Police Aviation News

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EDITORIAL

What a difference a month makes. Where now the heart searching over the latest COVID figures, who notices whether a couple of elderly people succumb to the natural disease or whether the pontifications of the Duke and Duchess of Sussex are worth a jot when people are being killed daily in the Ukraine and gas prices have gone through the roof.

Now the talk is of financial and technical support to the people of the Ukraine and how the USA has shot itself in the foot again by denying those it wants to help the best tools to undertake a conflict on behalf of the rest of Europe and the world. There are said to be red faces in Washington because the ITAR controls will not allow the USA to supply Ukraine with the best drones – meanwhile to Turkish are grabbing the headlines with their supposedly inferior craft. It was always a truth that you if are not in the battle you cannot claim a shred of credit.

Bryn Elliott

LAW ENFORCEMENT

BANGLADESH

POLICE AVIATION WING: Speaking at the army aviation school last month, Inspector General of Police (IGP) Benazir Ahmed has predicted that the recently launched Bangladesh Police Air Wing will be able to play a vital role in communication, search and rescue.

The Army Aviation School has been playing a special role in training the pilots of the new police aviation wing professional relations and cooperation with the Bangladesh Police. The field of such cooperation would be further enhanced and consolidated in the future.

At present, ten trainees from different forces are participating in Aviation Basic Course at Army Aviation School. Four of them are from Bangladesh Police. All four police trainees have already successfully completed their solo flight. They will join the police aviation wing as pilots.

The purchase of two modern helicopters for the aviation wing from Russia is currently being processed. [Financial Express]

Ed: Although neighbour India appears to be dead set against working against the common aim of sanctioning all things Russian it may be that the expectation of the new Mil Mi-17 helicopters arriving in the near future may not be realised.

BELGIUM

FEDERAL POLICE: The winner of the ROTOR magazine photo contest Wrench Turners category was Tom Houquest of Berg, Vlaams-Brabant, Belgium. His winning photograph is of mechanics at the Belgian Federal Police Air Support Unit performing pitot static testing on one of the units MD902 helicopters at Melsbroek.

COVER IMAGE: On March 1 the Mossos d'Esquadra. Police of Catalonia took delivery of their role equipped seventeen years old EC135P2 helicopter EC-JVS c/n 0432 at Airborne Technologies (ABT) in Wiener Neustadt Austria. This was mentioned last month but the images took a while to catch up, [ABT]

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GERMANY

BADEN-WURTTEMBURG: The first five blade upgrade law enforcement H145 was completed for the Baden-Wurttemburg operation early last month. The unit has six H145 helicopter delivered in 2015 and 2016. [Thomas Junker]

INDIA

BIHAR: Airborne law enforcement is a rare commodity in India, but occasionally an operation comes to notice. The State of Bihar in the east of the country has been a 'dry' state since 2016 and in keeping it free of liquor it has started using aircraft. Recently they were using several drones, but the latest tool is a helicopter to track those involved in the illicit liquor trade.

The operation uses a Robinson R66 VT-MAL in the tasking to locate illegal manufacturing units and smuggling of liquor. Other reports mention up to four unidentified helicopters.

The helicopter was able to locate several illegal breweries in riverine areas from Buxar (in the western part of the State) to Katihar (in the eastern part) and about 5,000 litres of liquor were seized with its help in two days. In the first two weeks of February, 554 raids were conducted with the help of 17 drones in districts like Patna, Vaishali, Saran, Bhojpur, Champaran, Begusarai, Khagaria, Munger, Bhagalpur, Kishanganj and Supaul, leading to 131 cases being registered and 162,592 litres of liquid seized and destroyed. [Media]

Ed: Yet again the lack of understanding of aviation by the media shines through in the reports. The R66 is described as a five-seater helicopter able to fly continuously for six to seven hours. The R66 featured in several media images is owned by Maharaja Aviation Pvt Ltd in Delhi.

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Wiener Neustadt©ABT

SPAIN

POLICE: On March 1 the Mossos d'Esquadra. Police of Catalonia took delivery of their role equipped seventeen years old EC135P2 helicopter EC-JVS c/n 0432 at Airborne Technologies (ABT) in Wiener Neustadt Austria.

Until last year the helicopter was operating as an air ambulance. The upgraded role equipped was handed back to the Spanish customer Eliance for operation by the Catalonian Police as reported here last month. The helicopter has the ABT Airborne LINX System consisting of a Wescam MX-15, a Trakka Search Light, and a Churchill Augmented Reality System all operated from the ABT workstation and Mission Management Unit.

