try another way to cope
New Zealand Flying Doctor King Air*

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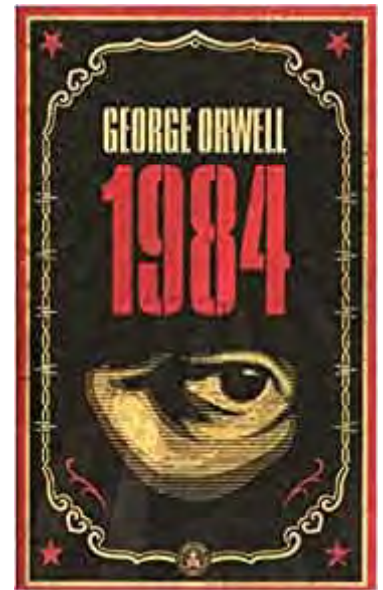
EDITORIAL

Ah, the Season to be Merry is upon us. Except of course there is little sign that it will happen in a fashion much like we are used to.

Until now many organisations have tried to continue and survive in the past without embracing technology. If the pandemic has done nothing else it has clearly demonstrated that living in the past is no real option. All life, even grocery shopping needs to be online. The events industry has been slaughtered and we do not yet know what the recovery will look like. If even a tiny part of industry finds that the newly experienced virtual events have a niche place in their business the negative effect on the events industry will be long lasting and potentially catastrophic. Many former face-to-face industries are being driven on-line simply to survive. Who would think that buying a house could be done without ever visiting the property? It is rare, especially in the UK, but it the new world order it has been happening regularly in recent months.

The younger generation are showing a preference for on-line interaction and only time will confirm whether 'pressing flesh' will return in a big way. Where we are now is all too close to the imagined reality of George Orwell's 1984 and we can all see – barring our supposed mental health issues – that with application it can be made to work. Orwell's work was written less than a lifetime ago and yet, until now, we were certain it would never happen to us. Now I suspect we may be less sure.

Bryn Elliott



LAW ENFORCEMENT

AUSTRALIA

NEW SOUTH WALES: On November 3, the Commissioner and Police Minister were joined by a host of dignitaries to officially open the Aviation Command's new \$60M headquarters at Bankstown Airport.

This is part of a record \$4.8 billion investment for the NSW Police Force. As well as the \$60M for the academy, the investment also includes \$30 million for new Bell 429 helicopters, money for a telecommunication system upgrade and five new state-of-the-art police stations.

Aviation Commander, Superintendent Matt Appleton, hosted NSW Police Commissioner Mick Fuller and



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NSW Minister for Police and Emergency Services, David Elliott, and officially opened the new facility during a COVID-safe orientated ceremony and plaque unveiling.

Established in 1979, the Aviation Command has been providing aerial support to NSW Police operations and assisting with aviation investigations for more than four decades. The command was initially based at Sydney’s Kingsford-Smith Airport before relocating to Bankstown Airport in 1991, where it was housed in three World War II hangars. Over the years, Aviation Command’s fleet has grown in line with the needs of the Force and the community, resulting in operational requirements exceeding the capability of the previous base.

The new 25,000 square metre facility integrates hangar, maintenance, operations, training and administration functions in a single stand-alone building, with a superior location, layout and design for an effective State Emergency Response centre. The modern facility complies with new civil aviation safety regulations and allows for improved accessibility, visibility and mobility in policing operations.



The Hoist Training Tower ©NSWP

The new facility incorporates ten hangars, two levels of operational and administration office space, including comfortable pilot stand-down facilities and engineering facilities, including a heavy maintenance area and spray paint booth. Additionally there are taxiways and



Bell 412 and EC135 ©NSWP

aprons, parking and loading areas and dog-friendly facilities, including rest area (for joint operations with the Dog Unit)

For in-house training it offers a substantial indoor tower helicopter winch simulator, a FLIR simulator room married to CASA-approved training/proficiency/currency facilities. [NSWP/CH7]

Ed: New South Wales first operated a war surplus Avro Anson for a short period immediately after the war [see cover image] but set up the current operation with a Bell 206B JetRanger III as Polair1 in 1979. Forty years later and the Aviation Command has a fleet of eight, and maintains responsibility for 130 drones, all of which provide aerial policing services across some 800,000 sq-km of the state. The PolAir fleet was based on Bell helicopters for many years and in the coming months it is set to return to an all Bell helicopter/Textron fleet. Currently consists of five helicopters (PolAir 1, 2, 3, 4 and 5), a mix of three Airbus types and two Bell 412s and two Cessna 208 fixed wing (PolAir 6 and PolAir 7).



CANADA

QUEBEC: At the end of October it was announced that the Sûreté du Québec, the provincial police service for the Canadian province and historically an operator of locally manufactured Bell helicopters – if only as a way of demonstrating support for the factory at Mirabel - had bought an Airbus.

Unexpectedly they have moved away from Bell and acquired a pre-owned Airbus Helicopters H145 helicopter acquired in Italy. A Bell spokesperson stated they were not aware of any tenders being issued.

The Quebec Ministry of Transport (responsible for the Government air fleet) has stated the H145 could be in service by the end of the year, rather than two or three years from now for a new aircraft when you take into account the tendering process, construction deadlines and delivery.

The H145 replaces a Bell 206LT TwinRanger C-GSQA, which Sûreté du Québec acquired in 1994. Their example of the long out of production type suffered a serious accident on January 22, 2020 while taking



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part in the search-and-rescue operation in Lac-St-Jean, 500km north of Montreal crashed into snow- and ice-covered water. The sole person aboard, the pilot, suffered non-life-threatening injuries. They also fly a forty-years old Bell 206B JetRanger (made in Texas) and a Bell 412 added to the fleet in 2002.

Parapex Media point out that the apparent change in allegiance from Bell to Airbus Helicopters probably emanates from the more recent Province of Quebec commitment to support Airbus after the European company took over the Bombardier C Series airliner, now renamed the Airbus A220, which is also built at Montreal's Mirabel Airport. The same source states that the H145 involved is C-GSQP c/n 20091, previously operated across Europe by Elifriulia as I-MAKE from 2016. [Helihub/PAR]

FRANCE

GENDARMERIE: Four examples of the Airbus Helicopter A160 have been ordered for use by the Gendarmerie.



GUYANA

DEFENCE FORCE: At the end of October the US State Department was reported to have approved the Foreign Military Sale of two Bell 412Epi and two Bell 429 helicopters to the government of Guyana for an estimated \$256M.

The sale is not finalised, as it depends on the final requirements of and acceptance by the Latin American country, says the Defense Security Cooperation Agency, which notified the US Congress, on 30 October.

The four light helicopters will have unspecified customer-unique modifications. The sales package also includes two WESCAM MX-10 cameras, mission equipment, contractor-provided pilot and maintainer training, ground support equipment and spares. Guyana will use the enhanced capability to strengthen its homeland defence; conduct maritime surveillance, patrol, and interdiction; counter narcotic trafficking and transnational criminal organizations; deter regional threats; and support coalition partners overseas.

Ed: Although nominally a military sale, the Guyana Defence Forces support police and other law enforcement activities with its aircraft. They have operated Bell helicopters before – with two leased JetRanger's being noted twelve years ago and a 412 owned before that. Other recent acquisitions have been two pre-owned Short Skyvan and two Britten-Norman BN-2 early last year.

UNITED STATES

NATIONAL: Faced with seemingly never-ending disruption from the pandemic APSA continues to extend its Webinar Training into 2021.

APSA's live, online Webinar Training Series created to bring many of the classes scheduled for this year's APSCON and Public Safety Drone Expo directly to its membership, has been extended. All are offered at no charge as a benefit of *membership*; however, registration is required. If someone who is not an APSA member and would like to access any of these webinars, they can easily join APSA on-line at www.publicsafetyaviation.org and at a price that is way less than single commercial webinars and conference would seek to charge.

11 December Aerial Firefighting Tactics Mike Sagely, Los Angeles County (CA) Fire Department Sponsored by Bell

14 December Use of Drones on Firefighting Missions Scott Mlakar, Willoughby (OH) Fire

18 December Emergency Management Use of Drones Darshan Divakaran, Airavat Technology Solutions

8 January Battery Care for your Drone Darshan Divakaran, Airavat Technology Solutions

22 January Law Enforcement Response to Aircraft Accidents. Scott May, Lexington (KY) Police Department (Ret.) / Bluegrass Airport (KY) Aircraft Rescue and Firefighting Center

Ed: This service is likely to continue for some time. Available statistics suggest that in November parts of the USA were facing a surge in Corona virus cases that set the USA something like 20% higher than Europe. Numerous events were being rescheduled for dates later in 2021.

ARIZONA: The Maricopa County Sheriff's office is responsible for 9,224 sq. mls. (23,890 km²) of the state and around 4.2 million people living there. They have had an active air unit for many years, mainly operating Bell singles.

The operation now has a Bell 429, twin engine helicopter in the completion centre for delivery in the New Year. The new 429 is larger than current helicopters and is primarily intended for rescues. [Twitter]

CALIFORNIA: US law enforcement tend to make greater use of sky shout facilities than other countries – it may be something to do with the large open spaces – but in some cases the area is so large that the customer on the ground cannot hear clearly what is being said. Now San Diego County Sheriff's Office have come up with a possible answer to that problem. If citizens hear the helicopter making an announcement in their community but cannot make out what is being said they simply call or text a special telephone number and receive a message delivered straight to their phone to see the words. Call or text "Hello" to (858) 866-HELO (4356). [Twitter]

I must admit it was something of a surprise to learn that the helicopters of the Los Angeles Police Department and their control rooms were not already fully equipped with a comprehensive suite of downlink and recording equipment. News that the LAPD was to start adding equipment and to begin recording helicopter footage of large-scale events only emerged in early November.

The upgrade in capability took place just in time for the Presidential Election Day and its aftermath, when protests and political unrest were anticipated by many.

LAPD Assistant Chief Horace Frank, assistant commander of the department's Information and Technology Bureau, said of a pair of recording devices that can capture and store live feeds from some of the department's helicopters have been tested and were ready to go.



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The recording equipment — including two massive hard drives to store the footage — valued at \$2,150 and was provided to the department by the Los Angeles Police Foundation, a non-profit that over the years has gifted LAPD with millions of dollars in new technology.

It appears that only some but not all of the helicopter fleet are equipped with cameras, downlinks and recorders but that, although able to watch the video live, the ground stations were not equipped to record.

With the new donation ten LAPD helicopters — more than half of its fleet — could be outfitted with the ability to record footage.

Ed: Some of the cause of this failure to provide the police air operation with the tools it needs lies with strong public opinion that affects some parts of the United States. Some strong pressure groups and politicians still skew the capability of airborne cameras and, in this case, how the footage is treated. "How do I know that somebody's not just sending images of my yard, not just capturing images?" is a common complaint.

Unlike in say the United Kingdom where cameras and downlinks are usually on as long as the aircraft is flying, the LAPD helicopters do not turn on their live feeds for regular patrols. During an event when a helicopter with a live camera is requested, officials start recording only after approval from a captain supervising the response.

LAPD would approve turning on the cameras and recording an event only if there's "an escalation of criminal activity."

Activists have long cited the belief that the footage from drones and helicopters to spy on them and criminalize legitimate protests. That stopped efforts by many departments to get drones mounted with cameras. The Police Commission approved LAPD's drones last year.

Other nations use patterns are prompted by various pressures. Having cameras on throughout the flight often reflected technology. 20 years ago FLIR cameras used QUIP technology that needed a relatively long period to cool down and required cameras to be switched on early so they were ready by the time the unit arrived on scene. Recording or downlinking the image was then a matter of taste. After an hour or so standard patrol images have no real attraction to casual watchers. However, like the millions of hours of CCTV footage captured each day, a tiny amount may have use for research and post crime investigation. [see 'Move along there' column for CCTV numbers]

A few days after the gifting of the downlink improvements it was announced that the Los Angeles Police Department is to be hit by fiscal restraints to the tune of \$150M. The effect of a budget trimming is that certain specialised units, including air support, will be downsized.

The significant trimming of the overall police budget has been driven by the pressures of the widespread protests in the summer and the pandemic. Part of that pressure has been the manner in which many lawmakers and politicians have been forced to bend to the "Defund Police" movement. The fiscal crisis could see funding for police and other city agencies dry up further as the year progresses.

The cuts are in the face of reported rises in crime, homicides and shootings soar to levels not seen in the city in a decade. Homicides are up by about 25% this year, compared with last, putting the city on pace to surpass 300 killings for the first time since 2009.

The \$150M budget cuts, way less than was being demanded by activists, will force the LAPD to cut 350 sworn positions and reducing its ranks from about 10,110 sworn officers to an estimated 9,752 by March. A greater number of civilian employees will be lost. In the main the reductions in staff will be achieved through retirements and reassigning staff to vacant positions.

NORTH CAROLINA: The Charlotte City Council will replace one of its two Bell 407 helicopters that is now more than 20 years old.

