

# Police Aviation News

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Issue 302

June 2021



**Sûreté du QUÉBEC H145**

**PAvCon Europe Details**

**Airship 100**



## EDITORIAL

This month we are assured that we, the British, will be free. Free to travel anywhere in the United Kingdom we please – which of course is not totally free! We are still faced with a world in turmoil and even those areas where we may choose to travel, including parts of Europe and the USA – do not really want us! Thanks to Covid 19, we remain unclean, and if we are not unclean the rest of the world is! True freedom may have to be delayed a little while longer and those soothsayers who said it will be 2022 before we may get something near freedom may yet be found to be the wisest persons of our times.

Meanwhile there is the Internet and this month sees PAVCon Europe joining nations across the world of airborne law enforcement together in dialogue. Bookings made by the end of April showed that it was indeed to be an International event drawing delegates from across the globe.

It will never match, let alone beat, face-to face networking but it keeps a door open for cooperation between nations after over a year of little or nothing. It is not too late to join in the experience, you can connect via the PAVCon Europe website.

*Bryn Elliott*

## LAW ENFORCEMENT CANADA

**SURETE DU QUEBEC:** The newly acquired Airbus Helicopter H145 C-GSQP for the Sûreté du Québec (Quebec Provincial Police) has now received its new colour scheme and role equipment.

It has been a difficult aircraft to find during the recent months, the H145 has been kept unmarked and it has been used discreetly for the training of the pilots still wearing the (yellowish) colours of its previous operator, the Italian HEMS company EliFriulia.

It was finally repainted in February with a striking new colour scheme worn by Sûreté du Québec road vehicles. As soon as it left the paint shop, it returned to Airbus Helicopters Canada in Fort Erie, Ontario, to undergo cabin modifications for 9 weeks and finally returned to the custody of the police base at Saint-Hubert Airport (CYHU) on May 07, 2021. [MotionFotoMedia.ca - Montréal, Québec]

*Ed: Claude Lafrenière, a former police officer and now aviation photographer based in the Montreal area has written a more extensive appreciation on the new helicopter and it appears later in this issue [page 37] with additional images.*

## CAYMAN ISLANDS

**POLICE:** Currently in the Cayman Islands the Royal Cayman Islands Police (RCIPS) operate two Airbus Helicopters H145. These replaced a former UK police EC135 and offer the islands superb air assets providing the most advanced specification and an EO/IR sensor. One is now fitted with a hoist.

The RCIPS continue to suffer from a pilot shortage. Currently they have one pilot, Captain Nigel Pitt, and have hopes that a second pilot will join them to commence flying in July. Identifying and signing up the new pilot involved a long recruitment campaign. Meanwhile the RCIPS has identified a shortfall of one or two full time pilots and access to a pilot part time to cover leave periods. The latter post only covers 2-3 months each year in July and August.

RCIPS are offering US\$95,111.64 - \$102,433.43 per annum for experienced H145 helicopter pilots with a minimum of 3,000 hours helicopter flight time, of which 1,500 hours should have been pilot in command, with a minimum of 200 hours night flying experience, 1,000 hours multi engine turbine, and able to demonstrate experience flying over water day and night, NVIS. Preference will be given to suitable Caymanians!

The arrival of the hoist has brought its own problems in identifying and attracting a suitably qualified winch operator. Ideally the latter should be a qualified TFO with winching experience, but they are a rare commodity. All these needs are to be drawn from acceptable sources – unless the RCIPS are able to somehow modify the requirements there is a primary need for pilots to have a British ATPL. There are few of these available and that is at the core of the ongoing difficulties the RCIPS has faced. Finding someone qualified who wishes to move to the Cayman Islands more or less permanently is a further complication. [RCIPS]

**COVER IMAGE:** The newly acquired Airbus Helicopter H145 C-GSQP for the Sûreté du Québec (Quebec Provincial Police) has now received its new colour scheme and role equipment. Claude Lafrenière, a former police officer and now aviation photographer based in the Montreal area has written an illustrated appreciation on the newly refurbished helicopter extracts appearing on page 3 and 37 in this issue.

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## EUROPE

**FRONTEX:** The Beechcraft King Air 350ER with the crew of the Estonian Police and Border Guard Board's PPA aircraft was on a joint operation on the southern coast of Spain for much of May. The PBGB air resource is participating in the short-term Frontex mission for the ninth time.

On the southern coast of Spain, the main tasks of the sorties are to detect illegal migration and cross-border crime.



Estonian King Air © EPBG

The air force is participating in Frontex's joint operation "Indalo 2021" in southern Spain, where their main area of operation relates to the high incidence of migrant arrivals at the end of May from Morocco into the section of Spain on the African mainland. On one day at least 6,000 migrants reached Spain's Ceuta enclave from neighbouring Morocco, a record number over a single day. The migrants - who include about 1,500 minors - either swam around the border fences that jut out into the sea or walked across at low tide. They are said to be mostly from Morocco. Spain has already sent some 2,700 back. Spain's Ceuta and Melilla enclaves have become magnets for African migrants. Frontex supports local border and coast guards in border surveillance, crime detection, ship identification and search and rescue.

The PBGB sends a total of 13 people to Spain. Some of them fly on the King Air ES-PKY and others on a passenger plane. Eleven flight crews, including flight crew and technicians, are based at Malaga airport in Spain. Two people work at the operations centre in Madrid, where they are responsible for planning patrol flights and assigning tasks to the flight crew and liaising with air and ground resources.

The PBGB aircraft squadron has been participating in Frontex missions on a short-term basis almost every year since 2009. Missions have also taken place in Greece and Italy in the past, most recently in a joint operation in 2019 in Spain, in the same region as in May this year.

The 350 was acquired in 2018 after being ordered in 2016 by the Estonian Ministry of the Interior for the Police and Border Guard Board (PPA) from Swedish company Bromma Air Maintenance AB for just over €19M.

The plane, completed in spring 2018, replaced the border guard's existing Czech-made Let L-410 surveillance aircraft. In Estonia, the aircraft is mainly used for monitoring flights, where one of the important tasks is to detect pollution at sea. While the aircraft is away for around one month Estonia covers their absence using other resources including helicopters, the European Maritime Safety Agency (EMSA) drone and satellite, and aircraft from Finland. [PAR/Border]

## GHANA

**NATIONAL POLICE:** Last month Inspector-General of Police (IGP) James Opong-Boanuh announced the establishment of an air wing of the Ghana Police Service. This the latest of several 'launch' announcements made in the country dating back around eight years.

The Inspector-General was speaking at a closing ceremony of the three-day 2021 National Police Command Conference (NAPOCC) held at Senchi in the Asuogyaman District of the Eastern Region. He stated that the construction of hangarage for the proposed air unit have been completed in Accra and that the police are now awaiting the arrival of helicopters promised by government.

In 2019 the Chief of Staff Akosua Frema Osei Opare promised to procure three helicopters for the police service. At least, 6 police officers have undergone aviation and flying training programme in South Africa to form part of the air wing of the Ghana Police Service. [Joy]

*Editor: In 2013 a helipad was commissioned at the National Operations Centre at the Police Headquarters in Accra. This was to facilitate access to air force Mil Mi-171 SH helicopters in aiding police deployment such as riot control. At the time promises were made about getting the police their own helicopter. In April 2019 a sod-cutting ceremony for the construction of a hangar for three police helicopters, was held. The 514-metre square hangar located at the Police Training School in Tesano-Accra has the capacity to contain four helicopters at a time. The construction formed part of a Presidential promise to deliver police helicopters. Police officers were training as pilots and engineers to man the helicopters.*



The last known activity was in 2013 © www

*The construction formed part of a Presidential promise to deliver police helicopters. Police officers were training as pilots and engineers to man the helicopters.*

*In February 2020, delivering the 2020 State of the Nation Address (SoNA) to Parliament, the president again stated that three helicopters were on the way. In October 2020 The Ghana Herald was asking where the three promised helicopters were.*

## JAMAICA

**DEFENCE FORCE:** Bell delivered the 300<sup>th</sup> Bell 505 Jet Ranger X to the Jamaica Defence Force (JDF). The first Bell 505 was delivered in 2017, and today there are 300 aircraft in operation across six continents, with customers logging more than 70,000 global fleet hours.

The Force's sixth Bell 505 will support Public Safety missions to serve the citizens of Jamaica and be operated by its Caribbean Military Aviation School (CMAS) to train the international rotorcraft pilots of tomorrow. Its similarities with the Bell 429 platform allow for a smooth pilot transition as JDF begins training operations. With a Garmin G1000, the platform shares similar avionics with JDF's Fixed Wing Trainer aircraft and reduces pilot workload, enhancing the students' learning experience. [Bell]

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Bell 505 line up © Bell

### JAPAN

**NATIONAL:** The first Subaru Bell 412EPX delivery took place last month to the National Police Agency. It will serve with the Iwate Prefectural Police, Tohoku Region. The sale was announced at the Paris Air Show in June 2019 by Bell and the Subaru Corporation.

The 412EPX variant of the forty two years old Bell 412 design was announced in July 2018 and launched at the Singapore Rotorcraft Show in April 2019. [Bell/Subaru]



NPA Bell 412EPX © Bell/Subaru

### UKRAINE

**NATIONAL GUARD:** Ukraine's National Guard has received a further helicopter under a 12 aircraft contract with France's Airbus Helicopters.

The latest arrival is a Airbus Helicopters H225 helicopter, it arrived in the Ukrainian capital in early May. It is supplied to the National Guard of Ukraine as part of the development of the single system of aviation security and civil protection under the Ukrainian Interior Ministry. The first H225 for the National Guard arrived at its air base on December 21, 2018 and the second in December 2019.

The National Guard is expecting to receive four more helicopters from France this year. Meanwhile, the construction of new hangars for storing and servicing the helicopters is being completed in Oleksandriia, Kirovohrad region. [UNG]



Photo credit: Ukrainian National Guard/Facebook



# UNITED KINGDOM

**DEVON & CORNWALL:** The G7 Heads of State Summit is being held in Cornwall over the weekend of June 11–13. It is the annual meeting of seven nations to discuss economic policy and other matters of State and the selection of this relatively remote area in the extreme west of England brings its own security issues. The boundaries of the area meetings will be held in, a peninsular bordered by the Atlantic Ocean and the English Channel, bringing the need to highlight seaborne security technologies and a scenic land area occupied by people and a police force wholly unused to the intrusion of security measures familiar to city dwellers.

This year a number of guest countries have also been invited to swell the seven core nations. The UK, US, Germany, France, Canada, Italy and Japan make up the G7, and leaders from Australia, India, South Korea and the EU will also attend. Key locations of the summit include The Carbis Bay Hotel, The Tregenna Castle Resort, St Ives, The National Maritime Museum, Falmouth and Cornwall Airport, Newquay. These locations are either on or close to the sea, a factor that will weigh heavily on the security planning.

Around Cornwall Airport Newquay, the main aviation hub there will be a number of road closures and parking restriction orders in place for the duration of the event, beginning



Carbis Bay Hotel © CBH

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at 6pm on June 9 and ending on 11.59pm on June 13. Airspace restrictions will be in place from 10 to 13 June. This will introduce a level of security wholly alien to the local mindset and that alone will challenge the planners.

The regional airport was a formerly RAF St. Mawgan and can take some of the largest and fastest of civil and military aircraft, having been built and maintained for decades as an RAF maritime operations base. The military still use part of the site but the primary resident users are currently HM Coastguard and Cornwall Air Ambulance helicopters. The main airline traffic has been disrupted by the demise of the airline Flybe and the pandemic but with flights to the Isles of Scilly recently reintroduced around four domestic airline flights a day are expected.



With the new Emergency Services Network still very much a dream the existing Airwave secure emergency services communications infrastructure is having to be improved to overcome patchy reception and capacity issues that ESN is designed to iron out. Normal network needs are to serve 10-20 people the Summit will massively increase that. Police have confirmed they are erecting a temporary radio mast to ensure they have good communication network between officers before the G7 Summit gets underway.

The temporary mast has been erected in Porthrepta Car Park, St. Ives, to provide crucial support needed for emergency service radio cover during the summit. Although Airwave has localised drawbacks brought on by age, it is a common system for police, fire and ambulance across the whole of the United Kingdom. Officers connect to the network via personal radios to communicate with each other when responding to incidents, to their control rooms and it also provides a vital safety feature.


Devon and Cornwall Police state that the existing masts in the area do not have sufficient capacity to support the additional use which will be required for the thousands of officers and emergency service staff who will be deployed during the G7 Summit, the temporary 25.5 metre tall mast, managed by Motorola, offers capacity and fills in some of the coverage gaps.



Accommodation is another headache for the Summit, the individual Heads of State and their entourage are mainly being catered for at the main venues but police are having to work out locations and accommodation for the large number of outside agency officers who will be in and around the G7 Summit site and looking after the assigned protest areas.

It is a holiday region so, with booking depressed by the Pandemic lock-down the police were able to secure accommodation in the area but unlike say Las Vegas (Nevada, USA) the units are small. One of the many 3,500 bed hotels in Las Vegas would solve most issues instantly but planning is infinitely more complex when the accommodation is spread out and comprises even 'large' hotel stock with only 100 rooms each. The Pandemic lock down also brought with it restrictions on the public staying in hotels and eating out. Until recently the population as a whole could not use hotels or eat inside restaurants so an infrastructure in suspension has had to be ramped up to meet a very different need.

Britain is now opening up and Cornwall is at the start of the tourism season and with a population of over 11,000, St Ives residents have already found out that the railway line will be closed from June 7 to 14 to



In association with the Airborne Public Safety Association Inc., PAVCon Europe is to hold a FREE ACCESS education event on Monday June 7 at 1000 CET (0900 UK).

The 6-hour programme includes contributions from The Netherlands, Belgium, United Kingdom and USA.

Pre-registration is essential but free at:-

[www.publicsafetyaviation.org](http://www.publicsafetyaviation.org) or [www.pavconeurope.eu](http://www.pavconeurope.eu)



be replaced by a bus service, in addition there are security road closures.

In order to facilitate peaceful and lawful protest at the G7 Summit, police and local councils have been working together to identify dedicated sites across the Devon & Cornwall area, where people can go to express their views.