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Meanwhile Pratt & Whitney Canada announced at the HAI Heli-Expo that its PW206B3 helicopter engine has been selected by the Government of Spain to power the 36 Airbus H135 helicopters recently ordered. The new order is part of a multi-agency acquisition to equip the Spanish Air force, Spanish Navy, Guardia Civil and National Police with the latest generation light-twin helicopter. www.prattwhitney.com.

UNITED KINGDOM

NPAS: In early March NPAS welcomed two fellow air support officers from the Royal Canadian Mounted Police (RCMP) to a national training programme for Tactical Flight Officers (TFOs) being run at the Doncaster fixed wing base in Yorkshire.

Sergeants Ken Capina and Jonathan Chevalier are working on behalf of the Ottawa Air Service to modernise and standardise the training they provide to their officers in Canada. As part of the research, the two RCMP officers requested a visit and were welcome to the base.

The National Police Air Service is an Approved Training Organisation (ATO), which is the highest level of approval a training provider can receive. The Flight School covers the training of officers for both rotary and fixed wing aircraft.

The 'Mounties' joined five NPAS officers, who are destined to work at NPAS Lippitts Hill, Birmingham and Hawarden, on week one of a four-week Tactical Flight Officer Foundation course.

Their first week is split between an organisational induction and aviation topics, including Weather, Crew resource management, Operations manual, Fitness to fly, Flying Clothing & PPE, Aviation charts and mapping, Target acquisition and identification and Basic navigation. [NPAS]

Ed: In a later social media posting from Doncaster base, the remaining weeks of the training period were mentioned. The NPAS National Training Course for new Tactical Flight Officers (TFO) was using EC135 G-POLA as the training aircraft "on loan" from the Newcastle base.
The reason for the choice was that POLA's was recently out of maintenance & made more sense to use that helicopter than change to use G-TVHB, a fleet spare, already operating in its place at Newcastle.
One of the more minor flaws of the P68R fixed wing is that the interior is too small to use as a TFO training platform. A helicopter has been brought in to undertake the task from the start, just a detail that someone failed to notice when they were writing the specification.

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LONDON: In the London Assembly late last month, one of the Members, Caroline Russell finally received an answer to concerns she raised months ago about aircraft noise with the Mayor Sadiq Khan. A constituent was concerned about the noise levels and costs associated with the use of police helicopters in London. Has the Mayor or the Metropolitan Police Service (MPS) had discussions with NPAS to use drones in place of helicopters where appropriate, and what issues may be preventing this already?

The mayor answered that the police have invested heavily in drones and is working with NPAS, the CAA and other forces nationally to establish a roadmap for achieving Beyond Visual Line of Sight (BVLOS) drone use. Unfortunately, despite a national police focus on developing this as a solution, the technology is not yet at a stage where BVLOS can be used safely.

Until BVLOS can be used safely, there are two options that remain: tethered drones (with a wire going between the ground and the drone); and untethered drones. The former are immobile and therefore have a fixed field of vision, and depend upon considerable human resource to despatch, raise and manage. The latter can only fly for around 25 minutes currently and cannot be deployed without a team around it.

In addition, both are more vulnerable to severe bad weather. The helicopter and CAA regulations also stipulate that a wide sterile area must be established before they are deployed, to minimise the risk to uninvolved persons such as local residents, pedestrians or traffic. All of this means that using drones for most spontaneous incidents is not feasible currently, but work is underway to enhance the use of drones in support of pre-planned operations. The MPS also hopes that in the future the use of drones will reduce the use of police helicopters at public order events.
Ed: It is noteworthy that the question was originally asked on November 18 last year and the answer took over four months to deliver. This subject has been covered regularly in PAN during that period and might even have offered a more comprehensive reply quicker. Another pertinent statement is that these cheap and cheerful little drones from China "… cannot be deployed without a team *around it." It is the need for staffing and transport to scene that makes the whole concept financially suspect but the little blighters get all the good PR!!*

POLICE SCOTLAND: Implemented at the COP26 Climate Conference late last year, Police Scotland claims to have become the first police force in the UK to overcome the long-standing issue of video feeds from drones and air support only being visible to a single operator or ground-based unit.

The technology was developed by multinational Excelerate Technology and implemented specifically for the COP26 conference.