The Charlotte-Mecklenburg Police Dept, has been operating Bell helicopters for about 50 years and in 1997 acquired its first Bell 407 [N407PD/53161] to replace a long serving Bell 206. It is that 407 that is to be replaced. The second 407 is three years younger.

The current fleet has EO/IR cameras, moving map systems, search lights, microwave downlinks, Lo-Jack tracking and NVG compatible cockpits.

The \$5.2M required to buy the new helicopter will come from the Capital Improvement Plan and not CMPD's budget.

It's not uncommon for local law enforcement offices to acquire surplus equipment no longer being used by the military. Many agencies across the USA make use of the service but it seems that volume of equipment recently obtained by the Columbus County Sheriff's Office has some residents expressing concern.

Since Sheriff Jody Greene took office in December 2018, his department has accepted \$3.8M in surplus military equipment from the federal government, including two helicopters, a mine resistant vehicle, nine cargo and utility trucks, boats, 300 magazine cartridges and nine riot shields. Prior to Greene's term, it does not appear the Columbus County Sheriff's office accepted any military surplus equipment from the federal 1033 program in charge of equipment distribution.

Ed: Out of the estimated 17,000 federal, state and local law enforcement agencies across the country, it is estimated that over 8,000 participate in 1033 to accept equipment the military is no longer using. The 1033 scheme has been donating military equipment to law enforcement agencies since 1997, but was predated by earlier schemes that saw US airborne law enforcement accept ex-military aircraft in the 1970s.

OKLAHOMA: The new air support facility for the Oklahoma City air unit is nearly finished to the north of the Will Rogers World Airport. The main structure and landing area are complete and awaiting completion with a hope that the unit will move in this month.

Until they move the Air Support Unit will remain based with its two AS350B3 helicopters at 1401 South Western Avenue, Oklahoma City, a City Centre location and former Airpark a few miles north of the airport. The air unit is one of the last occupants of the former Airpark, an area destined to be redeveloped with housing and commercial units.



The new larger facility is being built next to an existing police facility -known as the Southwest Briefing Station. On the north side of the Will Rogers Airport it was formerly known as Will Rogers but now the facility is known as the OPD's Southwest Division, located at 5501 S Portland Ave, Oklahoma City, OK 73112

Ed: OPD aviation dates back to light aircraft use in the 1960s but since the 1990s they have operated helicopters to keep watch over the city. In February 2009 they were looking to replace their ageing MD500 helicopters but it was 2014 before two replacement AS350B3's arrived in service.

OREGON: There are said to be no law enforcement agencies in Oregon currently operating a helicopter. However Lane County still owned one, an MD500E N438RC, last year although it supposedly eliminated funding for its aviation programme in 2012. That Lane County Sheriff's is still registered in their name although its actual status is unclear since it suffered a hard landing while returning from a local fair on July 27 last year.

Yamhill County used to have a Bell OH-58 but sold it to an out of state agency in 2012. Beaverton rid itself of a Hughes 300 it operated 20 years ago.

All of which leaves a few agencies, including the State Police, using a few fixed wing light aircraft to provide air cover.

Now a change may be in the air with Deschutes County Sheriff's Dept., located in Bend, Oregon, researching the acquisition of a helicopter. Since last year they have had a drone section operating a handful of small DJi Mavic 2 craft.



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TEXAS: In mid-November Collins Aerospace Systems' helicopter rescue hoist business presented the Texas Department of Public Safety (DPS) with the company's Rescue of the Year Award.



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Each year, Collins Aerospace honours one of its Goodrich hoist customers for a particularly daring helicopter rescue executed using the company's hoist. This year, Texas DPS was recognised for rescues it carried out during a flood in Junction, Texas, in October 2018.

After Junction received more than 18 inches of rain in less than 24 hours, the Llano River breached its banks and began flooding the surrounding area at a rate of 120 cubic feet per second. A nearby recreational vehicle campground was completely consumed by the rising water, which left trailers turned upside down and residents swept away or stranded in trees.

DPS 107 aircrew members Cpt. Shawn Stephenson, Lt. Jeff Evans and Texas Highway Patrol Tech. Sgt. Steven Tippett were called in to assist with water rescues in the Junction area. Working together, the crew saved the lives of four campground residents over the next few hours, including one woman who had spent nearly five hours in the Llano River and drifted 23 miles before being rescued by the aircrew after multiple attempts. [Collins]



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AIR AMBULANCE

AUSTRALIA

NEW SOUTH WALES: According to Australian start-up AMSL Aero and the University of Sydney the future of emergency medical transport will take to the air in 2023.

The two partners are working together to produce an electric VTOL craft for the first responders and by 2023 “the Australian skies [will be] dotted with [them].” AMSL and the university are developing the craft in partnership with the University of Sydney, autonomy; sensing specialists Mission Systems, and Australian aeromedical company CareFlight.

The pod-shaped aircraft, Vertiiia, flies under the power of eight tilting multirotors mounted on the upper tail and the lower front. The prototype can reach a speed of 300 km/h with autonomous capabilities to come when fully ready. AMSL claim it will have a dynamic range of 250 km [155 miles] utilising battery power but the planned hydrogen-fuelled version will offer 800 km [500 miles] and be quicker to refuel. The current marketing states that the Vertiiia will be safer than helicopters, will cost as little as a hatchback car, and will be easy to maintain.

There is a strategic partnership with CareFlight, the Australian critical care aeromedical retrieval service and charity, for use of Vertiiia by 2023 as an air ambulance to provide convenient, low-cost connectivity for remote regions that are devoid of any airstrips.

AMSL are at the pre-flight prototype stage, the craft is based at Bankstown Aerodrome with test flying due to take place flights at Narromine Airport. The project has attracted some Federal Government support to the tune of a \$3M Cooperative Research Centres Projects (CRC-P) grant. [Yanko]



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Editor: Pie in the sky? Or a viable green project? Time will tell. I think that we can be pretty sure that CareFlight will not be operating the developed and transport category certified craft in 2023 but the promise of an eco-friendly aircraft that travels at 300 kph and can reach 98 percent of the population must be tempting. Perhaps no-one noticed that the main project focus is to reach the regions - that presumably means addressing the needs of the remaining 2% of the population in the vastness of New South Wales who have no airfields. Even the promised 250 miles radius is nothing in NSW.

BOSNIA & HERZOGOVINA

SRPSKA: The Russian Helicopters holding company (part of Rostec State Corporation) has delivered a first Ansat helicopter to a client in Europe. The operator of the rotorcraft, which is equipped for medical operations, is the Ministry of Interior of the Republika Srpska (Bosnia and Herzegovina). This is the first of three helicopters.

Ansat for Republika Srpska comes with a medical module equipped with a stretcher and a medical shelf. The helicopter cabin has place for transporting one patient and two chairs for accompanying doctors. Equipment configuration includes a system for artificial lung ventilation, tele-ECG allowing to monitor cardiac activity in real time, and various other equipment for the evacuation of patients of varying severity. The delivery set includes five seats, which can be installed instead of the medical module and carry 7 passengers in the helicopter cabin. The helicopter also comes with active vibration control system.



The contract includes the training of three technicians and two pilots of the customer in the Kazan Helicopters Aviation Training Centre. The facility will provide further multi-stage training of four more pilots and six technical personnel as more helicopters are delivered over the next two years. [acrofan]

CANADA

ALBERTA: Frustration and disappointment is emerging from the southeast corner of the province following a delay in the results of the province's Helicopter Emergency Medical Services (HEMS) review.

HALO Air Ambulance has been awaiting the results of the report for close to a year, with the review into helicopter service agencies being launched last November.

The province stated that the report would be released sometime in the autumn but groups like HALO continue to wait.

For HALO, the results of the HEMS review are a critical piece for determining what the funding model for the organization will look like in the long run. Earlier this summer, HALO was put on life support as the COVID-19 pandemic limited fundraising opportunities and the programme came within weeks of ceasing operations without provincial support. Thanks to a wave of public donations in the following weeks, HALO was able to maintain full operations and currently have enough in their coffers to stretch into the second quarter of 2021.

Meanwhile the province say they will not support the organisation financially until the results of the HEMS study were found.

NORTH WEST: Keewatin Air, a small airline operating from seven bases across Nunavut, Manitoba, and the Northwest Territories from the border with Alaska to Hudson Bay is now deploying the EpiShuttle isolation pod, for safe transportation of contagious patients. Canada is facing an increasing number of Covid-19 cases, and safe transport is key to handle the pandemic.

Keewatin operate a fleet based on the Pilatus PC-12 and Beech King Air and have recently received extensive training including trial runs in using the EpiShuttle to meet operational certification from Transport Canada to deploy the units in the PC-12. Keewatin, along with Alberta Health Services fixed wing air ambulance has EpiShuttles in service.



Tight fit ©Keewatin via EPI

In case of a local outbreak, Keewatin Air can with their EpiShuttles offer fast and safe transport, even from remote locations. The aircraft PC-12, is widely used in the north, where its short takeoff and landing capabilities make it able to service the smallest and remote communities with modest airstrips. This includes missions to Alert which is the most northerly community in Canada and the world at latitude 82 degrees about 800 miles from the North pole.

Keewatin Air is subsidiary of a larger group of airlines owned by Exchange Income Corporation and operates a variety of aircraft within the group, with that Keewatin Air is also working on certificates to do mass evacuations with EpiShuttles in ATRs and Dash 8s as well.

Ed: The EpiShuttle remains the isolation transport device of choice across the world but some regions have had to await delivery in a scenario where the world was not really aware of it until six months ago. There are alternatives but it is clear that most aspire to the Norwegian device even at its standard cost was being quoted as €47,000 each in April this year.

Direx announced that the first EpiShuttle arrived in Spain, for evaluation from professional caretakers and medical transport last month. Spain is currently experiencing a second wave of corona patients, and need more than ever to gain control. EpiGuard and Direx just signed an agreement placing the latter as the exclusive distributor in Spain.

GERMANY

DRF: From October 21st, DRF Luftrettung will provide rapid assistance in Bremen with another helicopter: A modern EC145 will replace the BK 117 currently in operation.

As an intensive care transport helicopter and also in emergency rescue, "Christoph Weser" makes an important contribution to HEMS in Bremen and the surrounding area, The EC145 many advantages compared to the previous type, especially for longer patient transports between clinics, which can also be abroad.

IRELAND

NATIONAL: The Health Service Executive (HSE) is looking for a new Emergency Air Ambulance Service provider to transfer patients (both inpatients and at home based patients) between Ireland and other countries, mainly the UK, because the Air Corps and Coast Guard cannot transfer sick patients or donor organs at night.

These services are generally provided by the Irish Air Corps and the Irish Coast Guard Services under existing arrangements. However, due to specific constraints both the Irish Air Corps and the Irish Coast Guard Service are unable to provide Emergency Air Ambulance Services each night between the hours of 7 p.m. and 7.30 a.m. (7 p.m. to 8.30 a.m. June, July and August). The requirement is the transfer, via air ambulance, of patients from Ireland to another jurisdiction, often in emergency situations. The entire provi-

sion of the service would be the remit of the service provider i.e. staffing, equipment, etc.

Under a new arrangement, the HSE is expecting to spend up to €16M over two years on the provision of an air ambulance service which can operate when the Air Corps and Coast Guard are unavailable to transfer patients. Tender documents say the new suppliers' aircraft "may also be required from time to time on a similar emergency basis to transport organ retrieval teams from one hospital to another".

The service is required from June 2021 for two years but may be extended for another two years. The tender requires the suppliers to provide their own aircraft, staff and equipment. The tender documents were issued at the end of October and were due to close on November 26.

As previously reported in PAN the Air Corps has been struggling to sustain its operations because of a shortage of qualified staff, such as pilots and technicians. Figures show more than 800 personnel were discharged from Army, Naval Service and Air Corps last year. This has increased steadily year-on-year since 2013 when 473 people left.

The situation is partly relieved by the recent introduction into service of four new Pilatus PC12NG aircraft and the pending delivery of two Airbus C295 aircraft in the medium term but remains challenging.

A Coast Guard spokeswoman said there are no restrictions on helicopter-based search and rescue operations at night because its crews operate on 24-hour shifts that commence at 1pm each day. It provides patient transfer services to the HSE on request depending on availability, but international patient transfer operations are subject to commercial air transport (CAT) regulations prescribing mandatory rest periods for crews. Such requirements do not apply to crews when operating on the search and rescue missions they typically carry out. [Independent/TED]

NEW ZEALAND

FLYING DOCTOR SERVICE: The New Zealand Flying Doctor service has come a long way since it first took off 25 years ago - and in late October it unveiled a new specialist medical aircraft in Christchurch – a Beechcraft Super King Air 200C ZK-FDS.

The King Air was revealed at Christchurch Airport on October 29 with a ceremonial water salute by the airport fire service on landing. It is equipped with two patient stretchers, plus seating for up to four medical crew, as well as patient support people, equipment and two pilots. Its 1,500 nautical mile range, allows it to service the entire South Island and the remote Chatham Islands. A journey from Invercargill to Christchurch takes just over one hour, rather than eight hours by road ambulance.