Four sites were initially identified, two of them appear unrealistic because of their distance from St. Ives. Plymouth Hoe is some 70 miles away, Exeter is over 100 miles away. Closer to the Summit are Falmouth and Truro, both around 20 miles from the areas allocated to the G7. If there are any hot issues to protest about, those involved will not want to be waving their banners and shouting from 20 miles away. The police have already stated that these preferred areas of protest are in addition to the as yet unidentified "space limited" St Ives area. They are also looking at areas where protest on the water can be facilitated without presenting a safety or security risk. The high likelihood of protest brings with it a need for additional call handling and custody provision.

As a final big stick it has been pointed out that any demonstrations take place in line with the current COVID legislation! The fact that some groups have disregarded these regulations at the height of the pandemic does not bode well for a period in which they are preparing to remove them altogether.

*Ed: Last month PAN mentioned the helicopter transportation arrangements put in place for delegates. No details of the NPAS resources being committed are in the public domain but it has been noticed in recent days that North Weald is operating one EC135 and two EC145s, G-MPSB and MPSC. As stated in the PAN 300 'B' suffered an accident in March and 'C' had been unavailable since last year. Clearly resolved — which will make G7 easier to cover.*



Eurocopter EC145 G-MPSC © NWAMA 28/5

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## UNITED STATES

**NATIONAL:** APSA is partnering with the Texas Department of Public Safety to host a one day safety stand to in San Antonio, Texas, on Wednesday, June 23, 2021.

The Stand-To will be conducted at the Bexar County Regional 911 Center, 4700 Quarry Run, San Antonio, TX. 78249, the \$40M hardened 911 call complex that has served 2.5 million residents living around San Antonio since 2017.

There is no charge to attend this excellent training, however, all attendees must be registered to participate. The event is sponsored by Aero Computers, Airbus, CNC Technologies, Dallas Avionics, L3 Harris and Macro-Blue. Additional details from Airborne Public Safety Association, Inc. (APSA), 50 Carroll Creek Way, Suite 260, Frederick, MD 21701 USA +1 301 631 2406 <http://www.publicsafetyaviation.org>



Nebraska now has a modern helicopter © NM

**NEBRASKA:** The Bell 407 serving with the Omaha Police as N402PD c/n 54322 since last year has role equipment including a FLIR Systems 380HDc and a Trakka Systems searchlight. It has a lengthy history. It started its flying some 8 years ago as a military demonstrator for Bell as N407GT travelling to Amsterdam, Bogota, Chile, Dubai, Paris and Jordan. For a period it served in South Africa and took up a law enforcement role being used to deter and capture rhino poachers until returning to the USA. Now serving with Omaha it brings to an end a difficult period for the unit where predecessor helicopters suffered a string of accidents and incidents around two years ago.

Last month aircrew from the Omaha PD were joined by officers from Kansas Highway Patrol, Nebraska State Police, the FBI and DEA in a two day Tactical Flying Airborne Thermographer EO/IR Workshop led by Nick Minx a pilot from San Diego. [TF Facebook]

A promotional banner for 'Rotortech' featuring a blue helicopter on the left and a drone on the right. The text reads: 'ROTOR TECH HELICOPTER AND UNMANNED FLIGHT EXPOSITION 15 - 17 JUNE 2021 ROYAL INTERNATIONAL CONVENTION CENTRE, BRISBANE, AUSTRALIA www.rotortech.com.au'. There is also a logo that says 'IT'S LIVE! in Queensland'.

# AIR AMBULANCE

## BULGARIA

**AIR RESCUE:** In 2019 it was announced that support from the European Regional Development Fund [ERDF] was being channelled towards providing Bulgaria with a HEMS. At a time when Bulgaria was the only country without a helicopter based air rescue and air ambulance service, resolving the matter was seen as urgent. A limited military service has been available since 2009.

In 2019 it was said that a new emergency helicopter would be purchased as early as 2020 – although others thought it could not be put in place before 2023. The aspirations for a 2020 introduction were no doubt delayed by the pandemic. The cost of a fully role equipped helicopter for the new service was being quoted as €4M each in 2019. The project has a budget of €20M of which half will be from EFDF sources.

The size of the eventual operation has not been outlined, one source suggested at least four bases were needed in the cities of Sofia, Plovdiv, Burgas, Varna or Pleven and another source is certain at least eight will be needed. The latest on this project is that four used examples of the Eurocopter/Airbus EC135T2 are headed to Bulgaria from Spain. The four were serving as air ambulances with Babcock MCS Spain and are between 14-18 years old. c/n 0306 EC-ITJ 2003; c/n 0317 EC-IUN 2003; c/n 0354 EC-JDG 2005; c/n 0705 EC-KUQ 2008. They were sold to a Bulgarian operator. [Trud/Helihub]

*Ed: In January 2004 there was a subscription air ambulance service set up by a financial group, DZI-Rosexim, in cooperation with the Military-Medical Academy and the Union of Bulgarian Motorists. The service was insurance based and set to provide free transportation to DZI policy holders but was to be available to others. At the time the management of DZI-Rosexim was holding talks with health officials with a view to extending the service to provide a wider service in Bulgaria.*

*The project was centred around five former ADAC BO105DBS-4 helicopters bought from the German company. It was certainly launched with one of the helicopters involved in a ceremonial landing at the Alexander Nevski Square in the centre of Sofia. Ultimately only two Bolkow helicopters were registered in the country. Clearly it did not progress beyond that point, in recent years the Military-Medical Academy has provided paramedics to the military operation.*

*Another company, Heli-Air, undertakes some EMS work among its day-to-day air transportation and cargo carriage operations using fixed wing and helicopters.*

## FRANCE

**BORDEAUX:** Airlec Air Espace, operating as Airlec Ambulance and Airlec Medical as an air repatriation service has added a Dassault Falcon 900EX to its fleet of fixed wing air ambulances. The new aircraft can accommodate up to four ICU stretchers, allowing cost-effective multiple patient transfers. Airlec now offers worldwide coverage with reduced fuel stops.

Airlec Air Espace employs a team of 30 permanent staff (pilots, engineers and dispatchers) along with a roster of 55 healthcare professionals on a rota to guarantee flexibility in providing a service based of Merlin, Citation and Hawker aircraft. [AirMed/Airlec]

## GERMANY

**DRF:** DRF Luftrettung is putting the world's first upgraded type H145 helicopter into operation at the base in Villingen-Schwenningen, Germany. This particular machine was retroactively modified from four to five main rotor blades. Technicians from DRF Luftrettung, together with the manufacturer Airbus Helicopters, performed this first retrofit of a four-bladed H145 at the Airbus site in Donauwörth.

## INDIA

**NEW DELHI:** India is not well known for its air ambulances. They certainly are the transport of a select section of the populace, money comes first.

Since April the capital's Indira Gandhi International Airport has facilitated the passage of 100 air ambulance flights mainly focussed on moving victims of the global pandemic. The general aviation terminal along with adjoining aircrafts parking slots, built almost a year ago for private jets has been at the centre of the activity.

Operations are restricted by the government, it may not be as strict as say China or Dubai but it is not an Open Skies situation. Around 12 aircraft are currently permitted to operate from the airport, and they have undertaken the 100 movements of COVID positive patients in the month. These air ambulance flights are but a tiny proportion of the pandemic which continues to expand unabated – over 100,000 new cases are being recorded each day, with over 3 million active cases.



Elsewhere there are stories of potential air ambulance services mired in red tape. For instance in Uttarakhand an air ambulance service was given the verbal go-ahead for a service in 2018, with operations to start in 2019 but the paperwork remains lost in the National Health Mission and they are therefore effectively grounded. The NHM has initiated the tender process twice in the last three years. Any progress is now mired in the lockdown.

## IRELAND

**NATIONAL:** The HSE has been sued by a company that failed to secure a €12M contract to provide air ambulance services. The action is by Sere Holdings Ltd, which was informed in March it had been unsuccessful in its tender to provide the services. It is trying to prove that the award of the contract was flawed and is seeking damages.

The contract was awarded to IAS Medical Limited following a public tender process. The four-year contract, due to commence in June, pays the service provider €3M annually.

Sere claims there were several breaches of the public procurement rules arising from the decision to award the contract to the other company. One is that the winning contractor did not meet the minimum turnover requirements stipulated in the tender. [Irish Times]

## UNITED KINGDOM

**EAST ANGLIA:** Last month PAN reported on the East Anglian Air Ambulance (EAAA) charity moving into its new hangar at Cambridge Airport. Within days they also moved back into their original home base at Norwich Airport after its major makeover.

The crews from EAAA moved into their Norwich headquarters, ahead of planned 24/7 operations later this summer.

The charity, which has been operating from temporary accommodation for over a year, launched its mission to deliver a 24/7 air ambulance service in the East of England back in 2019. Last month, despite delays due to the pandemic, that goal is one step closer as its life-saving crews moved into the charity's newly built 24/7 operating base at Norwich Airport. The new building sits behind the original Sterling Helicopters hangar which has been comprehensively refurbished.

The £7M development will enable the charity to finally have the training, rest and welfare facilities required for a fully 24/7 helicopter operation and will make EAAA the first air ambulance in the East of England to fly round the clock.

By flying 24/7 the charity estimates it could be tasked by helicopter up to 600 more times a year, delivering critical care to those in need faster at night and closing the five-and-a-half-hour gap where there is currently no helicopter coverage in the region (between 1:30am and 7:00am).

The charity's doctor and critical care paramedic teams are currently available 24/7 from both its Norwich and Cambridge bases, with the night



Norwich Airport: Refurbished hangar with the new facility erected behind © EAVV



shifts predominantly facilitated by rapid response vehicle (RRV). From July 2019 to June 2020 the EAAA night teams were tasked more than 500 times by RRV between the hours of 7pm and 7am.

EAAA has been flying until at least midnight from Cambridge since 2013, (flying hours were extended to 1:30am in 2019) providing some night helicopter coverage for the region. With a 24/7 helicopter service EAAA could help even more patients and reach them faster.

Planning was officially granted for the base in November 2019 with ground works starting in January 2020. Construction was halted by the coronavirus pandemic but is only six months behind the original schedule.

The new purpose-built base provides a world-class facility which will help the charity reach this long-term goal to be there for people when needed, as well as future proof the organisation and bring all of its Norwich-based teams under one roof for the first time. The base also includes a community hub and training and conference facilities, as well as an immersive training suite for its clinical teams.

Developing the new 24/7 base has included purchasing the land for the base, making EAAA a property owner for the first time which will save costs in the future. Not only has this enabled the charity to create a facility to best suit its unique needs, it has also meant that the building could be designed with long term durability in mind and to minimise future running costs. The base has been built with vital input from the

Architects and Interior Designers: Feilden & Mawson; Project Managers and Cost Consultants: REAL Consulting; Main contractors: P J Spillings; Consulting Engineers: Canham Consulting and Mechanical and Electrical Consultants: Johns Slater Haward. *Ed: The newly refurbished hangar and new build have been serving air ambulance needs in the region for decades. Since the mid-1990s Sterling Helicopters started operations on a limited basis using a Bolkow BO105 that also served the local police needs and, through a not always smooth transition, it transitioned into the current charity.*

Babcock and EAAA have announced a significant new seven-year contract to keep the HEMS operating into the next decade and expanding its service.



Norwich Airport: Early days, the air ambulance has its roots in an air ambulance operation set up by Sterling Helicopters in the same Norwich hangar nearly 30 years ago. © PAR

The contract, awarded after a competitive process not involving a formal tender, will see Babcock providing exclusive aviation support including advanced helicopters, ground support, engineering and pilots and includes the imminent introduction of 24/7 flying for the charity. Options for additional years would see Babcock's role as EAAA's exclusive aviation partner, which started 10 years ago, continue into 2031.

As a private charity EAAA were not obliged to enter into a European tender process. They undertook a detailed examination of all potential UK helicopter operators as part of their selection process to find the right helicopter operator to partner with, before selecting Babcock as their aviation partner of choice. They have not detailed what the criteria was but they have a great deal of experience and time invested in working with Babcock in the move towards 24/7 flight operations, breaking that link would create a major disruption to that work.

EAAA, with support from Babcock, was the first UK air ambulance to introduce the advanced H145 helicopter – piloted for them by HRH Prince William, Duke of Cambridge. They also pioneered the UK's first night HEMS operations to remote sites not previously surveyed with Babcock pilots flying with specialist night-vision goggles. This month EAAA will become the first air ambulance in the East of England to provide critical care by helicopter 24/7, a crucial part of the charity's long-term strategy to provide the same level of service, day and night.

Looking ahead Babcock aims to help the charity take the next significant step forward in technology for air ambulances as they become the first in the UK to operate with a new five-blade upgrade on their helicopters – the H145D3.

EAAA has meanwhile launched an "urgent" fundraising appeal to enable the life-saving service to permanently carry blood on board its helicopters and rapid response vehicles. The target for the appeal is £89,354, which includes a one-off implementation costs. Going forward, EAAA will need to raise in the region of £70,000 a year to routinely carry blood.



The EAAA team has previous experience of carrying blood as part of a national research trial called Re-Phill, which ended in December 2020. As part of this five-year trial EAAA started carrying blood on board for the first time, with the research project specifically focused on evaluating the impact of administering blood to a select group of trauma patients.

By carrying blood independently for the first time as a result of this appeal, EAAA will be able to offer this potentially-lifesaving treatment to a much larger number of patients. [EAAA/Babcock/PAR]

**NORTH WEST:** Not all congested inner-city hospitals can have an air ambulance helipad added easily, many have to go to great lengths to overcome planning and logistic hurdles.

A new state-of-the-art helicopter landing pad, which has been incorporated into the rooftop of Grafton Street car park on Oxford Road Campus (ORC), will enable critically ill or injured babies, children and adults to be airlifted straight to the hospitals in Manchester city centre.

Sheppard Robson, the company that designed the Grafton Street car park opened in 2016, has completed a 130m long cranked bridge that will allow critically ill and injured patients to be flown by helicopter directly to Manchester's city centre hospitals. Suspended 18m above the ground, the "hospital corridor in the sky runs from the new air ambulance helipad on the roof of a multi-storey car park straight into Manchester Royal Infirmary. It will also serve neighbouring Royal Manchester Children's Hospital.

Previously patients had to be airlifted to a nearby park, then transferred to hospital by a normal road ambulance, adding extra minutes and discomfort to situations where every second counts.

The bridge's longest span is 40m and is clad in stainless steel panels. The material and form were chosen to minimise the impact of the conspicuous addition to the skyline. The final design is a result of 13 routes that were tested during the feasibility stage of the project.