The newly deployed ExStream UAV Streamer was customised to improve situational awareness across air to ground operations, solving the long-term issue of the feed only being visible to a single operator or ground-based unit. The UAV Streamer connects to existing UAVs and other video devices and delivers the video into Excelerate's ExStream video streaming service even when only low bandwidths are available from the field. From there, users can access the remote streams via dedicated iOS and Android applications, Windows and Mac clients in addition to a secure web portal.

Inspector Nicholas Whyte, of Police Scotland's Air Support Unit, said: "Police Scotland remain focused on providing officers with innovative solutions that help us to keep people safe. The Excelerate technology allows the Air Support Unit to downlink live footage from the helicopter or drone to any control room in

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Scotland, to police commanders on the ground and to officers' police-issue mobile devices who are directly involved with the incident. This gives those involved a real time, aerial view of events, enabling them to make informed decisions about an operation or search as well as maintaining officer and public safety."

Currently, Police Scotland has five Ex-Stream UAV Streamers in operation providing greater flexibility and resilience around Scotland – with the aim of rolling out further units as part of the Force's ambition of being a first adopter of leading-edge technology. The system in place utilises Excelerate's secure dual-resilient data centres, which are cyber and national infrastructure-approved for greater security, where it can be immediately accessed by relevant personnel on any team member's authorised and connected device. [Excelerate]

UNITED STATES

NATIONAL: APSCON 2022 and APSCON *Unmanned,* formerly the Public Safety Drone EXPO, are scheduled to co-locate in Reno, Nevada this year, the week of July 25-30. These events will take place simultaneously at the Peppermill Resort Spa Casino and the Reno-Sparks Convention Center.

At the same event APSA will be recognising a range of APSA members for their contributions to public safety aviation and members children for their academic excellence. The APSA awards recognise those individuals whose personal efforts or actions have perpetuated the professionalism and advancement of public safety aviation. The awards that APSA presents annually are:

Robert L. Cormier Award
Captain 'Gus' Crawford Memorial Aircrew of the Year Award
Technical Specialist Award
Safety Award
Fixed-Wing Operator Award
Tactical Flight Officer (TFO) Award
Unmanned Aerial Systems (UAS) Award

This year APSA will provide eighteen (18) scholarships totalling $44,000 to award to members' children. Those being awarded will be honoured at events during the APSA event in July. The deadline for receipt of award nominations and scholarship applications is May 1, 2022.

In addition to those awards Teledyne FLIR will again sponsor the Teledyne FLIR Vision Awards, recognising US state and local law enforcement agencies for their contributions to public safety through the use of tactical, airborne thermal imagery. Each year law enforcement agencies submit their video footage shot during rescues, pursuits, apprehensions and surveillance operations. Entries highlight the tactical use of EO/IR technology and the importance of the airborne imaging system in the successful completion of the mission. The deadline for video submissions is May 13, 2022, multiple entries from each department and airborne team are allowed. Include a brief outline of the incident and list the name, rank and position of each crewmember via the online submission form. All types of infrared and daylight videos will be considered for this award.
Ed: Running a similar competition in Europe has been put forward several times in the past. On each occasion it simply failed to get underway. Something to do with a lack of enthusiasm, no official support and red tape. The nearest anyone got to it in the UK were the highly successful "police, camera, action" series on television, it ended a decade ago [running 1994-2010]. In that case the inertia was provided by the commercial needs of outsiders - the media companies.

Footage from each winning video will be shown as part of the Teledyne FLIR Vision Awards ceremony, as well as highlights from all submitting agencies. Awards will be presented at APSCON 2022 on July 28 in Reno, Nevada.

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ARIZONA: StandardAero has begun phase 2 for the Pinal County Arizona Sheriff Department UH-1H helicopter upgrades as part of a three-phase modification process to enhance the performance of this special purpose helicopter and is expected to be completed within 150 to 180 days.

StandardAero defines this three-phase modification as its UH-1H^3 upgrade also known as “Hot, High & Heavy” upgrade. The upgrade is offered to qualified operators who fly in the harshest conditions in the hottest and highest-flying environments with significant increased lifting capabilities to successfully complete their critical missions.

The phase 2 effort includes installing airframe modifications to the lift beam, main beams, tailboom attach area and engine mount and main transmission mount areas. It also includes upgrading main transmission and drive shaft assemblies. These airframe modifications are designed for increasing horsepower and torque required for the improved lift capability of 5,000 lbs. external cargo capacity and a 10,500 lbs. external gross weight limitation.

The airframe modifications are being completed at StandardAero’s helicopter airframe facility located in Langley, British Columbia, Canada, where the company maintains the certified fixtures, specialised tooling, training, data and experience to complete this modification.