The new aircraft is needed as numbers of missions have significantly increased in recent years. They flew over 1200 missions in the past year, up 17%.

As a charity, the New Zealand Flying Doctor Trust relies upon the community for supporting the service over the years. The New Zealand Flying Doctor aircraft and air rescue helicopters complement each other, with helicopters being the primary response in emergency situations from the scene to hospital, and fixed wing aircraft taking over when a different type of care or transfer is required, most often for inter-hospital transport of patients requiring acute treatment offered at a larger tertiary centre [starnews.co.nz/NZFD]

Ed: One of the service's first high profile missions was to transfer medical teams from Christchurch to Greymouth using a Cessna 421 Golden Eagle to help staff at Greymouth Hospital after the Cave Creek disaster on April 27, 1995. That mission was remembered at the official launch of the new plane six months after the service's 25th anniversary, which has to be pushed back due to the Covid restrictions.



New experience ©NZFD



NORWAY

BØDØ: Luftambulansetjenesten HF in Bødø in the north of Norway is to procure a new permanent Base in Kirkenes at the extreme north of the country and close to the borders of Finland and Russia. The process is an expansion of the existing contract and was set to be signed about ten days after a voluntary Transparency Notice was published at the end of October.

The Air Ambulance Service is to expand the existing contract with Norsk Luftambulanse AS for the operation of air ambulance bases to include the operation of the new base in Kirkenes. The total value of the additional element to the contract is assessed at 360 000 000, Norwegian Krone (about £300,000).

The procurement includes complete operation in Kirkenes, equivalent to the other 13 air ambulance bases, including operation of an air ambulance helicopter, reserve helicopter, and doctor car, staff, maintenance, stand-by, equipment, training, etc. The procurement will follow the same period as the contract for the other air ambulance helicopter bases, up to and including 31 May 2024, with an option for an extension for 2 + 2 years.

The Air Ambulance Service signed a contract with Norsk Luftambulanse AS in 2016 for air ambulance helicopter services. The contract includes complete operation of 13 air ambulance bases, including the procurement and operation of an air ambulance helicopter and doctor car, staff, maintenance, stand-by, equipment, training, etc. The contract includes 17 helicopters that are dedicated to the air ambulance service. 13 helicopters must always be on stand-by at 12 bases. Unforeseen circumstances have arisen that now makes it necessary to expand the contract to include the operation of a new permanent base in Kirkenes.

The need to expand the existing contract is due to an increased need for stand-by resulting from a

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changed view of vulnerability/risk. The changed view is partly due to the challenges connected to the air ambulance services, and partly due to the Covid-19 pandemic's influence on the general approach to vulnerability/risk.

The aim of the original contract was to establish uniform national stand-by of air ambulance services. It has become apparent that this aim has not been fully met due to the development that has occurred since the original procurement was made in 2015/2016, which the Norwegian Air Ambulance Service could not have foreseen. In the light of operational experience it has been found that the existing contract does not ensure adequate stand-by in North Norway. Creating a new short-life contract, instead of an expansion of the existing contract, would lead to great uncertainty as to whether the Air Ambulance Service would be able to ensure continual operation in Kirkenes until it was in place. All contracts will need to have the same end date. There is doubt as to whether the same requirements listed in the original contract could be set in a new contest for a new contract of such short duration, as this would prevent true competition.

[TED]

SPAIN

MADRID: The Community of Madrid has renewed the two medical helicopters of the SUMMA 112 (the Medical Emergency Service of the Community of Madrid). The new model of these aircraft, which came into operation on November 1, is the Airbus H145 EC-MOR. SUMMA 112 has the two medical helicopters in addition to ground based resources (28 mobile ICUs and 16 Rapid Intervention Vehicles).

At the end of May a contract was signed with Eliance Helicopter Global Services SL for the Helicopter Service at a cost of €2,571,300 euros for the service commencement with the H145 model from November 1 at the Las Rozas and Lozoyuela bases. SUMMA 112 helicopters have carried out a total of 516 call outs and 176 hospital transfers so far in 2020.

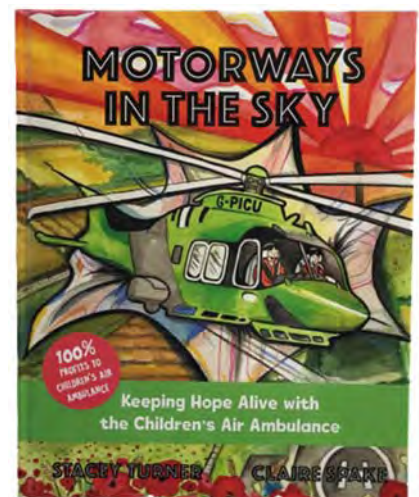
Ed: In 2014 SUMMA 112 awarded the air ambulance contract for Madrid to INAER Spain through a public tender. The company operated an AgustaWestland AW109 and a Bell 412EP under a four year contract with a two year extension.

UNITED KINGDOM

CHILDREN'S: "Motorways in the Sky" is the exclusive children's book written by Stacey Turner and illustrated by Claire Spake, to educate families on the inspiring work of the Children's Air Ambulance. The 40 page hardback cover book ISBN: 978-1-5272-7295-8 is available from the Children's Air Ambulance at £5.99 each.

The book is designed to educate and promote the air ambulance service for children and sets out the official story of how the service operates. They also have a children's club #TheCrew which was launched by two nine-year-old girls, who created their own fundraising club.

<https://theairambulance.org.uk/online-shop/motorways-in-the-sky-childrens-air-ambulance-book/>



The new H145 shares hangar space with an earlier NPAS H145
©DAAT

DEVON: On November 11, the new Airbus Helicopters H145 helicopter was introduced into service and ready to bring emergency medical care to patients across Devon.

Devon Air Ambulance Trust (DAAT) has upgraded one of its two owned EC135T2 helicopters to the larger airframe to provide some additional operational capacity. The new aircraft has a bigger airframe offering additional cabin space for medical compartment. When operating with a standard team of three clinicians (a doctor alongside two paramedics), there is still seating space for a parent/guardian or trainee clinician or pilot.

DAAT have designed their own medical fit-out which includes a unique seating configuration where up to three clinicians can all access a patient, when on the ground or in flight, with their equipment and monitors laid out in a systematic way and all within easy reach. The medical interior of the H145 includes a new single stretcher system to ease the transfer of a patient from the scene of the incident, into the aircraft and then into the hospital A&E making the journey more comfortable for the patient.

The new H145 will be based at Exeter airport and the existing EC135 helicopter is based out of the north Devon Eaglescott airbase near Torrington and together both will be providing up to 19 hours' service, operating until 2am every day, seven days a week. www.daat.org

EAST ANGLIA: An air ambulance service will push ahead with plans to run 24/7 despite the setbacks brought about by Covid-19. The charity operates across Cambridgeshire, Bedfordshire, Norfolk and Suffolk, working in partnership with similar air ambulance trusts, such as Magpas and Essex and Hertfordshire.

East Anglian Air Ambulance has had a "challenging year", with a forecast £1.7M shortfall in fundraising over 12 months, but it will still start flying 24/7 in 2021 after a 16-week delay.

The £7M project to turn the original air ambulance base at Gambling Close, Norwich Airport, Norfolk into a state-of-the-art 21st Century 24/7 operation was started in January and was due to finish by the end of this year.



The funds for the new base project were ringfenced from years of gifts in wills and committed before the Covid-19 pandemic hit. The exterior work on the project is now complete and despite all the challenges of 2020 has managed to remain more or less on track. East Anglia's goal to become the first HEMS in the East of England to fly 24/7 is just a few months away. East Anglia and Magpas both run 24/7 via car, but not in the air.

Despite the difficulties, from July 2019 to June 2020, the air ambulance exceeded its fundraising target and finished its financial year with a surplus of £1.1M, in part thanks to a one-off government grant. In contrast, for the current financial year the charity is predicting that £1.7M shortfall - a fall of 15% - as its fundraising income is hit by the effects of the pandemic.



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GREAT WESTERN: The 'Charity (GWAAC) is looking for a Head of Operations, a new post for the charity and created in recognition of the fact that as it grows and becomes more complex, there is a need to enhance the leadership team. The new Head of Operations will report directly to the CEO and will be an integral part of the charity's management team, deputizing for the CEO regularly, and having an influence on all facets of the charity's operations.

GWAAC owns a purpose-built base, located at Almondsbury at the M4/M5 junction in South Gloucestershire. The site currently has two tenants, including the National Police Air Service. The management of this 72-acre site, and relationships with tenants and neighbours, will be the responsibility of the Head of Operations.

The Head of Operations attracts a salary in the region of £60,000 and the 25-35 hours a week will split its time between the office in south west Bristol and the Almondsbury base. Applications closed at the end of November.

LONDON: Aberdeen Standard Investments has confirmed a new three-year charity partnership with London's Air Ambulance, having supported the charity since 2012. The new partnership, that will run until 2023, will continue to provide lifesaving funding to the London's Air Ambulance service. London mainly serve the ten million people living and working within London and the M25 motorway operating two MD902 Explorer helicopters from the rooftop pad on the Royal London Hospital in Whitechapel, in east London. The helicopter operation is supported by response cars during maintenance downtime and bad flying weather. [Helihub]

Last month London's Air Ambulance Charity launched its Christmas appeal, 'London's Christmas Mission'. The appeal comes as the charity is estimating that it faces a £5M reduction in income over the next two to three years due to Covid-19 restrictions. Many of its fundraising activities have been halted during lockdowns. The major fundraising events lost have included the annual Abseil event in September which last year raised £132,000. In addition, the London Marathon this year had been expected to raise approximately £82,000 for the charity but was cancelled.

UNITED STATES

ARIZONA: Although social distancing protocols are somewhat different in the USA than elsewhere, in Maricopa County it took two sessions to officially break ground for an Exceptional Healthcare facility to be built by BMH Builders of Dallas at the junction of the newly built John Wayne Parkway and Honeycutt Avenue.

To maintain social distancing, the Texas-based company hosted a ceremony in the morning with business and economic development representatives and another in the afternoon with Maricopa City Council and city staff.

One year from now the new build \$20M community hospital, will offer a 24-hour emergency department. The company is forging partnerships with ambulance companies and Mesa-based Native Air Ambulance. The hospital will have a helicopter landing pad to facilitate air transfers to other facilities.

For the local Fire Chief the proximity of a hospital will be a game-changer for his department. Approximately 85% of their calls for service are medical and served by an existing hospital that is over 19 miles away.

The building will be one storey and have 10 private rooms, 10 emergency department rooms and space for radiology. It is unlikely that the facilities on site will stop at that and the company is already looking to expand the facilities to include a surgery department, MRI space, a specialty clinic and medical offices. Being Arizona there is space, it is just a case of getting it for the right price.

FLORIDA: Critically ill and injured infants and children throughout the southeastern United States now have expanded access to the expert paediatric care of Wolfson Children's Hospital of Jacksonville through a new Kids Kare helicopter. The refurbished 2014 Bell 407 helicopter, N610PA, is the latest addition to



Wolfson Children’s Critical Care Transport Fleet, is dedicated solely to infants and children, staffed with a highly trained clinical flight crew, and has advanced medical capabilities. Along with Kids Kare Mobile Intensive Care Units (ICUs) and a fixed-wing aircraft that are part of the transport fleet, the new helicopter is being used for interfacility transport to bring patients from other hospitals in the region to Wolfson Children’s.



407 ©Wolfson Children’s Critical Care

The new Kids Kare helicopter is fully equipped with all medications and supplies needed to treat a critically ill or injured infant or child during transport. The helicopter also includes a satellite phone to ensure constant communication between the crew and pediatric physician specialists at Wolfson Children’s during transport. It is staffed 24/7 by a Wolfson Children’s crew consisting of a pilot, neonatal/pediatric transport -certified respiratory therapist and a neonatal/pediatric transport-certified registered nurse.

With the addition of the Kids Kare helicopter, the Wolfson Children’s Critical Care Transport Fleet is now comprised of the dedicated helicopter, fixed-wing airplane and three Kids Kare Mobile ICUs. [Wolfson]

GREAT LAKES: Leonardo have announced that Life Link III, an EMS operator in Minnesota and Wisconsin (situated in the north of the USA west of the Great Lakes), has signed a contract for an AW169 and an AW109 Trekker for air medical transport missions. The helicopters will ensure in-flight critical care and transport patients across the upper-Midwest of the country and delivery is anticipated to take place in the fourth quarter of 2021. This order marks the entry of the AW109 Trekker into the US for EMS applications and further grows the success of the AW169 in this market.