£3.9M towards the helipad was raised in just 12 months by Manchester Foundation Trust Charity's Time Saves Lives Appeal. In addition £1.36M of funding came from the HELP Appeal charity. The helipad will be operational between 8am and 8pm every day, 365 days a year.



The linking bridge is fully integrated with the hospital environment © SR/MET/HELP





**YORKSHIRE:** It has been confirmed that the Yorkshire Air Ambulance (YAA) are to replace their current Airbus H145 D2 helicopters with the next generation aircraft by the end of Summer 2023. The YAA will be the first organisation in the UK to order the brand new, 5-bladed H145 D3 model in a deal said to be worth over £15M.



Yorkshire Air Ambulance operate two H145 helicopters © YAA

The two current YAA helicopters, G-YAAC and G-YOAA, which came into service in 2016, will be replaced while still have low hours which should enhance their resale value. Placing an early order will take advantage of early Airbus production line slots, the H145 has become very popular within the air ambulance community. Recent advances in the airframe and the need to refresh the medical fit are also driving the decision. Changing the rotor head for the new five blade version was considered and rejected. Advances in the new model include the 5-bladed rotor head which will provide a smoother flight for the crew and patients, on board Wi-Fi to allow patient records to be updated inflight, and a cutting-edge

secure communications system which will allow the crew to send patient data ahead to their destination hospital, allowing Doctors and Nurses to start evaluating and assessing the patient before they arrive. There will also be an improved medical fit alongside some of the most advanced and innovative equipment for treating patients at scene and in-flight. The first of the two new helicopters is expected to arrive in service in in two years time, with the second following shortly after in Summer 2023. [YAA/Airbus]

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## UNITED STATES

**FLORIDA:** Tampa General Hospital's Aeromed has added a new critical care helicopter to its fleet. The Airbus EC145e will provide enhanced medical transport services through faster air speeds and a larger cabin to better connect the greater Tampa Bay communities with potentially life-saving care.

In addition to providing extra room for crew members to move while caring for patients, the medical helicopter's added cabin space is especially useful for transporting COVID-19 patients.

Other features of the new helicopter include on-board radar, guidance systems and integrated display screens to give crew members direct access to key data, including maps, traffic patterns and more. The new technology on the airbus improves communication between crew members and the operations control centre.

Tampa General's Aeromed crew is highly trained and consists of either a flight RN/paramedic and a flight paramedic or two flight RN/paramedics.

Tampa General Hospital, a 1007-bed non-profit academic medical centre, is one of the largest hospitals in America and delivers care as the region's only Level I trauma and comprehensive burn care. With five medical helicopters, Tampa General Hospital transports critically injured or ill patients from 23 surrounding counties to receive the advanced care they need. Aeromed has been an operations customer of Metro Aviation since 2013.

**NEW YORK:** The state is the only one that does not allow air ambulances to carry blood. In recent weeks lawmakers from Upstate New York are promoting legislation that will permit air ambulances to store and distribute blood. This development will be most useful in areas where the number of hospitals is low.

**WISCONSIN:** LifeNet Inc, a division of Air Methods, announced that LifeNet 3-2 will now be based at the Hartford Municipal Airport. The new base location will ensure residents in the Hartford region and surrounding areas will have access to air medical services—resulting in quicker response times for emergent and trauma situations.

The decision to open a base in Hartford comes after an extensive review of the local needs. Recognising the regional growth in this area, Air Methods and local community and hospital leaders identified the need for the additional air medical services.

LifeNet will provide air medical services 24/7/365 to the Hartford region and surrounding communities. The base will be staffed by 12 crew members, including pilots, flight nurses, flight paramedics and mechanics, and it will operate an EC135 helicopter.



Airbus Helicopters EC145e © Metro

Metro Aviation

## AirMed 2022

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# FIRE

## SPAIN

**ANDALUCIA:** Babcock Spain has delivered three AS332L2 Super Puma helicopters to the Andalusian government, an autonomously governed region of Spain.

Babcock have a five-year contract to provide fire cover to the government, including airframes air crew, support and maintenance. The aircraft were originally operated by Babcock in the UK oil and gas sector.

[Babcock]

## TURKEY

A nation that has more recently shocked the airline world with its state sponsored air piracy of an Ryanair service the Belarussian Emergencies Ministry aviation department will again be helping fight forest fires in Turkey in coming weeks. A Mil Mi-8 helicopter of the Belarussian Emergencies Ministry has already arrived in Turkey.

The ferry flight to Turkey was from Lipki airfield, Gomel airport, Marculesti airport in Moldova and then along the coast of Ukraine, Romania, and Bulgaria to the Corlu airport in Turkey. The entire flight took about eight hours. After preparatory test flights and instruction the Turkish side will determine where specifically the Belarussian helicopter will be put on duty.

Thanks to such business trips pilots and technicians of the Belarussian Emergencies Ministry acquire invaluable experience of fighting large forest fires in complicated conditions of mountainous terrain, the Emergencies Ministry said.

Air units of Belorussia have regularly helped other countries fight natural calamities, they have been employed to fight forest fires in Turkey, Russia, Latvia, and Georgia. They have also helped render aid in flood-stricken areas in Serbia.

## UNITED STATES

**NATIONAL:** The investment firm that owns the 30-years old fire fighting Boeing 747-446 N744ST said it is ceasing operations immediately and may sell the aircraft to be used as a pure freighter. The 747 began life as a passenger carrier with Japan Airlines before being converted to a freighter for Evergreen International Airlines. Supertanker converted the aircraft in 2015 to be able to drop 20,000 lbs of retardant in a single pass. It has undertaken a number of operations since conversion. No specific reason for the sale has been given. [Flight Radar]



© Evergreen

In late April Coulson Aviation brought on line its latest Boeing AC-47 after a recent paint application. The Chinook is marked N43CU. The CH-47 and UH-60 helitankers arrived to supplement the existing mixed fleet in the summer of 2019 and now operate in both aerial firefighting and heavy-lift operations.

Coulson Aviation (USA) Inc. is a wholly owned subsidiary of Coulson Aircrane Ltd.,



Coulson Aircrane fleet © CAL

**CALIFORNIA:** In Santa Barbara County there is an expectation that the new fire fighting helicopter will be available for use in the autumn.

The new state of the art firefighting and rescue helicopter is undergoing final modifications before it's ready to go into action for the Santa Barbara Fire Department after a wait of twenty months.



The former Sikorsky HH-60L Blackhawk military aircraft 02-26964 was registered to the civil marks N964SB in December 2019. Since that time it has undergone a number of systems upgrades in Alabama. Now, it's in Colorado where a thousand gallon main water tank is being installed, and its landing gear is being modified to accommodate the changes.

The Santa Barbara based non-profit group Direct Relief donated \$1.1M dollars for the retrofit work. What's known as Copter 964 will have expanded water dropping capacity, more space for passengers and injured individuals and night flying capability.

Santa Barbara County has been using older single engine Bell UH-1 Huey helicopters, which have a limited water capacity and rescue flight capabilities. The Firehawk will more than double the passenger/rescued persons capacity and reach the incident faster - 218 mph, compared to 138 mph for the Huey. .

Elsewhere in the state they are looking forward to use of one of the largest current helicopters operating in the fire fighting role.

The city of Malibu has announced that the 69 Bravo Helistop, the world's most advanced helitanker refilling base located at the top of Topanga Canyon, a location in western Los Angeles County, in the Santa Monica Mountains, is being upgraded to accommodate the Boeing CH-Chinook 47, the "world's largest firefighting helicopter-tanker" [only if you ignore the larger Russian Mil Mi-26 Halo in the same tasking].

The Los Angeles, Orange, and Ventura County Fire Departments have each secured the use of a Chinook 47, which can store up to 3,000 gallons of water. All three helicopters will be based within 14 minutes flight time of 69 Bravo, where metal water containers are being upgraded from 6,000 to 8,000 gallons to accommodate the larger helicopters. The facility stores 10,000 gallons of water onsite in self-replenishing tanks, in addition to hook-ups to fire hydrants and water storage.

Mission Wireless Intercom innovator and leader Axnes has announced the new reconfigured Ventura County UH-60L Firehawk's that recently delivered from United Rotorcraft's facility in Denver, are equipped with the Axnes PNG Wireless ICS. Both aircraft delivered to the customer feature the integration of PNG's GPS positioning capability of the MP50 handheld transceivers with the onboard AeroComputers UC-6000 digital mapping system for greater situational awareness of dismounted crew members, especially while operating at night and in rugged terrain.



The DO-160G (environmental-airborne) and DO-178C (software-airborne) qualified PNG WICS is integrated with the aircraft Eagle Avionics digital intercom system increasing mission capability and operational safety for the most challenging scenarios, particular during rescue hoist missions.



The PNG WICS frees crew members from the encumbrance of wired connections to the intercom while minimizing the potential for ICS cord snag hazards. Additionally, this wireless solution provides for the ability to move freely within as well as outside the aircraft while maintaining real-time communications with the crew.

Captain Mel Lovo of the Ventura County Fire Department commented, "We selected the Axnes PNG wireless intercom for our new Firehawk's because it provides superb wireless ICS capability, as proven on hun-

dreds of aircraft worldwide. Their PNG wireless ICS will provide our agency with important communications for our flight crews. Its full-duplex capability allows for crew communication inside and outside of the aircraft in the most severe noise environments. What attracted us to PNG is its unique adaptive noise and echo cancelling technology and its “hands-free” non-interrupted VOX capabilities.

The Norwegian based Axnes develops and supplies advanced and highly durable wireless intercom solutions for use under harsh conditions on aircraft and other demanding applications. Axnes is well known for its successful wireless ICS solutions and today more than 1800 aircraft worldwide are equipped with their wireless technology.

Axnes is located in Norway, the United Kingdom and the USA. The office where this sale was facilitated operates as [AXNES, Inc.](http://AXNES.Inc.), 1155 Kelly Johnson Boulevard, Suite 111, Colorado Springs, CO 80920 USA. Contact Brett Gardner Phone: +1 (719) 722-1770 [bjg@axnes.com](mailto:bjg@axnes.com)

# SEARCH & RESCUE

## EUROPE

**MIGRANTS:** The number of illegal border crossings at Europe’s external borders in the first four months of 2021 reached 36,100, about a third higher than year ago. In April, the number of illegal border crossings reached over 7,800, a four-fold rise from the record low recorded in the same month of last year.



## INDIA

**COAST GUARD:** The Hindustan Aeronautics (HAL) Dhruv Mk III MR 2.5t helicopter successfully demonstrated its deck-operations capabilities that include landing on deck, folding of blades and storing the helicopter inside the onboard hangar during trials aboard the *ICGS Sujay* in April.

The ship-borne trials off the coast of Chennai were undertaken in collaboration with the Indian Coast Guard. Among the elements covered were maintenance activities inside the hangar and on the deck and hot refuelling with engines running on the deck. The helicopter is equipped with the most modern and reliable Shakti engines and an advanced glass cockpit. HAL had recently delivered the Dhruv Mk III MR to Indian Coast Guard as part of a contract for sixteen.

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Hindustan Aeronautics Dhruv at sea © HAL



This model of the Dhruv is equipped with the most modern surveillance radar that can detect and identify ships and boats up to a range of 120 nautical miles to enable the Indian Coast Guard in its duty to secure the nation from threats. Coupled with an electro-optical sensor that can closely monitor even the smallest of the vessels at distances as far as 30 nautical miles. The helicopter also carries a 50 calibre gun and a searchlight. The upgraded capability is in the wake the activities of terrorists arriving by sea.

The Indian Coast Guard has eight earlier model Dhruvs in service with an additional fourteen of the enhanced capability model on order. [HAL/Flight]

## ISRAEL


Aeronautics Group - a leading provider of integrated turnkey solutions based on unmanned system platforms, payloads and communications for defence and Homeland Security [HLS] applications has introduced its Orbiter 4 small tactical UAS, capable of performing long-range, long-endurance maritime patrol missions.

The Orbiter 4's high-performance EO/IR and radar payloads are ideal for maritime monitoring, gas and oil rigs protection, illegal activity tracking, and search & rescue. Orbiter 4 offers an ability to stay on station for 24 hours subject to the combination of multiple payloads selected.

Airstrip independent, it is able to take-off and land on any type of vessel. Operated by only three personnel, it is easy to use, maintain, and carries a low logistical footprint.



Orbiter 4 © AG



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**EMERGENCY**

In association with the Airborne Public Safety Association Inc., PAVCon Europe is to hold a FREE ACCESS education event on Monday June 7 at 1000 CET (0900 UK).

The 6-hour programme includes contributions from The Netherlands, Belgium, United Kingdom and USA.

Pre-registration essential — the event is open and free to all via the Airborne Public Safety Association Home Page [www.publicsafetyaviation.org](http://www.publicsafetyaviation.org) or [www.pavconeurope.eu](http://www.pavconeurope.eu)

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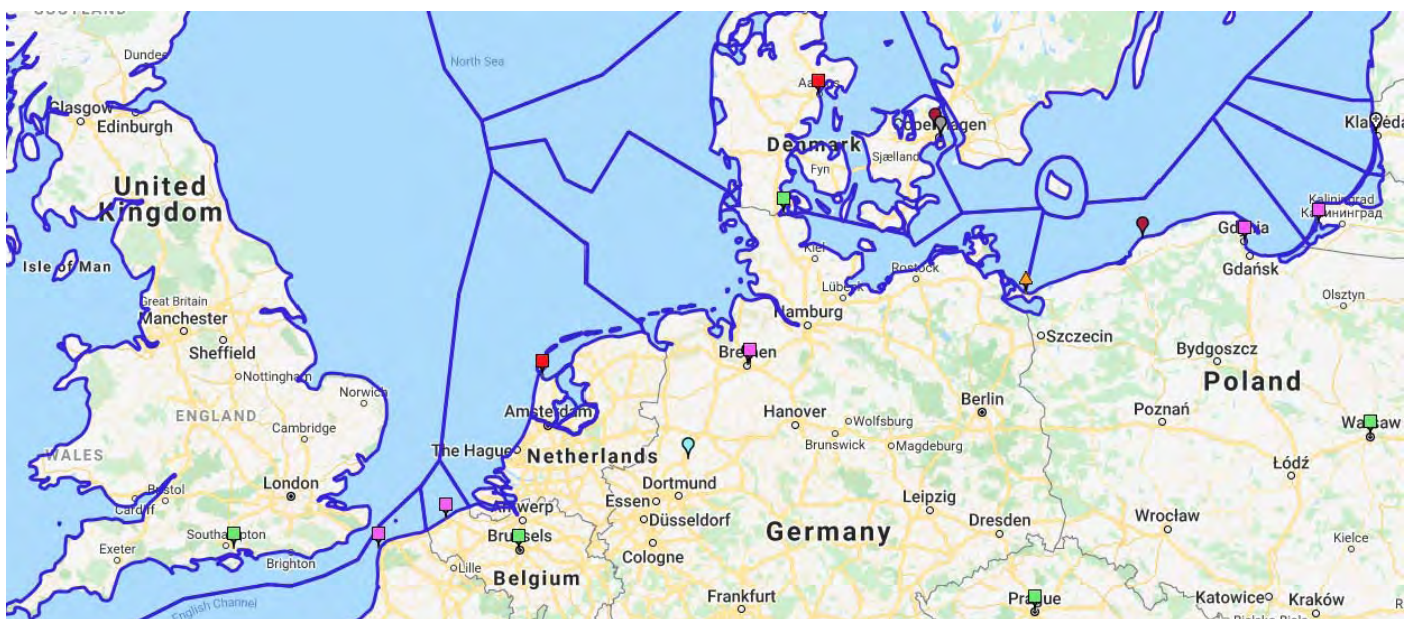


## NETHERLANDS

**KUSTWACHT:** The provisions for SAR and other coast guard tasks are up for tender. The fixed wing element is currently met by two Dornier 228-212, PH-CGN and PH-CGC managed by JetSupport at Schiphol Airport. The pilots are from the Royal Netherlands Navy and Royal Netherlands Airforce and the observers are from various ministries. The Dorniers act as support during SAR operations by helicopters. track and identify pollution, report on nautical law transgressions and track vessels. Since 2019 JetSupport have been working on their bid on the new fixed wing airframes.