StandardAero completed Phase 1 in July 2021 providing upgrade modifications to the UH-1H Tailboom and Airframe. Phase 1 benefits included improved hover-hold tasks, yaw control, high DA capability, reduced torque, reduced tail rotor power requirements and reduced fuel consumption. Phase 1 also included an upgraded Engine/Transmission cooling system.

Phase 3 is being considered for this same UH-1H helicopter in 2023. The Phase 3 modification will install 212 blades MRH for an improvement to provide 10,500 lbs. internal/11,200 lbs. external gross weight.
www.standardaero.com.

CALIFORNIA: The seemingly inexorable march of the 1974 Aerospatiale AS350 Ecureuil/Squirrel/AStar helicopter across US law enforcement continues. In recent months PAN has carried several stories – such as Baltimore MD - where the type is being newly acquired to replace the existing model, Riverside in Hemet, CA, often by other manufacturers and at the recent Heli-Expo Airbus were ready to churn out

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yet more stories of successful first sales, some of which were repeats of earlier announcements. Truly remarkable for a type that was regularly dismissed as too flimsy to undertake the law enforcement task when faced with the workhorse machines of the day—the Bell 206, MD500 and BO105—when it was first making its mark on the sector some thirty years ago. Now of course it has morphed into the Airbus Helicopters H125, but it remains the Ecureuil at heart.

The Kern County Sheriff's Office in California will acquire two new Airbus H125s as part of a plan to modernize its ageing fleet of helicopters. In the past the fleet has relied upon the MD500 and DoD surplus OH-58 Kiowa helicopters.

A first-time Airbus customer, Kern County selected the H125 platform following a thorough vetting process and several flight demonstrations throughout 2020 and 2021. The new helicopters will protect and serve the county's population of roughly 900,000, which includes the city of Bakersfield.

Kern County spans roughly 8,100 square miles with a diverse terrain that includes valleys, mountains and desert, elevations of 300 ft. to 8,000 ft. Its temperatures in summer can exceed 105 degrees, requiring a helicopter than can deftly navigate hot and high conditions. In addition, the sheriff's department sought a platform with impressive endurance, payload capability and the most advanced safety features on the market.

Compared with the AS350 that was dismissed as not up to the task all those years ago the modern evolution of the type is seen as a rugged multi-mission workhorse, offering powerful performance, enhanced maneuverability and reduced pilot workload, all in one cost-effective platform. It is now the leading airborne law enforcement helicopter for many state and local agencies across the USA and indeed in many parts of the world. The H125 account for nearly half of all intermediate single-engine helicopters delivered for that mission in North American over the last decade.

Standard features on the H125 that were absent in the early models include dual hydraulics, dual channel engine FADEC, a crash resistant fuel system, and advanced glass-panel cockpit displays – none of which features existed when the type was first presented for police service.

FLORIDA: Robinson Helicopter Company received two more R66 Police helicopter orders from Florida's Polk County Sheriff's Office (PCSO) less than a year after the department took delivery of its first R66 Police helicopter.


Polk County ©Robinson

Centrally located between Orlando and Tampa, PSCO flies, on average, 1,100 hours each year providing air support for every law enforcement agency in its 2,000 square mile county (pop. 750,000) as well as surrounding counties. "We are adding a second and third R66 because of our confidence in the helicopter's ability and functionality. It's a great aircraft that has reduced our operating costs by nearly fifty percent," said Sheriff Grady Judd.

Both R66s will be equipped with auxiliary fuel tanks and impact resistant windshields, NVG compatible lighting in the cockpit with a full complement of modern avionics including a Garmin G500H display, AeroComputers moving map system, Genesys HeliSAS Autopilot, Technisonic tactical radio, and a Wescam MX-10 camera system.

With a speed of up to 130 kts (241 km) per hour and a useful load of 786 lb (357 kg), the four-seat Robinson R66 Police combines power, performance, and payload with mission-specific equipment. Both aircraft are scheduled for delivery later this year.

Further north in Florida the Jacksonville County Sheriff's Office has now fully worked up on two re-

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cently delivered Bell 407GXi helicopters (N92JP/54934 and N103JP/54946) and are operating them from Jacksonville Executive at Craig Airport.

The new helicopters have in FLIR 380 cameras and a Trakka searchlight, and the pair cost of $11.8M. They join an existing Bell 407 in the Sheriff's Office hangar, home to its aviation unit almost since it was formed in 1970.