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This sale will increase Life Link III's Leonardo helicopters fleet to 14 aircraft and the company will be the first to operate a mixed fleet of AW119 IFR and AW109 Trekker. These aircraft feature the same core avionics which deliver unique advantages in terms of fleet management, training, safety, and support. The EMS operator's existing fleet comprises of ten AW119Kx which have accrued more than 21,000 flight hours. In addition, in July of this year, Life Link III signed for the first IFR-certified AW119 in the civil market - this aircraft will enable the company to undertake safer operations in challenging weather conditions. The helicopter is expected to be delivered in the third quarter of 2021. [Leonardo]

MISSOURI: Air Methods is to open a new helicopter base in Lincoln County, Missouri, north of St. Louis. The base is part of the Air Methods subsidiary, ARCH Air Medical Service, which has served Missouri and Illinois for more than 40 years. ARCH and Air Methods do not require patients to purchase memberships for air medical services, unlike other air medical companies.

Located one mile west of U.S. 61 on Highway E, at Lincoln County Ambulance District's Auburn Station 5, ARCH Lincoln County brings 24/7/365 air medical staffing for traumatic injuries, heart attacks, strokes, pediatric emergencies, and other life-threatening incidents. ARCH also frequently provides critical interfacility transports as area hospitals manage the current surge of COVID-19 cases.

The ARCH Lincoln County Bell 407 helicopter is staffed with trauma clinicians and pilots with years of experience in the field and will eventually carry blood and plasma on every flight. Skilled aviation mechanics ensure the aircraft is always safe and mission ready. Air Methods and ARCH adhere to strict COVID-19 protocols that include full personal protective equipment (PPE) for crews and decontamination of the aircraft after every transport. The base is committed to treating and transporting any patient who requires care. [Air Methods]

NORTH CAROLINA: Less than a year after opening a new fire station and recovering from a tornado in 2017 more emergency services construction projects are being started.

The Autryville Fire Department recently announced that a helipad project is coming soon, which will be built near the station. It's a partnership between the department and Cape Fear Valley Health and its Mobile Integrated Healthcare LifeLink Air.

Barnhill Contracting Company recently removed trees to make way for the space. Terry Spell Mechanical is also helping with the project, along with other businesses. The others involved are Gradient Land Water Innovations, Med-Trans Corporation, and Talbert and Bright. The department is looking forward to a groundbreaking ceremony in the future. An official finish date has not been set due to COVID-19 and scheduling from Barnhill Construction.

The department is applying for a permit from the FAA, which is delayed by the pandemic. Autryville's department received grant funding from the U.S. Department of Agriculture for a new generator at the station which will provide power to the helipad. Cape Fear Valley is also expected to receive grant funding to pay for the helipad and related technology. An official cost estimate and size was not announced. Hawkins added that fire department is also applying for a grant so helicopters can go to specific channel to turn on lights at the helipad.

The new facility will serve the town and Sampson County and eastern Cumberland County. Autryville is nestled on the borderline of the two counties, next to the South River. After the project is finished Cape Fear Valley will have a place to land besides a parking lot or on the street during emergency situations. After Hurricane Florence and Hurricane Matthew, research showed that some of the troubles for both counties involving flooding. Hawkins said the project was a big push for future needs between officials and getting resources from one side to another. [Sampson]



FIRE

AUSTRALIA

NATIONAL: The Fox and Coulson families are set to create a nationally co-ordinated and sovereign aerial firefighting fleet - with expertise in night-time blaze-battling – to quickly respond to emergencies and prevent the severity of future bushfire seasons.

In the wake of the devastating 2019/2020 fires, Lindsay Fox, founder of Australia's largest logistics company, LinFox, has teamed up with the world's leading aerial firefighting company, Coulson Aviation Australia, to create Australia's first national approach to the provision of high capacity fire and emergency aviation services that can operate at night as well as day, with the aim to launch next summer 2021.

The proposed fleet of large fixed wing air tankers, super heavy helicopters and fire intelligence gathering aircraft will be based and operated throughout the State and Territories in Australia, with maintenance and support infrastructure supplied in New South Wales and Victoria. The team intends to work with State Governments, Territories, emergency services agencies, and within any framework agreed by the Federal Government.

The team intends to build a world class training facility and centre of excellence for volunteers. Australia has one of the largest volunteer firefighting forces in the world. This will help create a strong, intelligence-led and informed approach to firefighting and be available 365 days a year.

Calls for a national aerial fleet have been echoed by fire victims for decades and was a key recommendation made by the long-awaited Royal Commission into National Natural Disaster Arrange-



The image features the RDDS MISSION CRITICAL logo at the top, set against a blue sky with clouds. Below the logo, four pieces of avionics equipment are displayed in a row, each with a label underneath:

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ments 2020. The Royal Commission focussed on emergency responses to the 2019/2020 fire season which saw 33 lost lives, 3000+ homes destroyed, three billion animals killed and 24 - 40 million hectares burned.

The combining of Fox and Coulson skill sets will allow the consortium to set up remote bases where aircraft can safely reload retardant close to a live fire zone, rather than having to fly, sometimes for hours, to the nearest airport - and then back again.

SAUDI ARABIA

BABCOCK: Babcock Italia, who manage and operate the Italian Government's fleet of 19 Canadair aircraft, recently sent two Canadair firefighting aircraft to Saudi Arabia to put out fires in the Asir region which borders the Red Sea and Yemen.

Eight pilots, four maintenance technicians and two Canadair CL-415s departed from the base at Ciampino Airport in Rome. Babcock Italia have previously lent assistance to missions in Sweden, Spain, Portugal, Libya and Russia. [Babcock]

UNITED STATES

NATIONAL: Coulson Aviation is further expanding its global aerial firefighting capabilities with the acquisition of four former U.S. Customs and Border Protection role configured Cessna Citation 550 twin jets. They will be employed in the role of leading tankers to retardant drop points and collecting intelligence for fire commanders on the ground. The Citations will gather information from fire scenes—including weather, maps, drop analysis, and video for transmission to command and control.

Coulson chose the Citation IIs for their existing special-mission configuration, and their enhanced speed and range when compared with older turboprop powered alternatives used by competitors.

As a lead aircraft they will fly in advance of the tanker aircraft and mark the target and then lead the larger tanker aircraft through the drop using the smoke to signal to the tanker when to begin dropping its load. . [AIN]

TURKEY

INTERNATIONAL AID: The Belarusian Emergencies Ministry also despatched a helicopter and crew to aid Turkey in another international aid mission recently. The mission was a first for the ministry air crews sent to Turkey, and provided a great deal of valuable experience in international cooperation in the prevention of and fighting forest fires. For the two first pilots, two second pilots, and two flight engineers it was the first time they had carried out flights with suspended load, a first time they had fought forest fires in mountainous areas and the first time they had transited international air routes.

While in Turkey the crew spent 459 hours and 49 minutes in the air to carry out 292 missions, discharge water 1,396 times, and drop 4,190 tonnes of water on fires. The helicopter also transported 212 Turkish rescue workers and forest rangers to fire locations.

On their return to their home base the crews were greeted by the Belarusian First Deputy Emergencies Minister Aleksandr Khudoleyev as well as friends and families of the crew. The return was treated as a high profile media event for the six directly involved in the mission and the sixteen technicians involved in preparing the helicopters for the flight to Turkey. [BEM]





SEARCH & RESCUE

ICELAND

COAST GUARD: The availability of the helicopters of the Icelandic Coast Guard has been suffering due to an ongoing strike by maintenance staff. Last month the Coast Guard has issued a statement, explaining that due to the ongoing strike of aircraft mechanics, it was expected that no rescue helicopter would be available in the country by the middle of the week commencing November 25.

The strike began November 5, and to date no meeting had been arranged between the Association of Icelandic Aircraft Mechanics and the State's Negotiating Committee.

There was an expectation that Airbus Helicopters H225 TF-GRO, the only operable helicopter, would be unavailable due to a check. The other H225 TF-EIR, was offline undergoing a check when the strike was called. Regardless of the immediate outcome of the strike its effects on the ability of the Coast Guard to operate will be felt into next year.

INDIA

COAST GUARD: The Coast Guard is to start taking delivery of a newer version of the HAL Dhruv helicopter shortly. The operator already has examples of the basic Mark 1 Dhruv in service but the new model is vastly more capable, offering a glass cockpit and more powerful engines.

The Dhruv is in service with all arms of the Indian forces in both utility and weaponised variants. The original version featured analogue instruments were powered by the Turbomeca (Safran) TM 333 2B2 turboshaft engines. The Mark III destined for the Coast Guard and Navy for coastal security features a full glass cockpit, new systems and the 12% more powerful Safran Ardiden 1H1 engines. Visually the model has a bulbous surveillance radar nose with a 270 degree coverage and chin EO sensor turret. Navy versions of the Mark III will have detail differences in equipment.

Development of the type was contracted in 2017 and has been taking place since 2018 with the pandemic

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delaying the final acceptance procedure by some months. The type will supplement and finally replace the existing fleet of Alouettes (Chetak). The delivery schedule should have five examples already in service with the Coast Guard and Navy by this month and another nine by March. In September HAL rolled out the 300th Dhruv and had a backlog of 73 airframes that should keep production going into 2022.

SPAIN

BARCELONA: The Department of the Interior located in Barcelona has issued a tender €8M tender for the charter, maintenance, supply of spare parts, fuel supply, aircraft administration and technical flight operation of two Eurocopter EC 135 P2 helicopters owned by the Generalitat de Catalunya and attached to the DGPEI's, Olot base in northern Spain.

The duration of the contract is intended to be from January 1, 2021 and end on December 31, 2023.

CANARY ISLANDS: At least 140 migrants bound for Europe have drowned after a boat carrying around 200 people sank off the coast of Senegal, the UN has confirmed.

The boat caught fire and capsized on November 7, shortly after leaving the town of Mbour. About 60 people were rescued, but the numbers are uncertain. The migrants were attempting to reach mainland Europe via Spain's Canary Islands. The route from West Africa has grown in popularity since 2018 but it takes a deadly toll on the would be migrants.



©PA

According to the Spanish government, more than 11,000 arrivals have been recorded in the Canary Islands this year compared with 2,557 during the same period last year. A previous peak, in 2006, saw 35,000 migrants arrive in the archipelago. At least 414 people are known to have died along this route so far this year a significant rise on a total of 210 fatalities recorded in 2019.

Ed: A bit of background information on those migrants who cross the Atlantic from North Africa to the Canary Islands, hoping to be shipped to Spain. According to the Spanish government this conveys the wrong message and reception centres will now be built on the Islands! Spain is planning to set up temporary migrant reception centres for 7,000 people on the Canary Islands, as the number of migrants taking boat journeys from North and West Africa to the Atlantic Ocean archipelago has risen sharply this year. The centres will be built in just a few weeks and be erected on land or buildings belonging to the Defence Ministry on Gran Canaria, Tenerife and Fuerteventura.

More than 18,000 people have arrived in the Canary Islands from Africa so far this year. Roughly 5,500 of them are currently staying in hotels, which have more rooms than normal available due to the pandemic. Madrid meanwhile refuses to bring the migrants to the mainland, saying Spain does not want to convey the message that the Canary Islands can serve as a springboard into Europe at large.

UNITED KINGDOM

H M COASTGUARD: A long time ago an eminent scientist, one Sir Isaac Newton, solemnly declared that every action has an equal and opposite reaction. Now it seems that the expanding level effort being put into the 'migrants across the English Channel' have led to the reconsideration of the current aviation contract for the Maritime and Coastguard Agency [MCA].

Officially they are calling it a 'Modification of a contract/concession during its term' but it amounts to a significant hike in the money invested in the Coast Guard aviation programme.

The Aerial Surveillance Contract 2018/S 169-384919 covering aircraft operating services for the MCA covering operation, pollution investigation, pollution, photography and maritime patrol aircraft from December 2018 to December 2024 is now insufficiently funded to go to full term.

2Excel Aviation Ltd., the suppliers of the relatively new fixed wing assets [King Air and Navajo operating out of Doncaster airport] will be needing additional funding to continue its current role. The modification of the contract will provide an additional line of tasking under the aerial surveillance and verification (ASV) contract to allow the authority to task one of two Piper Navajo aircraft, 24 hours per day, 365 days of the year.



The aerial surveillance and verification (ASV) contract was procured based on a level of utilisation in line with a historic pattern of use of surveillance and engagement with stakeholders which determined that the required capacity was a single line of tasking available 24 hours per day. Following the commencement of the ASV contract in November 2019 the authority has faced a level of demand which has exceeded its original estimates, requiring a temporary increase in its aerial patrolling capacity. The additional demand has been driven by a recent increase in tasks from other government departments requiring support from the authority's fixed wing reconnaissance assets in support of wider search and rescue efforts; this could not have been foreseen at the commencement of the ASV contract.

The updated total contract value has moved the contract price from just over £21M to over £22.78M plus vat.

ALL AT SEA

And still they keep on coming. As noted last month, big ships and the Channel port of Southampton are attractive options. Early in November a group of 11 Albanian migrants, including a pregnant woman and a 17-year-old boy, were found onboard a cargo ship at Southampton.

The group was discovered by port workers in Dock Gate 4 having apparently arrived in the city on a vessel from Le Havre, France. The pregnant woman is now in hospital and the other 10 people remain in custody. The 17-year-old boy would be transferred into the care of children's services.