Rotary wing operations are currently shared between 860 Squadron based at De Kooy near Den Helder. They operate the NH-90 but were delayed in their availability before last year due to delays in the programme. Standing in for them on the SAR tasking has been AS365N Dauphin helicopters of the Belgian company Noordzee Helikopters Vlaanderen [NHV] stationed at Den Helder and Rotterdam and the police AW139 fleet.

The current SAR contract will expire in 2022 and is now out to tender. It is unknown how many helicopters will be placed on which bases under the new arrangement. The basic principle that 16 people must be able to be rescued remains. In any case, a helicopter will be stationed at Den Helder. There is a suggestion that they want a type larger than the Dauphin currently used.



North Sea SAR regions © File

## UNITED KINGDOM

**MIGRANTS:** A new Tekever AR-5 drone has joined the English Channel search operation in recent weeks. It was first noted flying in early May.

The original drone was G-TEKV E505 built in 2019 and the new additional drone is G-TEKR E507 built in 2020 and registered in the UK in mid-October last year.



Tekever AR-5 production numbers remain low © Tekever

Research by the International Organisation for Migration (IOM) has found that as many as 300 would be migrants have lost their lives trying to reach England from the European mainland.



The IOM found that the migrants died either on the coast of northern France and Belgium or shortly after arriving in the United Kingdom, or drowned in the English Channel from 1999 to 2020. That is the equivalent of more than one per month but the reporting of the deaths would be spread across at least three nations and therefore not particularly noticeable among other deaths at sea.

Although it arrived at the figure of nearly 300 it believes that may be an underestimate as it is based on bodies found. Some may never be recovered.

In August 2020 the IOM joined with the UNHCR, the UN Refugee Agency, in stating they were troubled by the proposal to intercept boats and return those attempting to cross the English Channel irregularly. The foreseen deployment of large naval vessels to deter such crossings and block small, flimsy dinghies may result in harmful and fatal incidents.

By the end of April nearly 2,000 had successfully made the crossing to England since January 1 during good weather with numerous others being thwarted in France before they set off. There have been instances of migrants setting off in less than ideal weather and stopped but no reports of deaths directly linked to the activity.

The British government has issued appeals to the public to report unusual purchases of boats and lifejackets that may be linked to crossings.

These numbers are extracted from a project carried out by IOM's Global Migration Data Analysis Centre that aims to raise awareness of the challenges and coping mechanisms of people with missing migrant relatives in the United Kingdom, Ethiopia, Spain and Zimbabwe. The IOM report has a wider remit than quoted above, the wider project affects tens of thousands of people living worldwide facing the pain of not knowing the fate of their loved ones who went missing or died during migration journeys.

Meanwhile the migrants keep coming and the government and the national media seem to have decided to conspire not talk about the numbers that are landing on the beaches of southern England. As *PAN* goes to press the weather is glorious— as the schoolboys of Eton traditionally would have it "Jolly Boating Weather." The question remains whether that will result in 1,000 making the journey in frail craft in May!



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# INDUSTRY

Just as the last edition closed **Leonardo** launched a short tour of likely HEMS customers in the United Kingdom with an example of the AW109 Trekker. Specialist Aviation Services at Staverton had a visit from the helicopter on Wednesday 28 April 2021.

The AW109 Trekker, registered F-HVIK, is painted in a yellow paint scheme, and wears small "SAMU" titles on the side. It had flown from Leonardo, Yeovil and stayed overnight at Staverton.



The Trekker, configured as a French air ambulance, stayed overnight at Staverton in Gloucestershire before embarking on its short tour of the UK market © James Lloyds

The Trekker demo tour in the UK & Ireland is aimed at further increasing Leonardo Helicopters' presence and brand awareness, with its new multi-role light twin engine helicopter. The Trekker leverages the operational experience of the AW109 Family, with more than 1,100 helicopters in service and 2.5 million flight hours. The trekker dispenses with the retractable gear in favour of a simple but robust skid. The aircraft is supported by European mainland operator SAF Hélicoptères, the demonstration tour is designed to visit a series of different locations across UK & Ireland, where Operators, Charities, Pilots and Doctors will test hands-on the AW109 Trekker and experience this latest version of the successful AW109 Family.

Leonardo has announced a further major reinforcement of its presence and customer service and technologies in US with the official opening of their brand new, state of the art **Helicopter Training Academy**, located on their existing campus in northeast Philadelphia that also includes production, support and administrative functions for the United States. The new Academy was first announced at the 2019 Heli-Expo in Atlanta and, despite the challenges of Covid-19, was able to open two years later, on schedule. The facility is part of an \$80M investment in United States operations that will provide training services for a growing demand and need for pilots, cabin crews and maintenance technicians across North and South America. The Training Academy in the US will mirror the services provided by its sister facility in Sesto-Calende (Italy) offering ground, air and virtual training and leverages also simulator capabilities jointly developed by Leonardo and CAE and operated by their Rotorsim JV. The Academy, which is already up and running for customers, features training services for the AW119, AW169, AW139 models and will also be

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



home to the training services for global customers of the world's first tiltrotor set to receive civil certification, the AW609.

The UK police service has extended its 27-year partnership with **Tracker** (the UK market variant of the US Lo-Jack) for a further five years.

The extended contract will continue to support the police in the ongoing challenges and successes of recovering stolen vehicles and returning them to their rightful owners, whilst enhancing the prospect of apprehending more criminals.

Since the start of the relationship, Tracker and the police have jointly recovered over £561M worth of stolen vehicles, made 2,783 arrests from cars fitted with Tracker products and continue to recover on average £1M worth of stolen vehicles each month.

Tracker reported a spike in the theft of Range Rovers in March March, 2021 and highlighted UK car theft hotspots as keyless car thefts reached a record high.

Tracker detection units are fitted in over 2,000 police patrol vehicles and throughout the national fleet of police helicopters that comprise the National Police Air Service (NPAS).

The combination of VHF with GPS/GSM technology makes its units resistant to GPS/GSM jamming and enables the police to pinpoint a stolen vehicle if it is hidden in an underground car park, container or lock-up. The Tracker Mesh network has also been instrumental in locating stolen vehicles, said Tracker.

**L3Harris Technologies Wescam** is on the move from Burlington to a brand new, state-of-the-art headquarters, which will include 330,000 square feet of research and development, engineering, assembly and office space.

This move will begin mid-year with strategic timing that incorporates operational overlaps from existing and new facilities to ensure seamless production and support. When it takes place the move will see the company move to 50 Leavitt Boulevard, Waterdown, Ontario, Canada L9H 0C5.

The new location integrates the existing Burlington locations under one roof at the southeast intersection of Highway 6 North and Highway 5 in Waterdown. There, L3Harris will optimise manufacturing capacity for industry-leading WESCAM MX™-Series electro-optical/infrared systems and increase our capabilities as a world leader in highly stabilized imaging and designating technologies.

For the time being there are no changes to the main phone or fax numbers.

L3Harris and **Air Tractor** have jointly announced the production of an armed version of the Air Tractor AT-802 called the Sky Warden. The type features the largest payload capacity of any single turbo engine aircraft.

In the UK the **Air Traffic Management and Unmanned Aircraft (ATMUA)** Bill, designed to modernise airspace and clamp down on the illegal use of unmanned aircraft, received Royal Assent at the end of April.

The new law means airports that don't implement changes quickly enough could be directed to modernise their airspace, helping deliver quicker, quieter and cleaner journeys.

Modernising the use of UK airspace through the re-routing of existing flight paths will play a vital role in the government's plans to build back greener from the pandemic, generating lower CO<sub>2</sub> emissions from flights while also reducing noise pollution and improving punctuality for passengers.

The Transport Secretary has also been granted temporary powers to waive the rule, which requires air-

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lines to operate 80% of their flights in order to retain their airport slots. This means airlines will be provided with much-needed flexibility in choosing to not run flights, preventing high-cost and carbon-inefficient 'ghost flights' from taking place during periods of low air travel.

Two years ago it was proposed that the Scottish airline Loganair which operate the few minutes long flights to six airfields in the Orkney Islands would trial an electric conversion of the Britten-Norman Islander. Of 800 Islanders in service, around 600 are used for short flights. Electric is seen by many as the future in aviation and road transport.

The work was based on research by Cranfield as Project Fresson (named after Scottish pioneer aviator) started on 1 October 2019, to fly a demonstrator within 30 months before an EASA STC within another 6–12 months. Partners include **Britten-Norman**, Rolls Royce plc, for the power management system, and three others expert in batteries.

The target was a 60 min endurance plus 30 min reserves and with energy five times cheaper than Avgas and reduced maintenance, the conversion cost could be recovered in three years. Half of the £18M (\$22M) funding come from the partners and the other half from the UK government. All this was a stage towards developing a new 19-seat electric design.<sup>1</sup>

In March 2021, the power source was switched from hybrid-electric to hydrogen fuel cells with wing-mounted fuel tanks, as it was considered by the group that batteries were not yet viable. The first flight is still planned for 2022.

The modified project will now offer an endurance of one hour with a 45 minute reserve. Compared with the original range of the BN-2 of up to 720 miles the Fresson project will offer 100-135 nautical miles (200-250 km). Hydrogen fuel might save £150,000-£300,000 annually over fossil fuel, and there are significant savings on maintenance. The electric propulsion partners left the consortium, to be replaced by others.

Scottish Hydrogen Fuel Tank or SHyFT is a unique composite high-pressure vessel unlike conventional large, heavyweight cylindrical vessels. The unique multi-chamber composite design, aided by patented composite technology and recyclable materials.

SHyFT's largest model boasts the worlds highest Gravimetric Storage Density of 10%, allowing 5.4 KG of hydrogen storage. This is a significant 10% increase on current market leaders in composite storage of gaseous substances.

In what might be a negative development **ZeroAvia's** hydrogen power R&D aircraft crashed during a routine test flight just outside Cranfield airport last month. The hydrogen-powered Piper Malibu single G-HYZA - hailed as the world's first hydrogen fuel cell-powered commercial-grade aircraft – was damaged in a forced landing just outside the airport perimeter in a field during a routine pattern test flight. No one was hurt. The aircraft landed on its wheels, but the port wing was severely damaged by the uneven terrain as it slowed down. The aircraft is part of the UK government's HyFlyer project, which ZeroAvia is working together with the European Marine Energy Centre and Intelligent Energy to research low carbon power for aircraft. The aircraft first flew in September 2020.

*Ed: Equally interesting is that the video footage that goes with the promotional pages of the crashed aircraft at [www.zeroavia.com](http://www.zeroavia.com) include glimpses of a "missing" airframe. The BAE owned Jetstream G-BWWW. Back in 2016 the papers were full of what this airframe was doing for autonomous flight.... Last year I wrote twice to BAE and asked what further progress was being made and received no reply either time. Anyway it seems its parked up at Cranfield and still registered to BAE.*

*So, I wonder, did the sense and avoid technology BAE had in their Jetstream fail to deliver the goods?*

Sensor Solution specialist HENSOLDT is strengthening its avionics business by re-naming its subsidiary **EUROAVIONICS GmbH**, Pforzheim, and addressing the avionics market as a HENSOLDT brand. HENSOLDT Avionics Group, with approximately 100 employees, designs, produces and markets civil certified avionic equipment that provides interfaces to a wide range of third-party avionics and sensors. Among their products are situational awareness mission management systems as well as enhanced reality computers and autopilots, particularly for Unmanned Aerial Vehicles. The company generates revenues of more than € 20m. Their products are installed in almost every type of civil rotary wing aircraft by various OEMs.





**Bell Textron Inc.**, has announced that the Bell 505 cargo hook has been approved by European Union Aviation Safety Agency (EASA) to carry up to 2,000 pounds (907 kg) giving the aircraft an external gross weight capability of 4,475 pounds (2,030 kg).

In November 2018, Storm Heliworks AB, a helicopter operator based in Sweden tested out the 505-cargo hook while in Canada. The company performed a wide range of specialized operations, such as building power lines, clearing trees from power lines, forest inspections, mosquito control, firefighting and other missions.

One of Bell's North American 505 operators, Rocky Mountain Rotors, utilizes its 505-cargo hook for search and rescue (SAR) and utility missions. It is a premier provider of helicopter services in Montana, Wyoming and Idaho and detailed his experience with the aircraft.

In mid-April the **Superhailer** was launched into an unsuspecting world. Aimed at the emergency services, Superhailer is a high-powered wearable/man portable communication tool that can broadcast crystal clear live spoken word, prerecorded messages and alerting sounds over extreme distances – of up to 250m. We are all aware of Skyshout and its cousins fitted to aircraft, and even the relatively old fashioned but widely used hand held Tannoy, but are equally aware that often these systems do not really work as well as they claim – in the case of the former it is something to do with being just another part of a madly vibrating helicopter.