The air unit began 52 years ago with some fixed-wing aircraft that were used to transport or pick up suspects in other jurisdictions as well as aerial surveys of crime scenes. The department added classic Bell 47 as its first helicopters and acquired a mixed Bell and MD fleet that included DoD airframes before moving on to acquire the first Bell 407 more than 20 years ago. In January 2022, the last of the Bell 206s (N312JP and N317JP) were put up for auction

NEBRASKA: CNC Technologies has deployed an airborne law enforcement mission suite for the Nebraska State Patrol's (NSP) new Bell 505 Jet Ranger X helicopter N373NE c/n 65364. Completed in partnership with Force Aviation of Dallas, Texas, the state-of-the-art mission suite provides the NSP with a comprehensive patrol, surveillance and communications solution that is fully interoperable with the agency's existing aircraft and technology infrastructure. The project builds upon CNC's standing as a leading provider of airborne law enforcement solutions for the Bell 505 and completes the order announced late last year.

CNC previously provided the tactical airborne mission suite for the Fort Worth Police Department Bell 505, and CNC was recently contracted to provide microwave downlink solutions for the Omaha Police Department Bell 505. The company also has broad expertise developing, deploying and supporting airborne law enforcement solutions for the Bell 407 and Bell 429. For the new mission suite, CNC developed a custom solution matched to NSP's specific needs, incorporating an L3/Wescam MX10 imager, Shotover/Churchill Systems moving map, Airborne Displays monitor, Trakka TLX searchlight and Troll Systems microwave downlink system. Air crews will be able to utilize the solution to stream uninterrupted HD video and data from the aircraft to commanders and officers on the ground, enhancing situational awareness, intelligence gathering and public safety efforts.

Delivery of the aircraft was at Dallas Executive Airport following this year's HAI Heli-Expo in Dallas. CNC will provide ongoing training and 24/7 support for the new mission suite. The project builds upon CNC's growth over the past year with a broad range of law enforcement and public safety agencies including the Massachusetts State Police, Swedish National Police, Jamaica Defence Forces and the Texas Department of Public Safety. "We are honoured to have been selected by the Nebraska State Patrol to launch the airborne mission suite for the agency's new Bell 505," said Ron Magocsi, founding partner and chief technology officer at CNC Technologies. "We look forward to working together on an ongoing basis to support their law enforcement efforts."

ALE improvement is normally pretty slow in the State of Nebraska but in February Bell delivered another Bell Model 505 to the police in Omaha Nebraska. That airframe is N240PD

©Bell and CNC

Metro-Nashville 500©MNP

TENNESSEE: The Metro Nashville Air Unit has been operating a mix of 1970s Vietnam era Bell OH58s and slightly newer MD500s for decades now. They may look smart and well cared for, but they have a common link in being very old and difficult to maintain. Things are due to change shortly with the order of two Airbus Helicopters H125 to renew the fleet.

TEXAS: MD Helicopters (MDHI) has entered an exclusive five-year maintenance agreement with one of their long-term customers, Houston Police Department. They will perform drive train component maintenance for the department's eight MD 500E helicopters.

Houston PD's Air Support Unit provides a variety of law enforcement, public support, and safety operations in its aircraft. These include patrol flights, support for high-speed pursuits, call-for-service response, perimeter control support, homeland security site checks, security flights for the ship channel and Port of Houston, live video-downlink for major fire scenes, covert aerial surveillance, dignitary protection, photo evidence gathering, post-storm damage assessment, and SWAT officer insertion and extraction.

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AIR AMBULANCE

FINLAND

FINHEMS: As from February Finn HEMS has been operating its own HEMS service having terminated the service provided by Babcock.

To enable the efficient operation of the service an additional helicopter will be acquired. It will supplement its EC135 helicopter fleet in use at its southern bases to ensure uninterrupted medical helicopter service expansion next autumn. The new base serving Ostrobothnia will open in Seinajoki from the end of 2022. The helicopter will be acquired used by Finn HEMS. In the future, four southern bases in Vantaa, Turku, Tampere and Seinajoki will be operated by a total of five EC135 helicopters. Spare equipment is needed, among other things, for maintenance and in the event of possible breakdowns. Helicopters and, in part, crews are used flexibly at various bases. The flight crew and medical personnel carried in the helicopter must be trained in each type of helicopter in use. The tender documents are available in the Hilma public procurement notification channel.

Tenders were due in on 31.3.2022. The procurement will be carried out as an open procedure and the procurement decision will be made next spring. Finn HEMS originally launched a leasing tender for the helicopters needed for the new bases last spring. However, the acquisition was suspended because the

establishment of a base in Southeast Finland in Kouvola was delayed and the acquisition of helicopters could not be carried out as such.