Associated British Ports said the stowaways were found on the vessel MV Salome, a vehicle carrier which can transport up to 6,000 cars at a time, is owned by shipping firm Wallenius Wilhelmsen.

Better late than never perhaps, last month the UK Government released the report into the growing migration problem by David Bolt, the Independent Chief Inspector of Borders and Immigration. The report "An inspection of the Home Office's response to in-country clandestine arrivals ('lorry drops') and to irregular migrants arriving via 'small boats' May 2019 – December 2019" was dated March 2020 but was only released last month.

The report covers the second half of 2019 and there are references to 2018. It is therefore a year out of date even as it was released on November 11 2020, Armistice Day and also the same day that the government announced a major breakthrough, a new vaccine to offer protection against COVID-19! The audience was therefore somewhat distracted!

The only references to aircraft in the report relate to their use as a means of smuggling people in the UK. The UK Coast Guard fleet was based on helicopters when it was set up and apart from a brief look at a Bristow owned BAe Jetstream in 2016 it is only in the past year that fixed wing have featured. In August 2020 the seriousness of the situation was ramped up when the Home Office enacted 'Military Aid to the Civil Authorities' (MACA) with a request to the Ministry of Defence for aerial surveillance. This was provided by a mish mash of inappropriate military aircraft and a civil drone, the Tekever AR5 flown from Lydd airfield in Kent. The subsequent ramping up of the 2EXcel fixed wing contribution mentioned above speaks for itself.

#

Although now very outdated the report highlights a number of important points, including, 'The key to tackling the small boat threat is prevention: stopping the boats from setting off from the beaches and ports in northern France.' (Para 8.67) Also, the importance of the prevailing weather, generally an anti-cyclone (high pressure) the precursor to light winds and calm seas, is recognised. As we know, *the weather played a critical part in the timing of attempted crossings.*

The report also lays out the complexity of this Anglo-French operation in listing the main players at that period:

Coordination and information Centre (CIC) - Calais.
Border Force National Command Centre (NCC) - Croydon.
Joint Maritime Coordination Centre (JMCC) - Portsmouth.
National Maritime Information Centre (NMIC) - Portsmouth.
National Crime Agency (NCA).
HM Coastguard Operations Centre at Dover.

At that time the local police in the areas involved and the National Police Chiefs Council (NPCC) were 'involved' but only in mopping up and consultation exercises. Stopping and searching lorries was about the limit. There was a plan to work with the NPCC to create joint plans for the monitoring and 'policing' of the whole of the UK coastline (including ports and harbours) for the smuggling of people and goods and related criminal activities but none of this was the stuff of aviation. That came later.

MORE FUNDING FOR FRANCE

Under a separate and new agreement put together by the UK and France late in November the number of officers patrolling French beaches will double and the French are to tackle migrant activity in the Channel.

UK Home Secretary Priti Patel and French Interior Minister Gérald Darmanin reaffirmed their commitment to make this route unviable. They signed an enhanced agreement which builds on the joint co-operation that has already seen the proportion of crossings intercepted and prevented rise from 41% in 2019 to 60% in recent weeks.

In addition to increased officer numbers, they agreed an enhanced package of cutting edge surveillance technology - including drones, radar equipment, optronic binoculars and fixed cameras. The specialist equipment will allow the French to be more efficient in searching and clearing areas faster and help ensure officers are deployed in the right place at the right time.

Officially this focus on tackling criminal smuggling networks builds on collaboration between the UK and French law enforcement agencies which has already seen the creation of yet another element in the infrastructure – the Joint Intelligence Cell (JIC). Since it opened in July, the JIC has helped secure around 140 arrests and prevent approximately 1,100 crossings. *It is odd that it did not feature in the earlier Home Office report.*

This year Immigration Enforcement say they have convicted 57 individuals for people smuggling, and a further 46 people have been convicted of offences related to the small boat crossings.

The cost of this measure is £28.2M. This is UK money paid to France to undertake their live saving activities and is in addition to monies already sent to France to ostensibly do exactly the same thing.

Ed: It is tempting to wonder whether this later announcement is just a paper plan where the UK will be paying yet more money for France to undertake tasks it is already quite capable of doing.

At a time when the UK police have been starved of resources—particularly new and reliable aircraft for NPAS—nearly £30M is being lavished on ensuring that the Gendarmerie has access to new sensors and unmanned aircraft. I can see that the cost of the already existing EMSA Schiebel operation off the French coast will slot nicely into the UK funding. Strange that as the UK leaves Europe it now places its near neighbours in the 'Foreign Aid' category.

Some months ago, I mentioned that the coastal patrol resources available to the UK were tiny when compared with the rest of Europe. Thanks to the newly released, if



dated, Home Office report on the Migrant Crisis I now have real numbers to put to the maritime capacity rather than guesses. I had not appreciated just how big the difference really was [in 2018].

| | | |
|------------------------------------|-----------------------|-----------------|
| United Kingdom Border Force | coastline 7,723 miles | has 3 vessels |
| Italy Guardia di Finanza | 4,722 miles | has 600 vessels |
| Turkey Coast Guard | 4,473 miles | has 107 vessels |
| Spain Civil Guard | 3,085 miles | 147 vessels |
| Greece Coast Guard | 8,497 miles | 240 vessels |
| Croatia Coast Guard | 3,625 miles | 9 vessels |
| Netherlands Coast Guard | 280 miles | 16 vessels |

The figures do not give the whole story of course – you can add in the vessels of the RNLi to Britain and Italy also has a coast guard as well as the GdF fleet quoted - but it does give an impression of the woeful differences in resources.

The fact that the report even highlights that, in general, the UK police do not busy themselves with the task of “monitoring and policing the UK coastline” is pretty damning.

INDUSTRY

With the recent grant of the FAA STC for the Cessna 172/182/206 wing strut mount **Meeker-Airfilm** is able to point to around thirty of the kits in service.

The Wing Strut mount comes in two versions, the standard mount and the mini mount. Both mounts require no permanent modifications to the airframe and fits over the existing strut. The maximum payload is limited to 50lbs and 10lbs for the mini and are intended for various camera systems, searchlights, lidar, antennae etc. For further information on these and other mounts, please contact Cal at meekeraviation@yahoo.com



Eye in the sky ©Meeker



Las Vegas skyline of blessed memory—when will we see you again?
©Spidertracks/Maverick

Spidertracks, the provider of aircraft tracking and emergency management solutions, has teamed up with Maverick Helicopters as the official launch customer for the latest evolution of their Virtual FDR capabilities — Insights.

Earlier this year at Heli-Expo 2020, Spidertracks announced their most advanced hardware, Spider X — a simple and affordable plug-and-play solution, enabling aircraft owners and operators to see where, and more importantly, *how* their aircraft are flying. Spider X collects critical data off an aircraft — data such as roll, pitch, yaw, speed and altitude, and delivers this wirelessly to the Spidertracks platform.

The company is using more than 14 years of expertise to offer aircraft owners and operators an easy entry into FDM. Making flight data available and knowing what is happening during a flight, allows Spidertracks customers to use this actionable information to avoid or reduce emergency events. Insights from Spidertracks will provide both operational and safety efficiencies, by utilising data to deliver flight safety events based on the aircraft’s attitude, vertical speed, altitude, heading, and exceedances.

Sagetech Avionics Inc has published a new guide that sets out UAS Transponder Requirements in the United States. All new for 2020, this new definitive guide seeks to answer the question, "Does my UAV need a transponder?" With UAV transponder requirements and standards continually emerging, this guide brings together the current knowledge from the U.S. DoD, the U.S. FAA, recent conferences, and other resources all in one place. When deciding on transponder use, use this guide to understand:

Parameters for determining transponder requirements - size, weight, BVLOS, flight plan, etc.

Classifications of UAV groups, airspace rules, and other important regulatory information

FAA waivers and safety justifications

Transponder functionality, technologies, and modes

A look ahead to future requirements for remote ID and urban air mobility

Readers can consider the guidance, do their research, and make their own decisions based on their specific UAS requirements. Free to view and download at Sagetech.com.

Arizona-based rotor blade manufacturer **Van Horn Aviation** (VHA) received a Letter of Acceptance from Transport Canada for the company's updated composite main rotor blades fitting the Bell 206B JetRanger helicopter. Approved by the FAA in August 2020, the new VHA 206B Version 2 main rotor blades may now be installed for use on Bell 206B JetRanger helicopters in Canada.

Featuring corrosion resistant carbon fibre skin and spars, an efficient NASA-designed laminar-flow airfoil, tapered tip, and stainless steel/nickel abrasion strips along the entire length of the leading edge, the VHA 206B Version 2 main rotor blades contain different carbon fiber ply counts and orientations than the original VHA 206B main rotor blades. This "softens" the blades to mimic the ride and feel of metal blades while maintaining the increased performance of composite blades.

Available directly from the company and its distributors, the VHA 206B Version 2 main rotor blades (part number 20635000-501) can replace OEM metal main rotor blades part numbers 206-010-200-133 and up. List price is \$60,000 per blade, with a service life of 10,000 hours (double the metal blade) and no overhauls required.

L3Harris Technologies has been awarded a firm-fixed price contract to missionize three new King Air 350ER aircraft for the Canadian manned airborne intelligence, surveillance and reconnaissance (CMAISR) project. The aircraft will be delivered to the Canadian Department of National Defence (DND) as a Foreign Military Sale managed by the U.S. Army, Program Executive Office (PEO) Aviation, Fixed Wing Project Office.

The CMAISR project will provide the DND with a rapidly deployable, airborne intelligence, surveillance and reconnaissance capability for its deployed operations, ensuring an innovative, flexible and interoperable force. The aircraft will feature a suite of L3Harris systems, including full-motion video sensors, a mission management system and communication datalinks. The capability upgrades offer increased threat indications and warning, as well as high-accuracy target detection and location.

L3Harris have been showing off their innovation talents as part of the US Department of Defense's Hack-A-Vent Innovation Challenge to design a low-cost, ventilator system to help patients combatting COVID-19.

Out of 172 submissions, L3Harris' entry, the Innovative Inspiratory Ideas (i3) Breather prototype, was one of five designs chosen that is currently going through government testing in order to receive emergency use certification from the Food and Drug Administration.

New helicopter project in the pipeline?

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Website: www.helimetrics.com

This is just one of the many ways companies in the business aviation sector are assisting during the COVID-19 pandemic. That said the news release went to great pains to stress that work on the ventilator project did not take designers away from their usual work assignments. The team reportedly gave up off-duty and family time during the emerging peak period of COVID-19.

The L3Harris ventilator project was being promoted by the National Business Aviation Association (NBAA) because of the way it had refocused an aviation engineering team to the design of a critical medical instrument in a national emergency.

NBAA say that L3Harris developed the i3 Breather after a five-day design process modified for social distancing and remote participation. The initial prototype design team was comprised of 39 individuals from aerospace, university research, and health care industries, and included 31 L3Harris employees from across the flight sciences, systems, electrical, mechanical, and software engineering disciplines. Of those 31 employees, 21 of them are aerospace engineers.

Although not yet seen as a future emergency services helicopter British manufacturer **Hill Helicopters** has announced that the power for its new HX50 luxury personal helicopter will be their own Hill GT50 light turbine engine with a continuous power output of 400hp. This newly designed powerplant eliminates the need for a compressor turbine gearbox to save weight and complexity, while manufacturing methodologies have enabled a much shorter development lifecycle. An in-house FADEC brings further simplicity to the complete package.

The historically expensive and heavy compressor turbine gearbox of current helicopter engines has been eliminated and replaced by a direct-drive starter-generator to dramatically reduce the cost and mechanical complexity of the engine. Extensive use of redundant electrical engine ancillaries further simplifies the engine package and a modular design makes for easy maintenance of the unit's core components.



MIME Technologies, a med-tech spin-out from the University of Aberdeen, has received £248,000 in funding from the Scottish Government to help deliver technology that will support the heavily impacted aviation industry during its recovery from the pandemic. It will also drive new maritime med-tech solutions and create several skilled jobs in Scotland.

Headquartered in Inverness, the firm develops technology that supports non-medical professionals during first response situations in environments which are remote from immediate medical care. Initially focused on the aviation industry, MIME Technologies solution communicates detailed on-scene emergency data, such as the symptoms of a heart attack or stroke, to professional medical services using secure cloud technology.

Allowing aviation medical providers to see this on-scene data ensures they can make informed decisions about the passenger's need for immediate medical attention, supporting inflight diversion decisions and ensuring that the handover into medical care is seamless.



The recent award from the competitive Early Stage Growth Challenge Fund, delivered by Scottish Enterprise on behalf of the Scottish Government, offers support to early-stage, innovative, high-growth companies which have been impacted by the COVID-19 pandemic. It will support the company with new investment into Research & Development, as well as activities focused on entering new offshore markets.

The go-to-market product integrates a library of the world's leading Bluetooth, clinical-grade sensors to enable real-time monitoring of vital signs, allowing for the identification and tracking of patient deterioration or improvement.