Clear communication saves lives – but achieving that in emergency situations where there is a cacophony of other noises or large distances to obstruct clarity makes that very difficult.

Well the manufacturers of this latest 'man sized' bit of kit claim they have answered all the problems and it has resulted in a revolutionary loudhailer that employs the latest technology to project the spoken word, pre-recorded messages or attention-grabbing sounds.

Unlike some other loudhailers that can be harmful to people's hearing if used incorrectly, Superhailer is designed to be always safe and never expose individuals to volume levels that may impair hearing. The messages it projects are loud and compelling, but not damaging to hearing – to the user, bystanders or the target individual/s.

With litigation and evidence in mind the Superhailer automatically records video, location and sound data when in use and stores it on an internal removable USB drive that provide evidence of context-of-use.

There is information on-line at [www.superhailer.com](http://www.superhailer.com)



*Ed: I was in two minds as to whether this device was real or an out of date April 1<sup>st</sup> jape. It seems real enough so perhaps it was a marketing error. They claim that Superhailer is a wearable device but to be honest I tend not to wear a large dust/trash bin every day so I may dispute that part of any claim.*

After leading the turbine-powered business aircraft market in 2020, **Pilatus** passed another fleet milestone with the delivery of the 1800<sup>th</sup> example of the versatile single-engine turboprop PC-12. At 82 deliveries, according to the General Aviation Manufacturers Association's 2020 Year-End Aircraft Shipment Report, the Pilatus PC-12 was the most popular model of all turbine-powered business aircraft.



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The versatile PC-12 NGX performs many roles worldwide, including executive transport, commuter, medevac, police and border surveillance, cargo transport, military liaison, and regional airliner. The PC-12 fleet has amassed over 8 million flight hours of operating experience, including hundreds of thousands of hours in some of the world's harshest environments.

**Airbus** has successfully concluded a flight test campaign featuring a new capability for the C295 FITS mission system (COMMOMISS) which enables it to be remotely operated by ground-based crews. The campaign, carried out in April over the south of Spain, covered four flights and involved the use of an Airbus C295 Intelligence Surveillance Recognition (ISR) testbed equipped with a Collins avionics package.

The aircraft performed standard maritime patrol missions with all sensors controlled in near real time by a mission operator based at a ground station at Airbus' Getafe site. Sensor control was successfully handed over to the ground control station, with different surveillance tasks, including Electro-Optical/Infra-Red (EO/IR) pointing control and radar management, performed by the ground crew using the installed Ka band SATCOM.

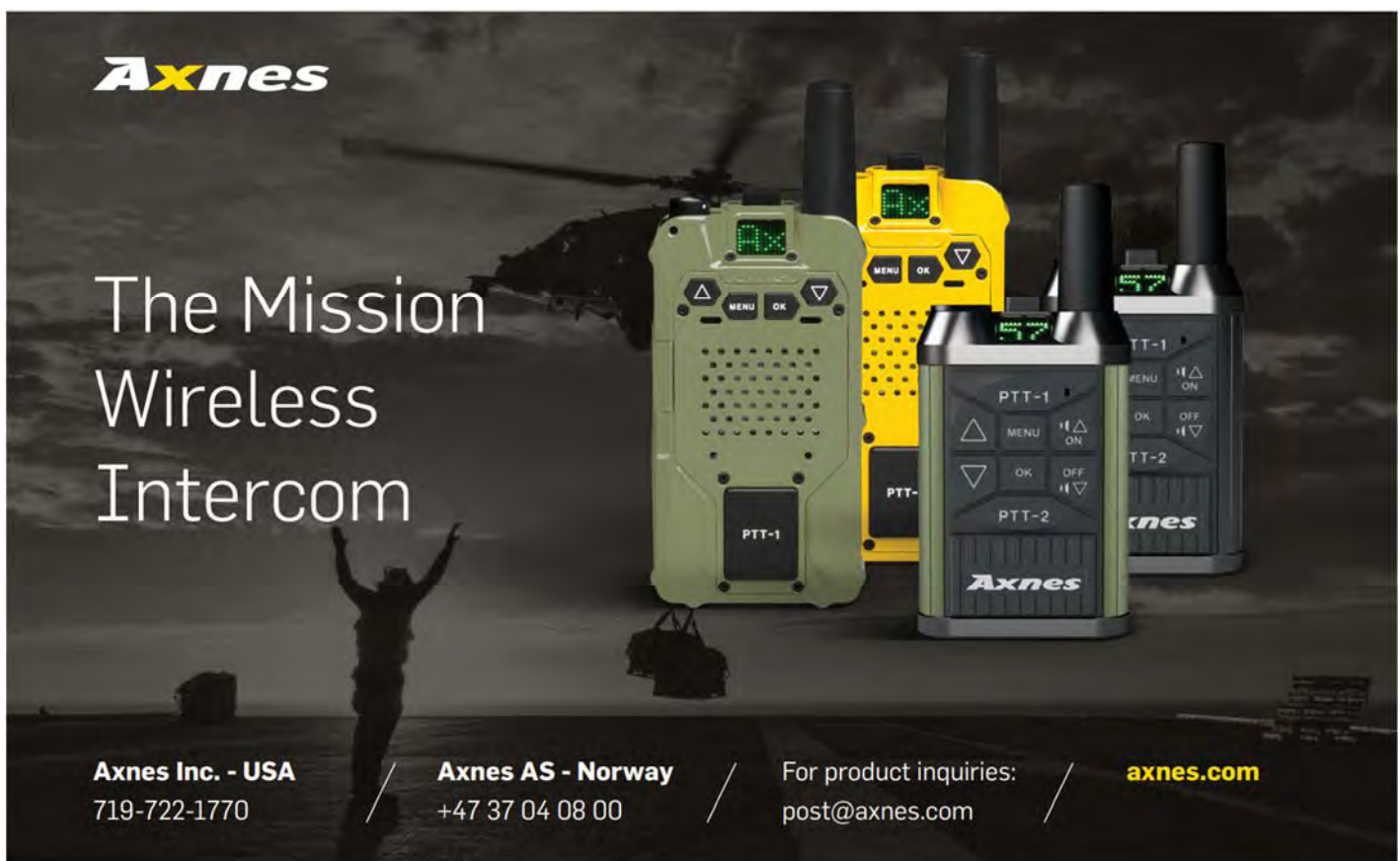
During the tests, the ground operator's situational awareness was complete, sharing the same set of tools and apps available in the onboard Fully Integrated Tactical System (FITS) workstations, transforming the COMMOMISS ground station into an effective additional operator's node.

The hardware required to implement this new capability is available for new customers interested in the C295 ISR, which means that the capacities of the COMMOMISS could be available for any customer from now on, either as a catalogue option or as a growth potential.

A unit of Airbus SE was fined over £28M (\$39M) after pleading guilty to one count of corruption as part of the U.K. prosecutor's probe into work it carried out for the **Saudi Arabian National Guard**.

Last year the Serious Fraud Office charged GPT Special Project Management Ltd. with corruption between 2007 and 2012, which has since been reduced to a period between December 2008 and July 2010. The unit pleaded guilty and accepted both the £20.6M confiscation order and a £7.5M fine at a hearing held at Southwark Crown Court. It was also ordered to pay £2.2M of the SFO's legal costs within ten days. The probe into contracts awarded to GPT for work carried out for the Gulf country was opened in August 2012. GPT is a U.K. company and subsidiary of Airbus that operated in Saudi Arabia and ended operations in April 2020.

At the center of the prosecutor's eight-year probe were allegations the Riyadh-based subsidiary paid bribes to win a 2 billion-pound (\$2.8 billion) contract to provide services and training for the Saudi Arabian National Guard on behalf of the U.K. defence department. The case has been particularly politically sensi-



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tive because of the British government's involvement and was delayed after the Attorney General sought external legal advice on the case.

The SFO's investigation related to contractual arrangements originating prior to GPT's acquisition by Airbus and continuing thereafter.

The case won't impact a separate agreement the European planemaker made with the prosecutor last year to settle bribery allegations. The company set aside 3.6 billion euros (\$4.3 billion) as part of a deferred prosecution agreement following an investigation by authorities in the U.K., U.S. and France.

The charges in that case involved the use of intermediaries in securing jet orders, a practice that Airbus employed as it tried to reach parity with U.S. rival Boeing Co.

**Air Bear Tactical** and Diamond Aircraft - Canada spent the start of May in Virginia providing presentations and demo's in a civilian DA62 to law enforcement agencies. This very clever all composite aircraft can cruise at 192 knots, burn less than 10 gallons of jet fuel an hour at loiter and has a flight duration of 10 plus hours. The upcoming special mission version will be a game changer for law enforcement and border security due to it's incredibly low operating cost and a large useful load for sensors and comms.



DA-62 surveillance © Air Bear/Diamond

**Diamond Aircraft** based in Austria are now offering customers the Avantix FlashHawk, a passive airborne solution aimed at geolocating any terrestrial telecommunication emitter (in the 30 MHz - 3 GHz spectrum) to provide a tactical view of the situation to operators. Developed to face airborne ISR mission challenges, FlashHawk meets border surveillance, anti-terrorism, search and rescue and defence needs with instant and reliable tactical intelligence. FlashHawk can be integrated underneath an Diamond DA-42 or DA-62 MPP propeller plane, providing 360° coverage around the plane in azimuth and elevation up to the horizon, allowing instant 3D geolocation without blind spots.

An average airborne mission time between six and eight hours is very supportive to the overall mission planning, including JetA1 fuel usage, IFR single pilot operation and a civil aircraft certification.

**Russian Helicopters** (part of Rostec State Corporation) will present a modernized Ka-32A11M fire-fighting helicopter at the MAKS-2021 International Aviation and Space Salon, held in Zhukovsky near Moscow in July.

The Ka-32 modernization includes a glass cockpit with an avionics system, more powerful VK-2500PS-02 engines and a new fire extinguishing system. A prototype of Ka-32A11M will be at MAKS and the plan is to start supplying the aircraft next year.

A new water tank holds 4 tons of water and is divided into 4 compartments. The patented digitally controlled discharge system allows the flaps to be opened in pairs or alternately, and to adjust the opening angles, thereby increasing the water discharge time. The system automation allows to accurately take in 4 tons of water in 60 seconds, as well as add up to 400 litres of foam agent. It has also been adapted to use a water cannon. In addition, all SP-32 systems are electrically heated, which allows it to be used in unprecedented winter conditions at temperatures as low as -20 degrees Celsius.

An advertisement for 'Able &amp; Rush' featuring a group of business professionals in suits. The company logo 'A&amp;R able&amp;rush' is on the left. A central list of services includes Transformation Management, Crew Resource Management, Organisational Development, Psychometrics, Talent Management, Coaching, and Facilitation. A quote on the right reads: 'Helping you to realise and release the talent potential that sits within your organisation, developing your people and ensuring that you safely thrive and fly'. The name 'David Howell, Director' and the website 'www.ableandrush.com' are at the bottom.



The **Helisim Simulation Center**, located inside the Airbus Helicopters Inc. facility in Grand Prairie, Texas, has inaugurated a new Thales Reality H full-motion flight simulator, the first of its kind in the region.

Helisim LLC, a subsidiary of Helisim SAS, has already invested \$22M in the new facility. The H145 simulator will offer the possibility for pilots to perform their initial and recurrent H145 training in the Americas, with customers already booked to begin training later this month.

The 18,500 square-foot Helisim Simulation Center was designed to house two simulator bays, with the possibility to expand to hold three simulators in the future as needed. The facility also operates an H125/AS350 full flight simulator and an EC135/EC145 flight training device.

This represents a major international expansion of France-based Helisim, a joint venture of Airbus Helicopters, Thales, and DCI which brings 20 years of experience in simulation training with Airbus helicopters.

Developed by Thales, the Level D H145 full flight simulator is one of the most advanced simulators on the market, thanks to the integration of Airbus Helicopters avionics and software suite, a larger field of view, 4K projection technology, the unique Thales full electric Hexaline motion, and a new intuitive touch screen instructor station.

Equipped with Airbus Helicopters avionics and software suite, this simulator will provide the most true to life experience while allowing the safety of simulation training for a variety of real world situations. The simulator becomes Airbus Helicopters' second H145 full flight simulator, the first being located in Germany.

The Grand Prairie facility is one of eighteen similar operations run by Airbus Helicopters worldwide and trains upwards of 1,500 pilots and maintenance personnel every year in Grand Prairie.

**London Oxford Airport** has embarked on a major development programme that will bring new hangars, upgraded helipads, a new fuel farm and, potentially, a new fire station.

As part of a new strategic plan the airport has commenced construction work on a new development phase, which will, when complete this autumn, be its most significant step forward to date. Central to the work is a 63,000 sq.ft. (6,000m<sup>2</sup>) 140m long hangar with two bays including rear offices, stores and workshops, capable of accommodating up to six business jets. The new hangar, the airport's 15th, is the first facility in a new zone of the airport to the north of the original site. Some years ago there were plans in place to re-site Eurocopter in new facilities in this area of the airport.

The hangar will be used predominantly by established tenants, many of whom reside in some of the older





The extensive works have encroached on the Airbus facility and removed existing landing pads. The new structure dominates the airport. © Oxford

WWII facilities, along with a number of larger business aircraft for which there has been limited capacity at Oxford. The airport will progressively replace 80-year-old hangars with new facilities.

With demand for space consistently outpacing supply within the London region, the airport is committed to invest in infrastructure to accommodate more business and allow established companies, such as Airbus Helicopters, Volare Aviation and Jet Maintenance International (JMI) to expand. The airport is home to a number of aviation support businesses (MRO) that cover maintenance, engineering, modification, design and operational support services.

As part of the development four new pads were built - two off the main apron and two off taxiway Bravo. There are now six exclusively for Airbus use, which has been the case for two months during which they have worked successfully. When visiting, customer aircraft, including those of NPAS receiving maintenance, have been using the four new pads.

Additional infrastructure has included the feeding-in of significantly more power onto the site.