NEW ZEALAND

CHRISTCHURCH: The Nelson Marlborough Rescue Helicopter has started to employ its own flight medics following a meeting with St John Nelson-Marlborough Area operations manager Anne-Maree Harris and CGH Aviation the operator of the aircraft.

They had mutually agreed that St John Ambulance Service would not be extending its current contracts. From March 28, the Nelson Marlborough Rescue Helicopter would be employing their own flight medics.

GCH Aviation Nelson base manager Ryan O'Rourke said it would not alter any of the frontline services they jointly provided over 25 years.

GCH Aviation is an umbrella brand representing their parent company Garden City Helicopters, based in Christchurch, New Zealand and a large number of associated aviation operations extending throughout New Zealand and into the South Pacific.

These operations include Garden City Helicopters Christchurch, Garden City Helicopters Nelson and Garden City Helicopters Greymouth, Wellington Helicopters, Pacific Island Air Fiji and Vanuatu Helicopters. The Group also represents emergency air rescue and air ambulance operations: Westpac Rescue Helicopter, NZCC Rescue Helicopter, Nelson Marlborough Rescue Helicopter and the New Zealand Flying Doctor Service plus GCH Aviation Jet Centre and GCH UAV drone division. GCH Aviation represents over three decades of aviation experience in helicopter and fixed-wing operations.

St John Ambulance, the suppliers of most ambulance services in New Zealand had been looking at discontinuing their aviation contract since last year, following a nationwide review. The role of flight medic had become increasingly specialised, and the aviation aspect made it "quite different" from other St John roles in critical care.

A number of air ambulance medical staff have moved from St John to new employment with GCH Aviation. From the end of the month there would be eight medics working directly for Nelson Marlborough Rescue Helicopter. Four would be full-time critical care paramedics, and four would work as paramedic crew people.

GCH Aviation would now be providing its own medical insight and would have several doctors onboard to provide authority to practice for flight medics, which would allow them to use drugs to treat patients.

St John Ambulance will continue to be contracted jointly by the Ministry of Health and ACC to dispatch air ambulance services via the national air desk. [Stuff]

SWITZERLAND

REGA: The Swiss Air-Rescue Service Rega has ordered nine five-bladed Airbus H145s to replace its current four-bladed versions. Rega's new H145s will come equipped with a state-of-the-art navigation system that will enhance the mission capabilities and the safety of operations.

The new integrated navigation system will use new capabilities of the Flight Management System GTN750 Xi by Garmin. It will integrate and control a multi-sensor system that provides highly accurate and reliable navigation capacities. Even in the event of GPS signal loss, the helicopter will navigate safely thanks to Thales' inertial navigation system. This solution will further boost the navigation performance in low IFR conditions and allows the helicopter to be certified as navigation procedure RNP-AR 0.1, which is the most accurate navigation procedure in the helicopter environment. The configuration also includes a new hoist by Vincorion that is being certified on the five-bladed H145.

Rega operates 13 HEMS stations in Switzerland. In 2021, the helicopter crews carried out 14,330 missions, including transporting 471 COVID patients. Rega's current fleet includes seven H145s and one

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H125 used for pilot training and examples of the specially developed Leonardo/AgustaWestland 109 Da Vinci helicopter.

The new version of Airbus' best-selling H145 light twin-engine helicopter adds a new, innovative five-bladed rotor to the multi-mission aircraft, increasing the useful load of the helicopter by 150 kg. The simplicity of the new bearingless main rotor design also eases maintenance operations, further improving the benchmark serviceability and reliability of the H145, while improving ride comfort for both passengers and crew. The new H145 introduces on-board connectivity to customers and operators through the integration of the next step of the wireless Airborne Communication System (wACS), allowing seamless and secure transmission of data generated by the helicopter. In total, there have been more than 1,500 BK117/H145 family built.

UGANDA

SAR/AMBULANCE: BAR Aviation is to acquire a Bell 412EPi from the manufacturers to support 24/7 medical evacuation missions and the new development of oil and gas projects in Uganda.

BAR Aviation is a leading aviation operator in Uganda known for its high quality and professional air transport service in Uganda and the region. Among its many services, BAR Aviation provides air medical evacuation services to support communities and connect them to life-saving medical support.

In January 2021, BAR Aviation took delivery of the first Bell 505 in Uganda and the first fully equipped emergency medical service Bell 505 in Africa. The aircraft carries out medical evacuation missions in the region.