Ed: The current product is aimed primarily at the airline and business jet market but they envisage moving into meeting the needs of the HEMS market. The primary customer base is supporting non-medical staff with only rudimentary health training. Although the full system requires access to The Cloud to provide full service the system is able to provide guidance and to store information until connectivity is re-established.

The Ulan-Ude Aviation Plant of the **Russian Helicopters** holding (part of the Rostec State Corporation) has delivered two Mi-8AMT helicopter knock-down kits to Kazakhstan to be assembled on the territory of the customer.

The delivery is part of a contract signed by Kazakhstan Engineering, Kazakhstan's Aircraft Repair Plant No. 405 and Russian Helicopters for semi-knock-down (SKD) assembly of Mi-8AMT / Mi-171E helicopters. The contract, signed in 2019, provides for a total of 17 helicopter kits during 2020-2022.

The main customers for the Mi-8AMT helicopters in Kazakhstan are the National Guard under the Ministry of Internal Affairs and the Committee for Emergency Situations. The first batch of Mi-8AMT kits will be assembled for the needs of the Committee for Emergency Situations.



Kopter, now part of Leonardo, participated in the digital edition of the AMTC 2020 (Air Medical Transport Conference) together with its parent company Leonardo, showcasing how the SH09 will ideally complement the existing Leonardo helicopter product range in the EMS segment.

Interior layouts will benefit from the SH09's removable flat-floor design and large cabin volume with the versatility further enhanced by an outstanding field of view that allows pilots and medical crews to easily monitor the mission.

The high-clearance tail boom and shrouded tail rotor facilitate the movement of ground personnel during loading/unloading stretchers and equipment from the rear clamshell doors, while access for patients and crews also is facilitated by wide sliding doors on both sides of the cabin.



Times are hard in the aircraft industry but despite it all **Airbus'** 2020 gross orders totalled 381 aircraft by October 31st with net orders of 308 and they were still taking orders for new airframes – well a few anyway.

Airbus delivered a total of 72 aircraft in October though there is no feedback on whether the airlines taking delivery were overjoyed at the prospect. Airbus' backlog of passenger carrying aircraft remaining to be delivered as of October 31 stood at an eye-watering 7,377.

Deliveries from **Airbus Helicopters** are several levels below those coming out of the airliner factories. The delivered a new H135 helicopter to France-based company Mont Blanc for helicopter emergency medical services (HEMS).

The delivery marks a milestone for the company as it represents the 1,400th H135 unit. There are more than 650 H135s in emergency medical service duties. The latest addition joins Mont Blanc's fleet that



includes more than 20 H135 and H145 helicopters that are already in service. The H135 helicopters family started operational service in 1996 with over 650 units currently in use.

In these uncertain times, CAE has released its *2020-2029 CAE Pilot Demand Outlook*. The renewed 10-year view offers fleet operators key insights on the future need for professional pilots in both commercial and business aviation, building on the markets' key drivers, variables, and trends.

CAE's data tries to reflect the current Covid-19 driven downturn and make sensible predictions of the upturn and its timing. While the demand for pilots has decreased significantly during 2020, CAE's analysis shows that the active pilot population is expected to return to 2019 levels in 2022. Retirement and attrition are expected to continue to be a challenge for the civil aviation industry as air travel recovers progressively. This is expected to drive an acute demand for pilots, resulting in an estimated short-term need for approximately 27,000 new professional pilots starting in late 2021.

The report demonstrates that despite the current situation the civil aviation industry is expected to require more than 260,000 new pilots over the next decade.

The *2020-2029 CAE Pilot Demand Outlook* is available at <https://www.cae.com/cae-pilot-demand-outlook-2020>.

In Parliament Kit Warmhouse, The Minister of State, **Home Department** was again answering yet another progress question about the forthcoming emergency services communications programme [ESN]. There was little new.

ESN is replacing the current Airwave radio system and will run over the commercial EE network with priority and pre-emption for emergency service users.

There is a Spending Review currently ongoing so the reply was restricted in seeking not to prejudge the outcome. Programme costs are separated into 3 categories; first the cost of building and rolling out ESN; second costs borne locally by users for things like devices and accessories that they'll need to use ESN, and; third the cost to maintain Airwave until ESN has been adopted by all users and Airwave can be switched off. The costs for maintaining Airwave are by far the most significant and, subject to commercial negotiation, the annual cost of extending Airwave beyond the current contract end date of December 2022, is likely to be in excess of £450m per annum, taking into account local Airwave costs.

The programme set itself an original target of transitioning all users from the current Airwave system onto the ESN and switching Airwave off by December 2019. We are now targeting an Airwave switch off date no later than 2025. The investment case for the programme remains positive even with this later Airwave switch off timescale.

The Home Office remains committed to completing delivery of ESN and switching off Airwave as quickly as possible but will only transition from Airwave to ESN when it is operationally safe to do so. In the meantime, Airwave continues to provide a resilient service.

Ed: But what of course the statement did not say was that ESN only exists because of the many shortcomings of Airwave. Airwave did not deliver what it promised in the way of a flexible working and data services at an affordable price. Many data services were at a price so extortionate as to be rejected by the police. Extending the roll out only further stresses the situation. We do not know whether the shortfall areas of Airwave will actually be available and affordable when they arrive in 2025.

Precision Aviation Group, Inc. (PAG), have announced their acquisition of São José dos Campos, Brazil based EFIX Aviation Support (EFIX). EFIX specializes in Maintenance, Repair and Overhaul (MRO) services for the South American Aerospace and Defence market, with a diverse capabilities list that includes - Landing Gear, Hydraulic/Pneumatic, Electrical Accessories, Starter Generators, Batteries, and Avionics. EFIX' Repair Station holds both ANAC and EASA certifications.

Precision Aviation Group (PAG) has eleven repair stations, and over 375,000-square-feet of sales and service facilities in the United States, Canada, Australia, Singapore and Brazil. It provides MRO and Supply Chain Solutions for Fixed and Rotary-wing aircraft. www.precisionaviationgroup.com.

Fischer Connectors, operating from France and the United Kingdom, is enhancing the integration capability of its versatile plug & use Fischer Freedom™ Series. The product line has been extended with new products and accessories allowing design engineers to further optimise cable management in line with their SWaP (size, weight and power) requirements, and integrate low-profile connectors, cable assemblies and active devices easily into all sorts of materials, even the most flexible of fabrics.

The rugged sewing junction of the new Fischer Freedom™ Quick Detach System allows to easily convert flexible material into a potential panel, e.g., heavy duty tarp cover/tent, sail, vehicle tyre blankets, smart backpacks. The system's adapter and retaining ring facilitate the quick fit and interchange of receptacles.



The new Fischer Freedom™ cabled receptacle in size 08 is a smaller version of the receptacle introduced to the market last year. With a metal housing, four signal and power contact tracks, IP68 sealing and EMI shielding, this new cabled receptacle is ready to use under any conditions, easy to integrate into garments or mount on panels, and quick to fit and remove. www.fischerconnectors.com

TECNAM has rolled out the first example of the P2012 Sentinel SMP (Special Mission Platform) with multi-mission capabilities.

Based on the sleek and modern P2012 Traveller the Sentinel is being promoted as the ultimate Special Mission Platform aircraft in its class in that it offers higher payloads, additional operator and observer stations and new capabilities, including approval for FIKI (Flight Into Known Icing).

TECNAM initiated a dedicated programme with L3 Harris Wescam MXTM – Series EO/IR sensors to greatly improve the law-enforcement mission efficiency. The Sentinel has the option to carry one Wescam XX-10, MX-15 or MX-20 in addition to other sensors including a SAR radar, providing the P2012 SMP with the mission capabilities normally pertaining to CS/FAR 25 platforms at a fraction of their acquisition and



While still a compact airframe Tecnam P2012 Sentinel SMP offers greater cabin space than the earlier P2006 twin developed for maritime patrol
©Tecnam

Original Oil Paintings by Clive Kidder

In support of the North Weald Airfield Museum Charity we have a limited number of original oil artworks on canvas [rolled] for sale at £100 each plus postage.

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operating costs.

The high cabin volume and payload will allow for excellent mission performance and plenty of space for sensors installation and operators console. A Sentinel equipped with full mission equipment, at its maximum takeoff weight of 3680 kg, will provide up to 9 hours' endurance for up to six 90kg-crew members, sensor operators and observers.

The P2012 twin-engine design guarantees an exhaust-free field of view to the sensors, granting increased accuracy and "noise-free" operations. Moreover, the hatches' position under the fuselage ensures a carbon-monoxide-free cabin that will enhance the safety of the crew members (one or two pilots and up to 5 mission operators). www.tecnam.com

The Pandemic continues to damage the publishing industry and force them to rethink their marketing. Many titles may not be seen again.

Aerospace and Security Media, the publishers of **Aviation Security International**, **Aviation Maintenance Magazine** and **Aerospace Tech Review**, have announced that the December 2020 issue of *Aviation Security International* will be the final issue in its current format and using its current title. 2021 will herald the launch of *Transport Security International [TSI]*, which will incorporate the long-established coverage of aviation issues, but will also broaden the scope of the editorial coverage and readership base by additionally focussing on mass transport, maritime, rail and road haulage security. The first issue of *TSI* will be published in Spring 2021 and will appear quarterly in print, but it will also provide online content on a more frequent basis. The journal of airport and airline security was first launched in November 1993.

With a change of title, there will also be a change of face at the editorial helm. Joy Finnegan, the editor of the publisher's other two titles, will also be taking on the role of editing *TSI*.



Cobham Aerospace Connectivity has announced that Airbus Helicopters has selected four Cobham systems on the H160 Medium-Utility Helicopter:

Digital Audio Communications System (DACS) for audio management and intercom functions. DACS is forward-fit on more civilian helicopters than any other digital audio system in the world.

251 Amplifier for cabin paging/public address. The 251 Amplifier delivers clear audio performance in a reduced size & weight package.

NPX138 Stereo Transceiver as an optional FM Maritime Radio. The NPX138 features a 100-channel memory, 32-character LED display, and 1-10 watt power selectability.

RT-7000 Mission Critical Communications Radio as an optional V/UHF radio system when tactical communications are required. The RT-7000 is a software-defined radio, with modules that may be upgraded as an operator's requirements and mission evolve, so the aircraft will remain current with AM/FM, P25, and TETRA today, and LTE, SATCOM, HD video, and more in the future.

The H160 is Airbus' most advanced medium helicopter, featuring an all-composite fuselage for reduced weight and lower fuel consumption, and the Blue Edge five-bladed main rotor for reduced vibration and noise. [Cobham]

MD Helicopters are currently taking their new enhanced glass cockpit MD 530F demo aircraft for a short marketing tour in the West Coast of the USA. This latest iteration of the Vietnam War era helicopter is touring from November 30 through to December 4. It is available for drop-in demo flights at Rotorcraft Support Inc. (RSI) on December 2 from 8 a.m. to 1:30 p.m. Pacific Standard Time as well as special on-site demos in the region during the week

The MD 530F is the latest model in the proven 500 line, delivering increased operational capabilities, greater mission versatility, and superior performance. The updated helicopter incorporates an advanced NVISB interior designed to enhance safety during nighttime patrol, surveillance, and tactical operations. The enhanced certified glass cockpit features the Garmin G500 [H] TXi Electronic Flight Instruments (EFIS), Howell Instruments Electronic Engine Instruments and Crew Alert Systems (EICAS), and Garmin GTN 750 Touchscreen NAV/COM/GPS.

Parties interested in an on-site demonstration can contact MDHI Director of Commercial Sales, Jason Lindauer on +1 480-353-6587.

www.mdhelicopters.com



ACCIDENTS AND INCIDENTS

6 November 2020 AgustaWestland A109S Grand N109EX Air ambulance of Prime Healthcare Air Transportation LLC. A helicopter that was transporting a donated organ went out of control at low height while landing on a rooftop pad on the Keck Hospital of USC/Los Angeles Co/USC Medical Center Heliport (35CA) in the Lincoln Heights district, Los Angeles County, California, USA. The private air ambulance was stable on its side near the helipad's edge. There was no fire and no significant fuel leak but the main rotor blade was smashed with debris on the road below the pad. [Media]

8 November 2020 Bell 206B N123NC North Carolina Highway Patrol. Aircraft, on a training sortie, on approach to home facility reportedly struck trees and crashed on Tryon Road in southwest Raleigh. It remained upright but the skids collapsed, the tail boom was severely damaged and severed from fuselage pod. The pilot, State Trooper B K Jones, was uninjured.

8 November 2020 Bell 407 N139PD Puerto Rico Police Department. Made an emergency landing on the beach at Vacía Talega beach, Piñones, Puerto Rico as the tide was coming in. The skids sank into the soft sand. No casualties reported. The landing was on the tideline so full sea water immersion does not seem to have taken place. From available images the nose mounted sensor pod was under water.



12 November 2020 Britten-Norman BN-2T-4S Islander G-CGTC Police Service of Northern Ireland. The aircraft was obliged to make a precautionary landing at City of Derry Airport after experiencing engine failure. The BN-2 was aiding officers on the ground during a security alert in Limavady. The pilot and crew landed the plane safely without damage being caused and no injuries were sustained by those on board.