A large area of new aircraft parking apron has been created but also seven new ICAO/EASA/CAA-compliant helipads supporting Airbus Helicopters and the growing number of commercial AOC helicopter businesses at the airport like MyHeli. These complement operations with the co-owned Edmiston London Heliport, London's only CAA-licensed heliport, which supports up to 12,000 movements year and the capital's essential police and air ambulance flights. Meanwhile the works have restricted the number of usable pads available outside the Airbus Helicopters facility although the familiar above ground fuel tanks remain unaffected. NPAS aircraft

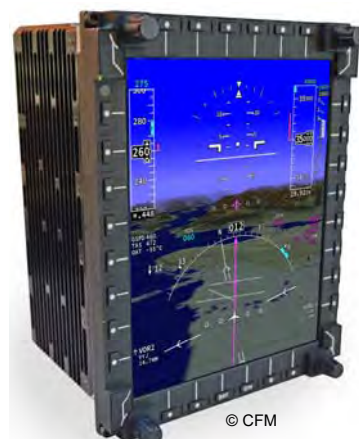
London Oxford Airport will also commence work on a new fire station to be established in a central position on the airport, having already ordered three new Angloco Scania 26 tonne fire tenders.

A new fuel farm will enable a quadrupling of the capacity of the original facility, whilst also providing valuable space for additional future static tankage for Sustainable Aviation Fuel (SAF).

London Oxford Airport is home to Airbus Helicopters UK's headquarters and a steadily growing business aviation sector, supporting around 10,000 passengers a year both private and charter, mainly for business trips. The GA airport is 90 minutes, almost 60 miles, from central London.

**CMC Electronics** has announced that its Smart Multi-Function Display (SMFD) MFD-3068 has received Canadian Technical Standing Order (CAN TSO) authorization by Transport Canada.

The 6 x 8-in MFD-3068 is the latest display from CMC and part of the same family of products as the recently certified multicore PU-3000 avionics computer. The display's unique open architecture platform allows customers to retain their intellectual property by implementing their own applications using CMC's comprehensive Software Development Kit (SDK). A combination of customer developed and CMC developed software including primary flight display, navigation display, synthetic vision system, flight management applications can be hosted on the unit simultaneously. The display can host software applications





developed to various Design Assurance Levels, up to DAL A.

Built to meet the most stringent requirements, the MFD-3068 is an ideal solution for both the retrofit and line-fit markets and is targeted to be installed in fixed or rotary-wing aircraft operating in harsh environmental conditions. The display offers superb optical quality, high graphics performance, true 8-bit colour rendition with optical performance stabilized over its design life-time and its extended operating temperature envelope.

The new SMFD offers high-performance multicore processing capability and an unrivaled set of interfaces. It supports analog, commercial serial interface standards as well as MIL-STD-1553. Additionally, a single SMFD can drive other displays, as well as digital HUDs, leading to an overall avionics solution that requires less space and weight in the aircraft.

Its open architecture platform features next-generation middleware built with non-proprietary industry standards for the partitioning of applications (ARINC-653) and the INTEGRITY-178 tuMP Multi-Core Real-Time Operating Systems (RTOS) from Green Hills Software.

CMC Electronics ([www.cmcelectronics.ca](http://www.cmcelectronics.ca)) has achieved an international reputation for innovation and excellence in the design and manufacture of innovative cockpit systems integration, avionics and display solutions for the military and commercial aviation markets. Based in Montreal, Canada, the company has facilities in Canada and in the USA serving its customers worldwide.

## ACCIDENTS AND INCIDENTS

**27 April 2021 LearJet 60 LV-HXK.** Air ambulance of Emergencias, Buenos Aires, Argentina. The plane was being towed along taxiway "C" to a remote location at the San Fernando International Airport, Argentina, when it was hit by a van belonging to the airport operator. No injuries were reported. Significant damage to the left wing tip where it was struck by the windscreen of the truck. [ASN]

**2 May 2021 Canadair CL-215-6B11 (CL-415) C-GOGH** Fire fighting amphibian of the Province Of Ontario, Ministry Of Natural Resources. fleet number 274, operating on a local test flight, experienced a mechanical failure and a subsequent gear up landing at Sault Ste. Marie Airport (YAM/CYAM), Sault Ste. Marie, Ontario. The aeroplane sustained minor damage and the two pilots were uninjured. [ASN]

**6 May 2021 Beechcraft 200 Super King Air VT-MPQ** Air ambulance operated by Madhya Pradesh State. Aircraft written off at Gwalior Airport, India. A small turboprop aircraft carrying remdesivir vaccine injections meant for critical COVID-19 patients crash-landed at Gwalior airport today, sources have said. The incident happened on a day when another small aircraft - an air ambulance - landed on its belly in Mumbai after its landing gear malfunctioned.

**6 May 2021 Beechcraft C90 King Air VT-JIL** Air ambulance operated by Jet serve Aviation. Aircraft landing at Chhatrapati Shivaji Maharaj International Airport, India, suffered an undercarriage malfunction. Carrying a patient, a doctor, paramedic, and two crew members they were flying from Bagdogra to Mumbai, with a scheduled refuelling halt in Hyderabad. One of the main wheels had separated during takeoff from Nagpur for Hyderabad. The crew decided to divert to Mumbai where a wheels up belly landing was performed on a foam carpet laid on runway 27 at the Mumbai Airport. There were no injuries. The patient in the aircraft was taken to Nanavati Hospital in Mumbai.

**6 May 2021 Eurocopter EC145 D-HDRR.** Air ambulance of DRF Luftrettung. The helicopter "Christoph Weser" was en-route from Hannover Airport (HAJ/EDDV) to Bremen Airport (BRE/EDDW). Germany with three aboard when it hit a bird of prey and made a precautionary landing on a road near Eystrup, Nienburg district, Lower Saxony. No damage or injuries. [ASN]

**9 May 2021 Leonardo AW189 G-MCGO** HM Coastguard's Rescue Helicopter 175 based at Lee-on-Solent went tech after landing on at the helipad of St Mary's Hospital, Newport, Isle of Wight on a patient transfer mission. [Island News]

**10 May 2021 AVIC AC313/Changhe Z-8AWJS (Super Frelon copy) WJ560308** Fire fighting helicopter of the Armed Police Forest Command. Four were killed after a helicopter crashed in Erhai Lake in Dali, Southwest China's Yunnan Province, during a fire fighting water bucket operation. Two crew are still missing. The helicopter was entering the hover with a bucket deployed for refilling when it entered rotations and while losing height it appeared to suffer a MRB strike at the front of the tail boom and a fire started before it entered the water. [Social Media/Global Times]

**12 May 2021 Eurocopter AS 350B3 AStar N183AE.** US Customs and Border Patrol. The aircraft undertaking a training flight experienced an inflight fire. The subsequent forced landing was onto open grass at 1700 block of North Cimarron Road, located just south of Interstate 40, part of the Clarence E Page Mu-



municipal Airport, Oklahoma City, Oklahoma, during a training flight. The main part of the helicopter was consumed by fire and the two pilots onboard received minor injuries.

**19 May 2021 Bell UH-1H Super Huey PNP-356.** Policia Nacional del Peru. Helicopter undertaking a search operation with five crew on board reported that they were going to make an emergency landing. Two days later the wreck was found at Puno, San Gaban, Peru with all five crew dead. They have been reported as the pilot, PNP Major Jaime Pomar Pérez, the co-pilot PNP Lieutenant Cristian Acosta Vásquez, PNP Third Chief Warrant Officer Harrison Ccasani Aliendres (flight mechanic), PNP Warrant Officer Brigadier Édgar Núñez Espinoza Cusipaucar and PNP First Officer Juan Oré Chávez.

**25 May 2021 Sikorsky UH-60A Blackhawk N9FH.** Fire fighting helicopter of Brainerd Helicopters Inc. Four persons died after a helicopter crashed into a trees and marshland off U.S. Highway 441 in Lake County, near an the International Airport at Leesburg, about 45 miles northwest of Orlando, Florida. The helicopter based at the airport is reported to have suffered a mechanical failure that led to the tail separating. The helicopter went into a spin and crashed. The tail was found separated from the main body of the aircraft near the airport runway area. It is reported to have been on a training exercise. [Leesburg FD]

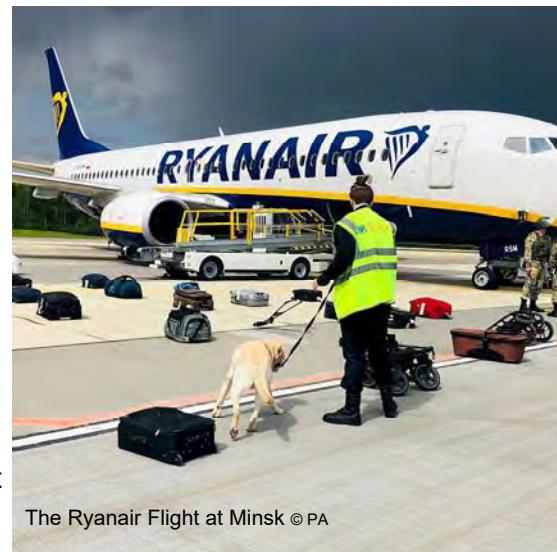
## SAFETY

If it is difficult to know where to draw the line for PAN content sometimes and this is one of those times.

Airline pilots are understandably up in arms about the forced landing of Ryanair Flight 4978 in Minsk, Belarus, on 23 May. Pilots, and many other people, are concerned that the intervention of the Belarussian Air Force was enacted for political reasons, in contravention of the Chicago Convention, and amounts to an act of unlawful interference, bearing all the hallmarks of state-sponsored hijacking. State sponsored or not, that is as much a crime as any. In this instance the gravity of the outcome borders that of the state sponsored murder of journalist Jamal Khashoggi in Turkey by the Saudi government. It seems that another journalist, Belarussian Roman Protasevich, faces an uncertain future.

Calls for an independent enquiry into this occurrence and appropriate immediate response by safety and security authorities is one thing but we know from the past that it is difficult to maintain sanctions. This unprecedented act of unlawful interference with an international flight will potentially damage all the assumptions about safe response to bomb threats on flights and interceptions. The damage this incident has done to the trust between air-crews and air navigation providers is immeasurable, handling all events becomes much riskier to manage. A line has been crossed.

The actions by the government of Belarus place us all in additional danger, if only because the captains of civil aircraft will now seek to question the directions given by air traffic control.



The Ryanair Flight at Minsk © PA



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**PAVCon** **VIRTUAL** **EMERGENCY**  
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In association with the Airborne Public Safety Association Inc., PAVCon Europe is to hold a FREE ACCESS education event on Monday June 7 at 1000 CET (0900 UK).

The 6-hour programme includes contributions from The Netherlands, Belgium, United Kingdom and USA.

Pre-registration is essential but free.

The event is open and free to all via the Airborne Public Safety Association Home Page  
[www.publicsafetyaviation.org](http://www.publicsafetyaviation.org) or [www.pavconeurope.eu](http://www.pavconeurope.eu)



# UNMANNED

Unmanned aerial systems (UAS) may appear to present benefits to society but they are getting increasingly complex and their wide use by a variety of industries and public sector services, including the emergency services, is becoming increasingly difficult to monitor.

Security risks are emerging, some operators (including elements of the emergency services) appear unaware of all of the regulations around flying. The disarray surrounding the hostile actions at Gatwick Airport in December 2018 demonstrated both the significant disruption that they can cause, and at the same time highlight the woeful lack of knowledge among the law enforcers. Some of the 2018 “attacks” turned out to be no more than the local air ambulance coming into land.

In this imprecise atmosphere it appears that even the law enforcers have discovered they have been unknowingly using illegal frequencies on their drones. The Home Office is investigating.

At the height of the Pandemic they were transporting PPE and test kits from the mainland, across the Solent to the Isle of Wight as an ‘experiment.’ With COVID-19 is now apparently in recession in Britain new trials have moved to the West Country.

The latest trial using the same model of drones is that Royal Mail is to send PPE, Covid-19 test kits and other items of mail from the UK mainland to the Scilly Isles off the western tip of Cornwall. The company said it would be the first parcel carrier in the country to deliver mail to a UK island using an autonomous flight, which would fly out of sight of any operator during the 70-mile journey.

A smaller drone, which is able to take off and land vertically, will fly parcels between the islands off the coast of Cornwall for delivery to their final recipients.

The Government-funded project developed in partnership with DronePrep, Skyports, Consortiq Limited, University of Southampton, Excalibur Healthcare Services and Windracers Limited, will initially have a particular focus on helping to fight the pandemic by delivering crucial PPE and testing kits to the islands’ most vulnerable and remote communities.

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The Windracers ULTRA (Uncrewed Large Transport Aircraft) platform is twin-engine and able to accommodate mail of most shapes and sizes, enabling more general mail to be transported to the islands as part of the trial.

The project unites two pioneering companies that have previously acted in response to the UK COVID-19 challenge with a similar service from the mainland to the Isle of Wight.

Parcels will be flown to the islands' airport in St. Mary's, by a UK-built twin-engine Windracers UAV, which can carry up to 100kg worth of mail at a time – equivalent to a typical delivery round. A smaller VTO drone, operated by Skyports, will then be used to transport items to a number of delivery points throughout the islands.

The trial and potential introduction of low emission vehicles, such as UAVs, help the Company inform its long-term environmental strategy, and to meet its goals of delivering a cleaner future.

Part of the reason given for this development is to get around the weather. The Solent can be pretty benign but the Western Approaches have real weather. Communications delays due to fog are just the start. Royal Mail are hopeful that postal delays will be significantly reduced.

The unmanned drones are able to fly in poor weather conditions which Royal Mail said could make them well suited to serve remote island communities.

In December the Royal Mail was the first nationwide carrier to deliver a parcel by drone to a remote lighthouse on the Isle of Mull in Scotland.

The Windracers ULTRA was developed at the University of Southampton funded by Windracers. This twin-engine design will be capable of flying large volume payloads of up to 100kg for 1,000km and operating from a range of landing sites. It will ultimately be fully automated without the need for a pilot on the ground. The UAV has primarily been designed to distribute humanitarian aid.

Distributed Avionics (DA), part of the Windracers group, specialises in high reliability flight control systems for UAVs. The DA autopilot uses patent-pending Masterless™ technology to bring unparalleled levels of safety to UAV platforms. The DA cloud-based mission management software offers users connectivity to their UAV platforms from anywhere in the world. [www.windracers.org](http://www.windracers.org)

In April 2020, the Windracers ULTRA aircraft, developed as part of one of the Phase 1 CASCADE case studies, flew NHS supplies from the UK mainland to the Isle of Wight as part of the FTZ funded Covid-19 emergency. This was a pioneering flight in many respects. It is the heaviest civilian unmanned aircraft to

have flown in Europe. It is one of the longest and most complex BVLOS operations to have taken place, operating in live manned airspace with Search And Rescue (SAR) helicopter operations, military, commercial and private aircraft flights all taking place concurrently. The aircraft was flown using the 'masterless' flight control system which has been patented and commercialised via a spin-out company called Distributed Avionics.