UNITED KINGDOM

DEVON: Each of the charity air ambulance operations in the United Kingdom has a strategy to move their operation outside daylight only. Each is different in its aims, aspirations and timeline. Some have sought early achievement of a true 24/7 aircraft operation; others seek a slower pace that extends hours into the twilight and perhaps relies upon response cars rather than helicopters. Devon Air Ambulance decided to operate into equipped pre-surveyed community landing sites set up in agreements made with local authorities'

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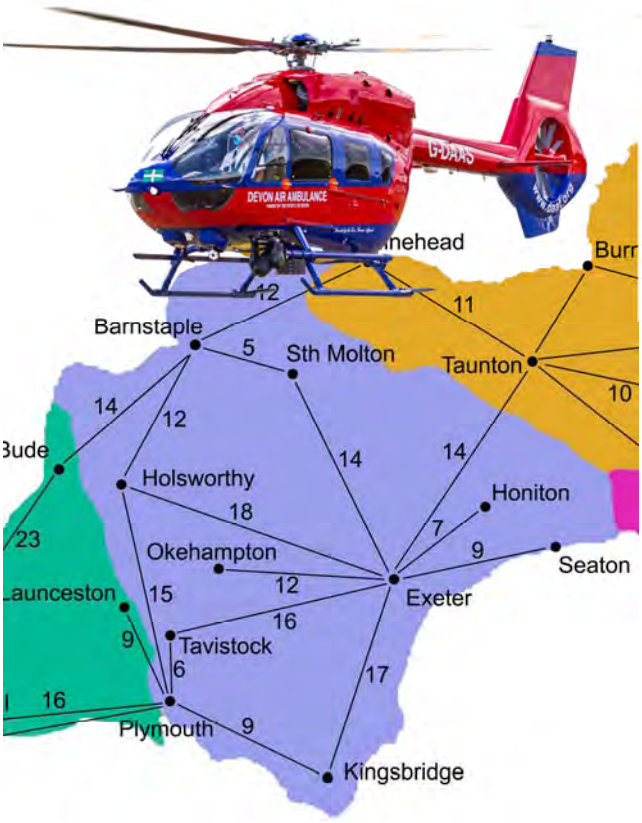
In the latest example of these a partnership project between Devon Air Ambulance and Torbay Council on the south coast of the county has established a new 'community landing site' at Steps Cross Park in Watcombe, Torquay.

The site at Steps Cross Park is now operational following the installation of floodlighting which is remotely activated using mobile phone technology prior to Devon Air Ambulance arriving by helicopter at night. Once the incident has been dealt with, the lighting is deactivated using the same 'dial up' method and this unique approach means no one needs to be on hand during the process. By using these surveyed floodlit sites, Devon Air Ambulance's clinical teams can reach patients more quickly and safely than if they had to operate into a 'dark field'.

The community landing site at Steps Cross Park is one of six such sites being developed through the project which also includes sites at Cricket field Road Recreation Ground, Quinta Playing Fields, Torquay Recreation Ground, White Rock Playing Field in Paignton and Galmpton Football Club. These sites will be added to the three already in operation at Brixham Rugby Club, Paignton Rugby Club and Foxhole Community Centre (in Paignton) creating a network of nine such sites in Torbay.



Devon Air Ambulance now operates until 2am every day (19 hours/day) and the charity's vision are to extend operations to become a 24/7 service for the people of Devon. Through its work with communities across Devon there are now 185 operational night landing sites enabling this emergency service to be delivered by air during the 'hours of darkness'. www.daat.org

Ed: In additional information Nigel Hare of the DAAT stated that Devon currently has 188 operational Community Landing Sites across Devon. Each one is equipped with fully remote activated/deactivated lighting.

In addition to the live sites, they have another 52 sites identified and in development. Over 20 of these are already surveyed and in the final stage of development.

They are currently looking at around 240 sites in the current phase. All of the district and unitary authorities in Devon (8 district, 2 unitary) and the two additional planning authorities, Dartmoor National Park Authority and Exmoor National Park Authority, have been involved in the development of sites in one way or another. Mainly through the planning process, but for some sites they have been at the forefront in establishing the site within their communities.

Since the commencement of the night HEMS service, with just a handful of Community Landing Sites, through to where they are now, DAAT have landed at a Community Landing Site and treated just over 300 patients.