[PSNI Twitter]

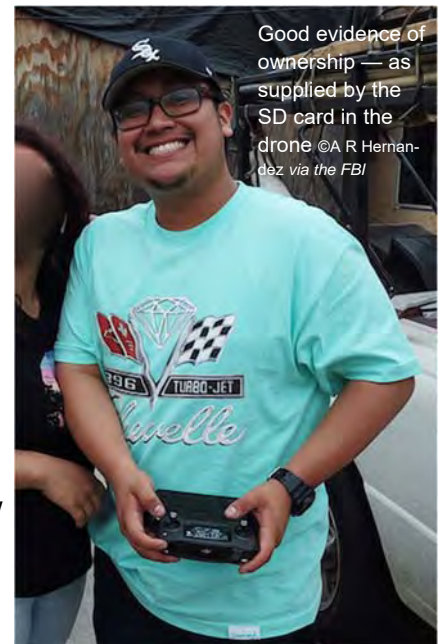
SAFETY

On September 18, police were called to a burglary call at a pharmacy in Hollywood area of Los Angeles, California. The police on the ground requested helicopter assistance and it duly arrived. While manoeuvring over the scene the helicopter collided with a drone and was damaged. The nose, bottom cowlings, and antenna were damaged. Debris from the drone struck and damaged a car when it came to earth.

A 22-year-old man named Andrew Rene Hernandez has been charged. He was found by authorities based on information contained on the memory card that was in the wrecked drone [thought to be a DJI Mavic]. The U.S. Attorney's Office for the Central District of California released images from the drone showing the suspect apparently taking his own 'selfies' with the drone.

It is said that the drone was launched specifically to observe the police ground search before the helicopter arrived. Hernandez admitted to flying the drone, which was controlled by a device attached to his smartphone, to "see what was going on." As the drone was ascending, Hernandez saw the drone "smacked" by the hovering police helicopter, and fell to the ground at a nearby residence.

The case is believed to be the first US criminal case alleging the unsafe operation of an unmanned aircraft.



Readers will recall that last month in this column mention was made of a Wizz Air aircraft having a weight and balance issue. Subsequently I have found that it was not such an isolated incident as I had imagined. There was a similar instance in 2012.

Much more recently Wizz Air UK have had to revise its return-to-service processes after an Airbus A321, whose crew aborted take-off at high speed, was found to have a pitot probe blocked by insect activity. The incident occurred on June 16, during a ferry flight to London Stansted, after the aircraft had been parked for 12 weeks following the onset of the pandemic.

The aircraft (G-WUKJ) had reached 120kt – the V1 decision speed – during its departure roll from runway 20 at Doncaster, when the captain noticed the airspeed reading on his primary flight display had dropped to zero. The crew rejected the take-off.

Although the air-data system was subsequently checked, a second attempted take-off was also aborted, at low speed, for the same reason.

Over the next two days the aircraft was inspected before three insect larvae, the size of a rice grain, were found in one of the pitot probes.

Potential blockage of the air-data system following prolonged aircraft storage is a hazard recently highlighted by the European Union Aviation Safety Agency but even my wife knows this from watching episodes of Air Crash Investigation on National Geographic channel. Perhaps the many grounded crews of this airline should watch a bit of TV!

Wizz Air UK has since introduced a requirement to flush all total and static pressure lines before returning to operation any aircraft that has been parked for more than three days. The inquiry adds that the carrier is looking to identify "better pitot probe covers" that might offer improved protection.

It looks likely that the return the travelling public to the skies is going to be even more fraught if the engineers returning the 6,000 or so grounded aircraft to the skies do not remember the basics.

Air Methods Corporation has agreed to pay \$825,000 to settle a civil case alleging that the company violated FAA regulations by operating an emergency-services helicopter with severely corroded pitot tubes. Air Methods, the largest air medical transport services provider in the USA operates more than 450 helicopters and fixed-wing aircraft.

On November 4, 2014, an FAA Aviation Safety Inspector inspected an Air Methods helicopter in Tampa, Florida. During that inspection, the safety inspector noticed that the helicopter's pitot tubes were severely corroded and crumbling to the touch. The inspector informed Air Methods and took photographs to document the corrosion.

When Air Methods showed the photographs to the manufacturer of the helicopter, an employee of the manufacturer responded that the parts were "obviously" outside the scope of what would be considered serviceable to keep a pitot tube in service and recommended replacing the part(s) "as soon as possible." Air Methods continued to operate the helicopter for several days before replacing the parts.

Last year the United States filed a civil action to recover civil penalties from Air Methods over the operation of the aircraft. Air Methods has now agreed to pay \$825,000 to settle the lawsuit. The claims against Air Methods are allegations, and in agreeing to settle this matter, Air Methods did not admit to any liability.

[US Attorney's Office, Colorado]

UNMANNED

As a means of getting around the lack of customer and media interface due to the pandemic Schiebel are operating Webinars: The rapidly evolving Unmanned Air System (UAS) industry - Update on a unique year and developments for the future

The invitations are out there to entice likely persons to join the inaugural webinar. The Austrian team will cover current activities and future developments at Schiebel and its state-of-the-art CAMCOPTER® S-100, including:

- How Schiebel successfully handle our operations and delivery during a pandemic
- Recent successes and operational achievements
- Multi-role capability and sensors being used globally
- Introducing Schiebel extended production facility in Austria
- New developments and future plans

The 90-minute webinar will be introduced by Schiebel's owner Hans Georg Schiebel and followed by a Q&A session.

Europe / Africa / Asia / Australia:
Date: Thursday, 10th December 2020
Time: 08:30 am to 10:00 am CET

North America / South America:
Date: Tuesday, December 15, 2020
Time: 01:00 pm to 01:30 pm EST

Volocopter has released the first worldwide study in partnership with ADAC Luftrettung on the role of eVTOL platforms in air rescue operations. The study has spanned nearly two years of research and technology demonstrations across Bavaria and the Rhineland and has tried to determine if an aerial mobility focused rescue service system can expedite the transport of doctors and other medical professionals.

The 130-page study was launched at the end of 2018 by ADAC Luftrettung and sponsored by the non-profit ADAC Foundation. The multicopter is not intended to replace the rescue helicopter, but to comple-



ment the rapid assistance from the air. Patient transport is not planned for initial implementation. Multicopters are new, vertical take-off and landing (VTOL) aircraft with several electrically powered rotors. Up to now, the aircraft have been first and foremost developed as air taxis in the private sector. After almost one and a half years of research, the tactical advantage of multicopters in rescue services can now be theoretically supported for the first time. According to the study, significant improvements in emergency care for an operating radius of 25 to 30 kilometers has been shown. In this case, the optimal flight speed of the multicopter should be between 100 and 150 km/h with a minimum range of approx. 150 kilometers. These ideal conditions would be technically possible in about four years.

It is envisaged that emergency physicians could often be at the scene of an emergency twice as fast in rural areas compared to a conventional emergency medical service vehicle (NEF) and reach around two to three times as many patients in a larger health service area.

Another positive finding is that rescue helicopters could also be used even more effectively in the future. For now, they act as transport for emergency doctors in around 60% of emergency cases. Helicopters could instead take advantage of their potential to transport patients to (specialized) clinics further away. This transport effectiveness also improves emergency care for people.

Operational testing is planned to begin in 2023 and will take place in the two existing model regions: the Ansbach rescue service area and the ADAC air rescue station in Dinkelsbühl, Bavaria and at a new, multicopter-only base in the Idar-Oberstein region of Rhineland-Palatinate.

Russian energy company Gazprom sees drones as a new way of linking its production sites with air delivery. They have used an unmanned aerial vehicle, the pilotless helicopter KAGU-150 created by Tyber company, to deliver materials and equipment to the field in Arctic region of Russia. This UAV successfully completed a 130-kilometre route, delivering 150-kilogramme load to the field. A second round of testing is planned in December 2020, to test it under Arctic winter conditions. Gazprom's goal is to use the UAV for restocking its production centres safely and quickly *essential resources*.



DFS, the German air navigation service provider, together with its project partners – the operators of Frankfurt Airport (Fraport AG) and Munich Airport (Flughafen München GmbH) – has concluded a large-scale four month long test of drone detection systems at the two busiest airports in Germany. The results obtained will form the basis for the specifications that technologies will have to deliver for drone detection at airports.

Little is known at present about the performance of the detection technologies available on the market. The detection systems already in use at various airports have mostly evolved from military applications and have proven to be ineffective and not very reliable.

Detection systems must be able to distinguish drones from other moving objects at airports, such as vehicles, birds or helicopters. The systems must be able to distinguish between a wide range of drones, which are available on the market in all shapes and sizes. This explains why drones of various types were used during the test flights: from agile mini drones to larger multi-rotor systems with higher payload capacity all the way up to fixed-wing drones that can reach speeds of more than 140 km/h.

A significant result of the test project was that there is no universal solution that can be implemented uniformly at all airports. The solution will be a mix of different sensor technologies, each technology's individual strengths offsetting the weaknesses of the others. The detailed results of the tests are currently being compiled. The results will be made available to the German Ministry of Transport by the end of this year. Since 2015, DFS has logged well over 500 cases of interference to air traffic caused by drones at German airports, and the number is increasing.

DFS Deutsche Flugsicherung GmbH, operates control centres in Langen, Bremen, Karlsruhe and Munich as well as control towers at the 16 designated international airports in Germany. The subsidiary DFS Aviation Services GmbH markets and sells products and services related to air navigation services, and provides air traffic control at nine regional airports in Germany and at London Gatwick Airport and Edinburgh Airport in the UK. www.dfs.de

In the United Kingdom the government announced significant funding of a drone related programme that brings together several threads seen in the pages of PAN in past months.

Innovative projects harnessing the latest technology to support the fight against COVID-19 and other challenges like climate change, while creating hundreds of jobs across the country, have been backed by the government investment.

The 20 winning ideas will receive a share of £7M funding ranging from the development of drones capable of delivering COVID-19 medical supplies to remote areas, to technology to enable remote inspections of infrastructure and construction sites - removing the need for workers to potentially be put at risk. The funding, backs aviation technologies of the future.

The £33.5M total investment comes from the Future Flight Challenge, which aims to increase mobility, reduce reliance on road travel thereby improving road congestion, and increase UK manufacturing opportunities.

Nine projects are focussed on developing technology to aid the response to the coronavirus pandemic. This includes the development of unmanned drones to deliver medication, reducing human contact and, consequently, transmission of the virus.

The projects include:

Dock-to-Dock, based in Cardiff, which is developing a pilot project to deliver goods between Bristol and Cardiff using a hydrogen-powered electric aircraft.

NAPKIN, based in Greater London, which focuses on paving the way for low and zero carbon short-haul flights for passengers around the UK.

APIAN Limited, based in Essex, is creating and building a drone to deliver medical supplies like COVID-19 blood and swab tests between NHS hospitals and labs in response to the pandemic, protecting key NHS staff and the wider public from coronavirus transmission.

The Light Aircraft Company Ltd, based in Norfolk, will integrate electric propulsion into existing aircraft to enable electric flight of small aircraft.

Windracers Distributed Avionics, based in Southampton and Bristol, will develop swarming technology, an approach to coordinate multiple robots, to allow multiple drones to fly in close formations and work together to provide humanitarian aid or fight fires.

Droneprep Ltd, Consortiq Limited and Windracers Limited, based in Cornwall and the Isles of Scilly, will use unmanned aerial vehicles to deliver critical PPE and Covid-19 testing kits to vulnerable, rural communities in Cornwall and the Isles of Scilly.

Advance drone system sees *ai* leading a consortium of eight partners that include Sellafield Atkins and Skanska has won a share of £30M from the Future Flight Challenge, a proportion of which has been allocated to address the COVID-19 pandemic.

UK based *sees.ai* was founded in 2017 by four leading engineers, from Apple, CERN, McClaren and hedge funds, with sector leading experience, including the delivery of a Formula One World Championship and two America's Cups. The technology is an enterprise command and control service provider, able to support industrial and engineering industries to overcome modern challenges to their productivity, including those thrown up by the pandemic.

The consortium is developing an advanced drone system that will facilitate pilotless drone access to the hardest to reach areas of industrial landscapes, providing for better and faster exchange of information between offsite and onsite teams; helping increase productivity, boosting health & safety of onsite workers; and reducing the number of visits to site overall.

The solution teams human pilots operating beyond visual line of sight (BVLOS) in a control room with highly-automated drones on the client site to enable the remote execution of complex, close-quarter missions on industrial sites. This solution unlocks the remote capture of aerial data at enterprise scale for the first time.

NATs, the UK's main air navigation provider, and Vodafone are technical partners for the project. *sees.ai*'s solution will be operated by Terra Drone, one of the world's leading drone service providers, for tests with end-clients Skanska; Skanska Costain STRABAG working in partnership with HS2; and Atkins. Sellafield's in-house drone team will test the *sees.ai* solution on their site. These companies see the value in aerial intelligence but have been unable to access it at the scale and quality required. For them, the *sees.ai* solution is a potential way forward.

www.policeaviationnews.com



PEOPLE

The new CEO of Kopter has been announced as Marco Viola. He has a long established career in aerospace, from a variety of positions at Leonardo Helicopters, in addition to his previous role where he led the integration process of Kopter into Leonardo.