*Ed: The promoters of new technology, in this case unmanned craft, will always be focussed and enthusiastic about the technology they are bringing to market. Remember airships and even hovercraft. They were the answer to everything but both actually fall into a small niche area of aviation.*

*The same will undoubtedly take place with unmanned for many years yet. They still have not overcome autonomy and sense and avoid to a degree that people will see the technology as safe.*

*In the case of the Scilly Isles venture it is currently pointless and uneconomic, but it does stretch the technology. Flying a drone, with a limited payload, between Lands End and the Isles of Scilly is a nonsense when the airline, Skybus flies a regular air service with the BN Islander and the Twin Otter, a 20 minute flight. In the freight role even the smaller Islander can carry around three times the amount the freight as that carried by the Windracer drone. If the drone can fly safely so can the airline.*

*Between March and November the ship, the Scillonian III runs a regular, daily passenger and freight service. <https://www.islesofscilly-travel.co.uk/skybus/> The Isle of Wight experiment faced the same challenges of far cheaper alternatives. These are simply PR exercises.*

**DroneShield Ltd** has partnered with Zenith Aero Tech to expand its counterdrone capabilities through tethered aerial vehicles.

Zenith is a US-based developer of heavy-lift tethered aerial vehicles [TAV]. As part of the integration partnership, Zenith deploys DroneShield's Drone Sentry C2 command-and-control ecosystem into its own family of TAVs, along with a miniaturised radar, to counter drone or drone swarm attacks. Partnership between the two companies enables better, longer range drone detection, combined with countermeasures. By putting a detection capability on a TAV, which typically flies at 400 feet, you get better range than if you were to have these systems on a pole or ground vehicle. This can provide more accurate alerts.

In contrast to standard drones, the three Zenith TAVs can stay aloft for hours—and even days—due to Zenith's Ground Power-Tether Management System, which converts 120- or 240-volt AC power from a generator (or another source) into high-voltage DC, powering both platform and payload. The platforms themselves can carry 5-15kg of payload.

Where lawful Zenith will offer DroneShield's soft kill measures, to be used by personnel on the ground.

"Because we detect inbound drones from further away, we give personnel on the ground more time to jam them,

## PEOPLE

Two officers from Leicestershire Police are among 12 recipients in the Civilian Gallantry List 2021 for their acts of heroism.

The **Queen's Gallantry Medal** is awarded to Sergeant Michael Hooper and PC Stephen Quartermain for their attempted rescue of five people following the crash of a Leonardo AW169 helicopter at the Leicester City Football Club stadium in 2018. Both officers put themselves at huge risk trying to save those onboard, sustaining serious burns and smoke inhalation as the helicopter became engulfed by flames. Tragically, they were unable to save the five people inside – the football club's owner and chairman Vichai Srivaddhanaprabha; two of his staff, the pilot and another crew member.

The Queen's Gallantry Medal (QGM) is a United Kingdom decoration awarded for exemplary acts of bravery by civilians, and by members of the Armed Forces "not in the face of the enemy", where the services were not so outstanding as to merit the George Cross or George Medal.

The Queen's Gallantry Medal was instituted on 20 June 1974 to replace two earlier gallantry medals.



**MD Helicopters, Inc.** (MDHI) announced the addition of new members to its leadership team, paving the way for further increased product expansion, growth, and delivery on customer expectations.

To date Alan Carr, was the sole Director of MDHI's board of directors.

Mario Coracides — Vice President, Supply Chain, oversees the supply chain strategy with an eye toward improving productivity, reliability, and supplier quality while gaining cost efficiencies and better preparing the company to succeed after the pandemic.

Marc Brodeur — Vice President, Commercial and Military Sales, responsible for the leadership of the MDHI military and commercial sales and marketing team, developing new business opportunities and cre-



ating customized solutions aligned to customer requirements.

Barry Sullivan — Chief Financial Officer. Sullivan manages the company's finance, accounting, tax, risk management, collection, legal and contracts and information technology departments. Duncan Koerbel – Vice President, Program Management, a newly created executive-level position, overseeing day-to-day activities of MDHI's program management department, building on existing processes and structure while driving program execution and accountability.

Cheryl Bazzell as Vice President, Global Human Resources;

Nick Nenadovic as Vice President, Aftermarket and Customer Support;

Chris Jaran as Chief Operation Officer;

Ramon Moro as Vice President, Engineering;

James Rodriguez as Vice President, Operations;

Jeff Adamcik as Deputy General Counsel and Secretary.

No news yet on the fate of the former **PCC of Yorkshire**, the political clout of NPAS. The winner of the Mayor of WY was soap actress Tracy Brabin who famously helped her cause by distributing loads of chocolate brownies! She is of the same political leaning as the former PCC.

The Mayor is supported by a Police and Crime Panel (PCP), made up of 12 representatives from the five councils in West Yorkshire and two independent members. This group met in late April before the election and are not due to meet again until June so it might be expected that little will emerge in the meantime as the new organisation finds its feet.

## MOVE ALONG THERE

In the dusty bowels of the Police Aviation Research archives there lie many police reports. Recent material is thankfully in digital form but your editor has been brushing the dust off the older material – a mix of VHS tapes and paper - and digitising it.

The paper reports in particular have proved to be enlightening. Some have provided “first hand” evidence for recent detrimental comment by several sources on current police activities. Being able to read these reports from different sources has shown the lack of interaction between authors, they simply did not talk to each other let alone have a common viewpoint on anything and everything police aviation related. It is clear that the last thing the authors had considered doing was asking the opinions of those people historically most likely to have knowledge of the subject before arriving at their own opinion. The reports are written, shared and filed away in libraries but rarely consulted. There may have been forums for talking to others but they were rigid and did not include the opportunity for relaxed Networking. The USA remains streets ahead in having casual multi-day forums organised by such as the Airborne Law Enforcement Association, now APSA. But even there some operators shun the advice.

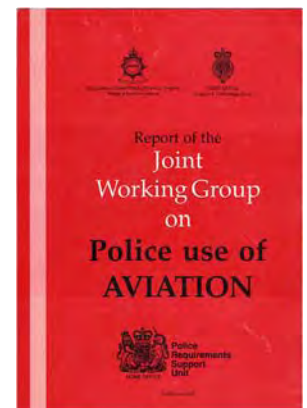
In Britain almost everything likely to provide an opportunity to network was organised to take place in a day. The aircraft vendors financed and organised meetings of operators but they were mainly for senior ranks and were strictly type specific. There was an MD Operators forum and one for the Eurocopter [Airbus] product and none of them was open to outside scrutiny and they diligently ensured that there was no interaction between the operators of the different types. This might be blamed on the manufacturer but it was vigorously supported by police acquiescence. They could have insisted that there was a cross fertilisation of ideas but it simply never happened.

The only realistic chance of open interaction between the whole industry might be at a police aviation conference but they were poorly supported and usually inhabited by the wrong police people – senior people with little real understanding of the subject matter or the ‘usual suspects’ who attend meeting after meeting to the exclusion of all others.

I vividly recall a comment by a senior Metropolitan Police officer attending the May 1997 Shephard Police Aviation Conference in a Heathrow Airport hotel. He stated that the content was the same as he had seen time and again at meetings and was therefore boring. Apparently he had never considered sending someone of junior rank, and less experience, in his place. Nothing has changed. At that same event two senior police aviators from Uganda sat in the back row ‘taking in’ the English language presentations. Neither of them understood a word English, their first language was French.

That is not to say there had not been attempts at bringing European aviation together under an American ALEA like umbrella.

In the late 1990s the police in Belgium set up an organisation called PACE – Police Aviation Conference Europe. It had the hallmarks of a European ALEA but was not widely accepted. In the UK the Association of Chief Police Officers [ACPO] Air Support Sub-Committee debated a PACE proposal, put forward by Captain Herman Baeyens of the Belgian Rijkswacht and others, at their meeting of March 11, 1998. They rejected it and instead recommended that colleagues should consider membership of the British Helicop-



ter Advisory Board [BHAB]. That simply resulted in a single police representative attending BHAB meetings and occasionally feeding back information to ACPO.

In 2003 the Italian police pilots created an aviation group called Up Polizia and ran their first National Congress in Belgirate Italy in late March. They invited an international audience and Hermann Baeyens was there representing PACE. Although it was affiliated to the Italian police union, it failed to prosper.

The PACE idea was dogged by an inability to bring onboard senior officers and to set up a sustainable financial model for operating training and networking sessions. Most police operations were prohibited from financing such an enterprise on an international scale or of working with industry to find that funding. Senior officers were not enthusiastic about making it work and the organisers of PACE were not inclined to let ALEA take on the operation.

PACE was far more successful than the Italian model in engendering international enthusiasm but effectively saw the availability of an independent PAVCon as easier to work with simply because it was able to create the necessary distance between the financiers and the police attendees.

I believe the situation has slightly improved with the PAVCon series of police aviation conferences but, where possible, they are focussed on Europe and on taking the event to operators. The British remain very much a lost cause and I seriously doubt that the enterprise has longevity assured.

The best of us get it wrong. Here in the UK there are regular stumbles because no-one thought or because no-one was listened too because they were too junior in the organisation.

Several Far Eastern countries were set up a prime examples of getting the COVID crisis right and Singapore was one of them. Well the island state took their eye off the ball and has had to lock down the whole of its population again. Restaurants across the state were closed down again for at least a few weeks.

Singapore's award-winning Changi Airport has again tightened its COVID-19 restrictions.

All the airport staff were safely segregated away from the passengers but, and no-one appears to have noticed, when it came to meal times they were allowed to leave the safety of their segregated areas and purchase food in the main terminal concourse – mixing with the passengers. The airport [and the island at large] paid the inevitable price in an unexplained spike in infections. The airport, which has consistently been named as one of the best in the world, suffered a large outbreak of infections and last month they identified why the spike was happening.

On 24 May the country the airport authorities said they would again strictly segregate workers based on exposure risk and only those who have been vaccinated will work in high-risk zones.

Under new plans, terminals will be divided into three zones. There will be no mingling between those in Zone 1 – the highest risk area – and those in other zones during shifts.

## Blast from the past

It is now 54 years since the Bolkow BO105 light twin helicopter flew. It was the first light twin in the world and brought to the helicopter industry the extensive use of plastics in the airframe and the main rotor blades. It remains in front line service with airborne emergency services across the globe.

Developed by Bolkow of Ottobrunn in West Germany it first flew in February 1967 and was introduced to the worlds press in May the same year. At the time *Flight International* stated that the total development costs of the BO105 were expected to be DM40M, roughly £3.5M and that each helicopter would sell at DM0.5M, £45,450. Today, 54 years later, you will need to spend ten times that to get one in working order. The 105 features a revolutionary hingeless rotor system, a pioneering innovation in helicopters when it was introduced into service in 1970. Production of the Bo 105 began at the then-recently merged Messerschmitt-Bolkow-Blohm (MBB).

The main production facilities for the 105 were located in Germany and Canada; additional manufacturing lines were set up in Spain, Indonesia, and the Philippines. Eurocopter produced the type until 2001. Twenty years ago.

The test program was broken down into stages as the BO105 comprised a new airframe, new rotor system, and a new engine; the type was initially equipped with a main rotor from the Westland Scout and a





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pair of Allison 250 turboshaft engines instead of the radically new untested production examples. The new engine was to be the MAN Turbo 6022 but while the new rotor head prevailed the Allison remained the engine of choice for the production examples. In October 1970, the BO105 was certified in Germany and deliveries started to ADAC Air Rescue and the State Police in Bavaria. US certification came in 1972. In 1976, the Bo 105CB, equipped with more powerful Allison 250-C20B engines, was introduced. The Bo 105C was further developed to become the Bo 105CBS, the primary change being a fuselage stretch of 10 inches to meet American demand for EMS operations. By the end of production, 1,406 rotorcraft had been manufactured and delivered to operators in 55 nations worldwide.



Still in police service—Queensland, Australia © QPS

## CANADA

Claude Lafrenière, a former police officer and now aviation photographer based in the Montreal area was formerly a career police officer with the Sûreté du Québec. He retired less than 5 years ago after 33 years of service. What follows is his appreciation of the new to the unit H145 helicopter

Claude Lafrenière tracked down the H145 to take a series of images of the H145 Claude Lafrenière



The Sûreté du Québec (Quebec Provincial Police) modernizes its helicopter fleet with the addition of a state-of-the-art Airbus H145 helicopter by Claude La Frenière.

On May 7, 2021, the Sûreté du Québec's new Airbus H145 helicopter, registration C-GSQP, answering the air traffic control by call sign "Quebec 145", arrived at its operational base at Saint-Hubert Airport (CYHU) with its new official colors to enter into operational service in the following weeks.

It joined the two other helicopters in the Sûreté du Québec fleet; a Bell 206B Jet Ranger purchased in 1980 and a Bell 412 purchased in 2002.

Painted in the new black and white Sûreté du Québec vehicle colours, the design team has succeeded in harmoniously integrating the old

Sûreté du Québec heritage colors of khaki green and yellow into a very modern and eye pleasing visual design.

On August 20, 2020, the Government of Quebec had purchased the used Airbus H145 helicopter through the Government Air Service (SAG), which manages all aircraft owned by the Government of Quebec.

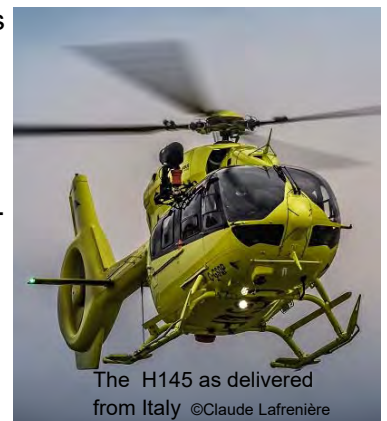
This Airbus H145 was manufactured in 2016 that had a very low number of hours of use at the time of its purchase, (believed to be less than 850 hours). The H145 replaces the Bell 206 LT that the Sûreté du Québec had been using since 1994; it had been destroyed in a severe accident, fortunately without fatality, in January 2020, during a search and rescue operation for missing snowmobilers in the Saguenay region of Quebec.