In 2019 Marco Viola held the position of Head of Blades and Composite Rotor Heads Production Centre of Excellence at the Anagni plant. From 2017-2019 he was the Head of Civil/Dual Use Light Platforms within Product Line Management.

Marco Viola joined AgustaWestland (today, the Helicopter Division of Leonardo) in 2003 as a manager in the field of Governmental Customers and Maintenance Service until early 2008.

In Australia the former NSW Rural Fire Service Commissioner Shane Fitzsimmons has been named the NSW Australian of the Year for 2021.

Mr Fitzsimmons received the honour at a ceremony on November 9 at Sydney's Luna Park, following widespread praise for his role guiding NSW through last year's unprecedented and deadly fire season.

Dr Duncan Bootland has been appointed as Medical Director of Air Ambulance Kent Surrey Sussex (KSS), reporting directly into KSS's CEO, David Welch. He took up new role last month.

Dr Bootland joined KSS in 2013 with six years' experience working in emergency medicine and intensive care, has been a HEMS Consultant and clinical governance lead at KSS. He is also an Emergency Medicine Consultant and the Major Trauma Centre Clinical Lead at Brighton and Sussex University Hospitals NHS Trust and an Honorary Clinical Advisor for South East Coast Ambulance Service. www.aakss.org.uk

The Wales Air Ambulance Charity has announced Dr Sue Barnes as its new chief executive. Swansea-born Dr Barnes, who has worked in London and the south and east of England for over 20 years. She takes up the role early this month.

Prior to her current role she was working as a director for business transformation and customer service provider, Arvato CRM Solutions UK, Dr Barnes, who lives in South Wales, worked in senior or director-level positions for several UK county councils, Northamptonshire Police, the Health Education Authority, the Wellcome Trust and the Audit Commission. In addition, she has been a strategic advisor for the City of London.



ARGUS International Inc., a division of SGS offering specialised aviation services and software, announced the hiring of Mike McCreedy as Senior Vice President of Operations and Business Development. Mike brings 25 years of experience in aviation to his role at ARGUS. In 2019, he founded World Jet Group, a consulting firm for aviation industry executives. He served as the Vice President of Sales for the Americas at Jet Aviation based in Basel, Switzerland. Additionally, Mike spent eight years as Senior Manager of Business Development at The Boeing Company in Englewood, Colorado. Starting his career managing and building flight training schools, Mike has held senior leadership roles at Jeppesen in Englewood, Colorado.

MOVE ALONG THERE

Earlier in this issue there was mention of how the USA population depresses the use of police EO/IR cameras in taking and transmitting images of people. A strange attitude when best estimates suggest there are between 30 million and 50 million CCTV cameras in the USA, a massive variation and a world beating number that dwarfs even the numbers in China.

Recent figures show that the United Kingdom now has some 5.2 million CCTV cameras in operation. The number relates to terrestrial cameras and to these we might add EO/IR cameras and those in aircraft and drones. Fortunately they are not all 'Big Brother' cameras operated in support of the government, most are privately owned in factories and homes but clearly someone could one day find a way of linking them all together for the true 1984 effect.

With those sort of numbers – albeit mainly focussed in urban areas – it is a wonder why the streets do not erupt in riot as people worry about their 'human rights.'

Which begs the question why the USA is so quiet on this issue. In 2019 the rate per 100 population in the United States was given as 15.28. China is lower at 14.36 and the United Kingdom with 7.5. Other top 10 countries include Germany with 6.27 cameras per 100 individuals, Netherlands 5.8, Australia 4, Japan 2.72, France 2.46 and South Korea 1.99. All of these numbers vary with source.

A little something for those that have fond memories of International Drive in Orlando, USA. Early last month the Orlando Business Journal reported that Air Florida Helicopter Charters had voluntarily filed for Chapter 11 bankruptcy protection on October 23, 2020. As many will know the company operates Robinson R44s on tour flights out of a site at 8990 International Drive in Orlando, quite close to the Orange County Convention Center where I guess large numbers of the readership hope they will return to sooner rather than later.

I flew out of their facility once, when they used the Bell 206, and have managed to stick to my subsequent assessment of never flying out of there again! As they say, a little knowledge [of aerodynamics] spoils some of the best experiences!



Still if this pandemic goes on much longer you may not be interested in Robinson R44s at all! There is news that Air taxis could soon fill the skies of Orlando, as a German aviation firm is seeking tax incentives from the city to build a 56,000-square-foot transportation hub with a take-off and landing area.

Lilium Aviation plans to bring its five-passenger flying vehicles to a spot miles away at the Lake Nona community, south of the International Airport, which would be a stepping stone to constructing a massive transportation network across the USA.

The facility, which totals to a \$25M investment, would also create 143 new jobs in 2025 – the date set for operation.

The jet is a vertical takeoff aircraft, powered by 36 all-electric engines and is said to be six to seven times quieter than a helicopter at take-off

Do not hold your breath!

Wherever you go you will find the dissenters who refuse to comply with the wearing on face masks and other protective measures – mainly a ‘Macho Man’ trait but there are plenty of women who have the same ideals.

Thoughts then for the residents of one of Canada’s northern communities at Grise Fiord, about 1,500 kilometres north of the nearest Covid-19 infection, the 150 or so residents in town are living under the same two-week lockdown as everyone else in Nunavut. The lockdown ceases on December 2. Only then they may be able to tramp through the snow to visit their neighbour!

Grise Fiord, or Ajuittuq—“the place that never thaws”—in Inuktitut, is the most northerly community in the territory, and in Canada. Located on Ellesmere Island, at 76° 25’ N, it’s a place where the sun has now set and won’t rise again until February.

For something a little lighter we return to the volunteers of the Civil Air Patrol.

When the British Divers Marine Life Rescue realised that a grey seal pup, rescued in Cornwall, needed to be transported to the RSPCA wildlife rehabilitation centre at Mallydams Wood, near Hastings, they had no hesitation in requesting help from the UK Civil Air Patrol. Civil Air Patrol pilot, Graham Mountford is well known to the BDMLR and this was his eleventh seal rescue transport flight.

Accompanied by Civil Air Patrol colleague, Jeff Smith, Graham first flew his Cessna 414 twin-engine aircraft from Turweston in Bucking-



hamshire to Newquay in Cornwall. Then with the seal pup on board, in a specially designed transit cage, the flight continued to Lydd in Kent for the short road journey to the RSPCA centre, accompanied by a BDMLR animal medic.

The round trip, Turweston - Newquay - Lydd - Turweston covered 556 miles and took 3 hours and 45 minutes.

On arrival at the RSPCA rehabilitation centre the seal pup, none the worse for its flight, was immediately christened, Luke Skywalker!

EVENTS ON THE MOVE

In mid-November the Domus Group, the organizer of the biennial **Dubai HeliShow** announced that the event's 8th edition will be held in the state-of-the-art Emirates Flight Training Academy, located part of the giant Al Maktoum International Airport, in Dubai South. The date set is January 19-21, 2021 and the event is to be co-located with the UAV/Drone and Military & Homeland Security Show.

The rotary event was launched at the original Dubai Airport 16 years ago but despite the exotic location struggled to attract an international audience. It was not long before the majority of the international media abandoned the event. There were never enough high profile exhibitors to feed them sufficient stories to make their investment worthwhile and never enough visitors to overcome a very real sense of isolation. The number of aircraft inside and out in the static park dwindled to nothing. There was more media business to be had in one afternoon at a typical HAI Heli-Expo – before the show even opened its doors than across two days of a typical Dubai event.

There were promising high points in the small co-located conference sessions but they did not succeed in overcoming the general malaise. The busiest vendors were carpet and furniture sellers – slightly off focus.

The event moved to the racecourse which injected more exotica in the form of evening racing but, surprisingly, horses were never really aviation content. The style suited the local attendees and some exhibitors were still drawn to be there simply because it's a cash rich country and there was business to be had but it rarely made the grade as a true International show.

In the past the event has been held on even years in late November and it seems that the current pandemic has moved it forward to January. That may not be far enough.

The Emirates Flight Training Academy is one of the advanced flight training academies in the world established to train world-class pilots. As professional training is an essential aspect of aviation, the Academy, which is known for its industry standing and reputation. The organisers [who also promoted the racecourse solution] say that the move will "further enhance Dubai HeliShow through the aviation academy's advanced facilities and unique capabilities".

The co-location with the UAV/Drone and Military & Homeland Security Show is a new move that will broaden the market but the high-class venue is of course an AIRLINE training school and not much to do with helicopters or UAVs. The current state of the airline industry could actually work against the rotary event.

The pandemic will still be close at hand and we still do not know whether free travel will apply by late January. It is noteworthy that the organisers are taking each way bets and speaking of a virtual platform providing online attendees with a 360-degree view of the different areas of the venue such as the main lobby, the exhibition hall and the auditorium. A virtual networking area will be designated as well for the benefit of the remote participants.

In short the organisers may well be unsure about the date they selected. They predict that the attendees are expected to comprise international exhibitors, decision-makers, government and defense officials, business customers, owners, users and manufacturers.

On the other hand they may all stay home as usual. www.dubaihelishow.com.

After the disappointment of COVID postponement of the **2020 World Border Security Congress (WBSC)**, the organisers have announced new dates for the WBSC to reconvene in Athens, Greece on June 8-10 2021.

Whilst there is no need for explanation for the postponement of the face-to-face congress this year, they decided not to go down the virtual route. This was because the organisers believe that the fraternal community nature of WBSC is at the very heart of what makes it such an important event work for the global border community, and why it attracts more than 250 delegates from over 50 countries each year.

With the continued support of the Greek Ministry of Immigration & Asylum, they hope that by June next year the situation will have settled. Delegate registrations will be rolled forward to the new June 2021 dates.



It is a similar situation with the small **Rotorcraft Asia and Unmanned Systems Asia** will be held at the Changi Exhibition Centre, Singapore in 2021. It was originally set for the end of March into April 2021 but the organisers have decided that is too early and have already reset it for late July. The downside of that date is that it is likely to clash with other major events as they cancel and revise their dates. The only event this Far East show currently clashes with is the USA based APSCON 2021. That is not particularly important but it may reduce some chances for event growth in the coming year. As stated in a review of the same event in 2019, it is a very weak start up event – currently in the same mould as the Dubai Helishow – so it needs to take every opportunity it can to grow. <https://rca-umsa.com>

Confusion, or indecision seems to be gripping the **UK Emergency Services Show**. They started this year with a spring event, moved it to late summer and off again the next spring. They have since had a rethink and have moved their event to next September [its normal slot] in the hope that the worst will be over by then. It is easy to criticise but I understand their pain and, as we know from others, they are not the only one flipping a coin to choose the date in these uncertain times.

The Emergency Services Show, is now scheduled for 7 to 8 September 2021

Although they do not yet know how anyone will fare in the coming 10 months I guess its reasonable to hope that the exhibitors and visitors will be back to near normal by September 2021.

Mainly associated with the Fire and Ambulance services, the organisers have long tried to get the police more actively involved and may well have attained something for the next event.

The show has launched a new feature: *Future Policing*, supported by an Advisory Council chaired by Lord Hogan-Howe, the former Commissioner of the Metropolitan Police Service and architect of all that is NPAS. Showcasing the latest innovations available for the police sector and sponsored by Audax, Future Policing has the full backing of the Police Federation of England and Wales and will feature a two-day, CPD-accredited high-level conference with a line-up of senior speakers.

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

With COVID limiting opportunities for face-to-face training, Virtual Reality technology is also set to feature strongly, as is the use of other online technologies like Zoom and Microsoft Teams for training. Enabling ICT applications being showcased include control room systems, data management, mobile apps for emergency service and public use and the multiple technologies now being used to speed and aid collaboration.

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The Emergency Services Show 2021 will for the first time be co-located with The Fire Safety Event, The Health & Safety Event, The Security Event & The Facilities Event, creating the UK's largest event dedicated to the protection of people, places and assets. These events were originally set for a stand-alone event in the ExCel London in April this year, moved to co-locate with the ESS in September 2020 and then proposed for April 2021. It is clear that, like other organisers, Broden Media became aware that April was still probably too soon.

To minimise contact and ensure smooth and efficient entry flows, all visitors are required to register in advance for free entry and free parking at: www.emergencyuk.com

Usually a vehicle for the date of the next edition of **PAvCon Europe** the annual police aviation conference to be held somewhere in the European Union there are good grounds for perhaps not bothering with the 2021 calendar! There may be no highlighted date around June but the handy item of retro technology is still useful when your phone battery goes flat!



They are out there.... Will you get yours?



Meanwhile, at North Weald, the apron for the new air ambulance facility has now been laid as the date for the Essex and Herts Air Ambulance to move in draws ever closer.



From NW Facebook@nwug