Some people expressed surprise when they learned the price of \$CAN13,138,000 paid for a used helicopter. However, the representative of the Government Air Service of Quebec Mrs. Émilie Lord maintained in an interview to the Journal de Québec on September 16, 2020 that it is a very good price for a helicopter of this quality.

She said that the specialists of the Government Air Service estimated the costs to acquire a brand new equivalent helicopter with all the search and rescue equipment which this Airbus H145 is specifically equipped with to approximately \$22M.

A destroyed helicopter had to be replaced and the Sûreté du Québec could not suffer from further delays to re-equip its fleet. The decision makers opted for a used helicopter because it was already equipped to meet the needs of the police force for search and rescue and was available quickly.

Another factor was the extended timeframe being quoted for the delivery of a brand new SAR equipped helicopter from the manufacturer. Including the drawing up of the quotation to the delivery of the aircraft,



The H145 as delivered from Italy ©Claude Lafrenière

could lead to delivery times easily exceeding two years.

### THE NEW MISSION PROFILE

The new helicopter is much larger and more powerful than the aircraft it replaced. Its larger payload capacity and greater range will qualify it for a greater number of tasks within the mission of the Sûreté du Québec.

The territory served by the Sûreté du Québec covers more than 1,600,000 km<sup>2</sup> with more than one million lakes and streams and thousands of rivers.

The Sûreté du Québec conducts daily night and day helicopter operations and its activities are as follows:

- Aerial search and rescue operations
- Search for missing persons in the forest
- Transport of officers and specialists such as intervention groups (SWAT)
- Transportation of equipment
- Evacuation operations (e.g. during floods)
- Aerial surveillance during events and demonstrations
- Tactical operations.

A typical Sûreté du Québec helicopter team includes a government air service pilot and pilot-in-command, a mission manager (SQ) and various experts: explosives technicians, divers, tactical intervention group, dog handlers and rescuers, etc.

At the Sûreté du Québec, there are four mission leaders and their role is to plan the helicopter mission, ensure the safe transportation of passengers and cargo, participate in search operations for missing persons and operate the search and surveillance system as well as the winch system during rescue operations.

### ADVANCED SPECIFICATION

This multi-role helicopter has technical characteristics that put it in a class of its own and it is only the 2<sup>nd</sup> Airbus H145 in service with a police force in Canada after the RCMP in Vancouver.

Equipped with the latest refinements and equipment in terms of technology, this aircraft met the general needs of the Sûreté du Québec, and could be quickly adapted for its specific mission.

The Helionix® suite includes a Helicopter Terrain Awareness and Warning System (H-TAWS), a Synthetic Vision System (SVS) with Digital Moving Map (D-MAP), and more. The H145 is IFR certified single / dual pilot with satellite navigation (SBAS / LPV WAAS / EGNOS) and ADS-B output.





## AIRSHIP 100 *most flying devices have been used for police use and the airship is among them. Strangely the problems with them are the same now as they ever were.*

Readers who have delved into the historical resources of the Police Aviation Research websites will already appreciate that this modern industry has an extensive history dating back to 1914. The first 90 years of the history of police aviation is written and available for a free download.

Within these pages though time only to highlight what happened 100 years ago in the skies above England. In June 1921 embryonic police aviation already existed in parts of the USA and attempts by the German and Austrian governments to hang onto something resembling police aviation in the wake of the Great War had been squashed on the grounds that the proposals were far too like an air force for a defeated nation to have.

In June 1920 the Metropolitan Police had sent up a police officer in a military aircraft to report on traffic congestion attending the Derby Day Race meeting at Epsom in Surrey.

One hundred years ago, in June 1921, the military and government of the day pressed the Police Commissioner to trial a giant airship over that year's race meeting.

When launched in 1919, the Armstrong Whitworth built airship R33, and its sister craft R34, were the largest airships extant. Based on German Zeppelin designs, both of these 643-foot-long airships were the result of military orders placed during the Great War. In January 1921, R33 was transferred from the military to take up a civil registration G-FAAG. The earlier military designation, R33, was destined to remain its common name throughout. The giant airships were a great embarrassment to the government of the day. Designed as bombers and too late for use in the war, they were deemed too large and expensive to retain for military service in a very run-down peace-time environment that naively assumed there would be no further conflicts after the "war to end all wars". The hope was that these and other surplus military craft would find favour with a civil operator.

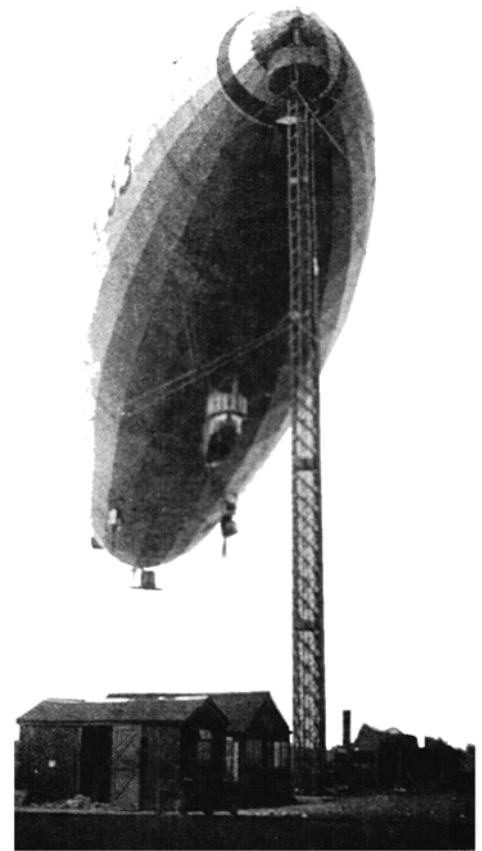
It fell to the DACA at Scotland Yard, Sir Percy Laurie, to arrange the details for the first fully documented police aircraft operation in Britain, an event that was wholly subsidised as a publicity exercise for the airship disposal plans. Under the headline "P.C. R33", the "Daily Mirror" subsequently reported that "..... for the first time in history Derby Traffic was controlled from the .....". Was it?

The great hydrogen filled airship was seen in the skies over Epsom on two of the race meeting days. Although relatively punctual and problem free on its first visit, on May 31, on the day that actually counted, Derby Day itself, the craft arrived very late due to strong headwinds encountered on its way from the government airship station at Cardington, Bedfordshire.

The R33 performed its police task successfully in the face of problems caused by less than perfect weather. The sheer bulk of the 1,950,000 cubic foot envelope proved extremely difficult to handle at low altitude.

As was to be found in the decades to follow, airships of all types were not to present themselves as ideal "instant response" vehicles for efficient police service in anything but calm weather. In even the most favourable of wind conditions, they were to consistently prove to be sluggish in responding to both power output and helm.

The first use of the R33 was primarily an observation sortie. Accommodation was severely restricted. The airship was fitted with a number of underslung cars, most of which contained large propulsion engines and propellers. An exception was the forward control car which featured the conning position, a radio room and an engine. The restricted size of the main control car was such that there was precious little room for police interlopers. Observed traffic flow information was passed by Major Fox on board the airship to the ground by wireless morse telegraph. The compact radio room was situated at the rear of the control room and forward of the engine room.





TRAFFIC JAM! One of the aerial images produced for the Aerofilms Ltd archive at the June 1921 Derby Day meeting. The 1919-2006 collection was purchased by Historic England in 2007. ©Aerofilms

In the main grandstand on the racecourse a "police office" was set up in a cubby hole to house the Marconi equipment to receive the information from the airship and send it out to some of the 1,800 police officers assigned to alleviate traffic congestion and control traffic. The equipment was as advanced as any of the period, although it was used in a static form in 1921, mobility for police uses was on its way.

The air over the racecourse was particularly busy that day. In addition to the airship, police had obtained the services of the RAF to provide air-to-ground photographs of the traffic conditions for later analysis and the de Havilland Aircraft Company used aircraft for traffic spotting and photography, photographs which eventually found their way into the extensive files of Aerofilms Ltd.

The newly flown airship R36, G-FAAF, performed further duties for the police over the Ascot Races on June 14, 1921. Again, this sortie was intended by the government as a means of creating interest in off-loading the airships into private hands. In comparison with the R33, the R36 was a far better proposition for the police duty in that it featured better accommodation. Modified to provide greater passenger space, the rear of the control car included a roomy section able to take some two dozen passengers in addition to the crew of 37, it was hoped that many more influential people would be in a position to push for the sale of the craft.

The sortie over the Ascot Races involved representatives of the three police forces adjoining the course, Surrey, Berkshire and London. The R36 operated from the airship station at Pulham on the Suffolk coast. The day started well, but operating from this remote site, the subsequent operation was ultimately to be very taxing on crew and passengers alike.

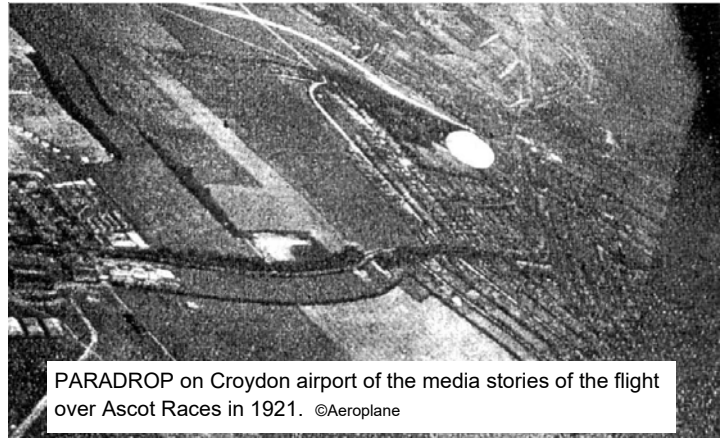
The airship set off from Suffolk at 0730hrs and made good progress to arrive in the patrol area three hours later at a leisurely 50mph. Traffic patrolling was neither frantic nor riveting for the passengers.

Shortly after lunch at midday, the 672-foot-long craft set off south east for an appointment over the airport at Croydon, Surrey. The largely positive reports of many of the national news reporters, each facing a daily deadline, were bundled together and para-dropped onto the airport. Retrieved they were then taken to



the newsrooms of the national papers in Fleet Street for inclusion in the following days newspaper reports.

After 6 hours of precise time keeping by the flight crew, most of the authors of those early news reports had been lulled into an assumption that the flight would continue to meet its published 11-hour flight schedule and looked forward to returning to Suffolk at 1830hrs. The inexorable will of the weather ensured that all the fine words parachuted down upon Croydon at noon had turned into untruths by tea-time.



PARADROP on Croydon airport of the media stories of the flight over Ascot Races in 1921. ©Aeroplane

The craft undertook a somewhat meandering return trip to the vicinity of Ascot and took up traffic observation duties as the crowds started to leave for home at 1600hrs. All this airborne time was beginning to tax the passengers. The situation was exacerbated by a general [and quite understandable] ban on tobacco smoking.

As the R36 headed east at the end of its working day, it found itself dogged by an adverse wind and unable to meet the pre-planned schedule. It was not until 2230hrs, four hours late, that the airship finally docked at the Pulham mast and the weary passengers could finally make their way home.

In spite of the fact that the majority of the news reports were incorrect, and of some assistance to the government cause, the truth got out and further harmed the few slender chances of disposing of the giant craft into civil ownership.

One important group that might assumed to have a major interest in proceedings remained quiet. The police - for whom the operation was ostensibly laid on - never made public its feelings on the advisability of using airships for traffic control work. They were hampered in expressing opinions by the spectre of a very strict Discipline Code.

The government's heavy subsidy of the traffic control flights failed to stimulate any commercial interest, in spite of their relative success from the police viewpoint. The weather dogging two of the series, high costs and poor handling experienced aboard all three craft, ensured that the airships were not to see further use in the role. That November both R33 and R34 were placed in storage, joining R36 which had suffered damage in an accident shortly after the Ascot flight. The latter never re-appeared in the skies again.

## FUTURE EVENTS

### PAVCon EUROPE 2021

In association with the Airborne Public Safety Association Inc., PAVCon Europe is to hold a virtual event aimed at education in early June.

The 6-hour programme includes contributions from The Netherlands, Belgium, United Kingdom and USA. It is sponsored by Bell Textron and Priority 1 Air Rescue.

Media back up is of course provided by APSA and PAN and there is continued support by AirMed & Rescue Magazine.

PAVCon 2021 Virtual has been posted to the APSA website and registration is open. While there is a button on the APSA home page that takes you to the PAVCon 2021 landing page. From the landing page, there are links to the agenda and the registration page. Registration is open and free to all, but they will need to provide some basic information to register if they are not an APSA member.

The programme comprises presentations on IR Airborne Tactics presented by Harald Brink [Netherlands] Luc Stremersch [Belgium]; UAV Tactics and Operations presented by Haiko Kroeze a regular attendee



In association with the Airborne Public Safety Association Inc., PAVCon Europe is to hold a FREE ACCESS education event on Monday June 7 at 1000 CET (0900 UK).

The 6-hour programme includes contributions from The Netherlands, Belgium, United Kingdom and USA.

Pre-registration is essential but free.

The event is open and free to all via the Airborne Public Safety Association Home Page [www.publicsafetyaviation.org](http://www.publicsafetyaviation.org) or [www.pavconeurope.eu](http://www.pavconeurope.eu)

and presenter at the standard PAVCon events from the Netherlands military; Psychometrics and Aviation Safety by David Howell [UK]; Safety on your terms presented by the APSA aviation safety guru Bryan Smith. The final presentation is from Spain with Joseba Mendizabal running us through Rescue Missions with the Wrong Type of Helicopter. Regular readers will recall that shortly Joseba should get the right kind of helicopter delivered for service. Regular attendees at past PAVCon Europe events will know that this slot in the non-virtual event is a humorous seat filler with a sting in the tail. Worth a look.

To kick off PAVCon Europe 2021, APSA is hosting a pre-event social via Zoom on Sunday, June 6. You supply your food and drinks and APSA will supply the Zoom platform. All cameras and microphones will be on, so you can be seen and heard! It will be just like at any PAVCon host hotel bar except no bar, no hotel and no tab for Bryn to pick up at the end of the night! That has to be a first, and just in case it's an illusion I have restocked the fridge! Nothing virtual in that fridge! An invitation with the Zoom link will be sent to all PAVCon Europe 2021 registrants on Saturday, June 5. Looking forward to sharing a beer and fellowship. But you must register to join us!



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