MANCHESTER: Delayed by COVID, Her Royal Highness The Princess Royal officially unveiled the helipad at Oxford Road Campus (ORC). She also visited maternity services at Saint Mary's Hospital, both part of Manchester University NHS Foundation Trust (MFT), in her role as Patron of the Royal College of Midwives (RCM). The helipad, the first of its kind in the Northwest, enables critically ill patients to be airlifted straight to the Trust's hospitals in city centre and has been used by the Air Ambulance over 70 times since opening in May 2021. The helipad allows patients to be seen within minutes by trauma specialists which can be vital to help save lives and improve outcomes during time critical situations. As well as unveiling the helipad, The Princess Royal also visited the Antenatal Clinic and Delivery Suite at Saint Mary's Hospital, which won the Royal College of Midwives ice of the Year Award in 2021.

The helipad development was supported by a fundraising campaign called 'Time Saves Lives' that saw organisations and individuals come together to raise the required funding for the helipad in just 12 months. This included a £1.36M donation from the County Air Ambulance HELP (Helicopter Emergency Landing Pads) Appeal, which funds helipads across the country.

WILTSHIRE: Wiltshire Air Ambulance has decided to continue with its existing Bell 429 helicopter until at least 2025. The decision follows a review by the charity's board and leadership team, which formed part of its three-year strategy launched last August.

Will fly on for at least three more years©PAR

The charity has used its Bell 429 G-WLTS since becoming a standalone operation in 2015. This is the only HEMS operation using the Bell 429 in the United Kingdom, a fact that has been difficult at times as support has been affected by the lack of support and the original agent going out of business.

Wiltshire Air Ambulance director of income generation and communications Barbara Gray explained: "As part of our three-year strategy, we said we would hold a review into our helicopter.
"That has now been completed and we've decided that given the unknown economic impact of the global pandemic, it is not the right time to make a change.
"In 2025 the helicopter will be ten years old and that feels like the right milestone to review the situation again."

There are also succession plans being drawn up as the charity's chairman is due to step down in 2023, and its chief executive retiring a year later. www.wiltshireairambulance.co.uk.

UNITED STATES

MINNESOTA: North Memorial Health is partnering with Airbus for the first time to welcome two new H135 helicopters to its Air Care operation in late 2022.

Air Care operates 24/7 out of seven bases and covers territory in Minnesota, Wisconsin, Iowa, and North and South Dakota. Air Care is part of the North Memorial Health system, which started as a single hospital in 1954 and has grown into a network of 26 specialty centers with 350+ care providers and more than 6,000 team members.

NEW YORK: Pratt & Whitney Canada are to supply Mercy Flight Central, a critical care helicopter operator serving the Finger Lakes, Central and Southern Adirondack Regions of New York State, with engines to renew its fleet with the purchase of four new Leonardo AW119Kx helicopters powered by the PT6B-37A engine.

With the fleet exceeding 2.8 million hours, the 1,000-shaft horsepower class engine series has been produced in seven models and currently powers a wide range of missions including humanitarian, firefighting, law enforcement, security and defence, VIP transport, and others. Roughly 1,500 PT6B series engines have been manufactured to-date, almost half of which are still flying.

The entire Pratt & Whitney Canada engine fleet has flown more than 960 million hours. These attributes have helped the AW119Kx make successful inroads into the single-engine light-helicopter HEMS market.

WISCONSIN: Flight For Life is upgrading its fleet of critical care helicopters with the addition of two new Airbus EC145e aircraft – the Metro Aviation exclusive version. The new helicopters will be replacing aircraft at their bases in Waukesha, WI, and Burlington, WI, and introducing a new paint scheme for the first time in fourteen years.

The new EC145e is equipped with Metro's standard medical interior and Genesys AeroSystems' instrumental flight rules (IFR) HeliSAS Autopilot and Stability Augmentation, providing safety and workload reduction for both single and dual pilot operations. The aircraft also has onboard the Outer link Global Solutions IRIS combined voice, video, and flight data recorder. The video function and data monitoring are helpful for pilot training. The flight following, push-to-talk radio, and live alerts and warnings allow the operations control centre to verify conditions in real-time.

The IFR platform incorporates the latest HeliSAS/EFIS autopilot and stability augmentation technology, providing safety and workload reduction for single and dual pilot operations. The system is a safety upgrade that significantly reduces the pilot's workload, making it easier to adjust radios, set destinations, and more. The new medical helicopter also includes the Genesys AeroSystems IDU-450 EFIS. The IDU (Integrated Display Units) and EFIS (Electronic Flight Instrument System) configure the aircraft's display screens in various ways to show flight instruments, moving maps, flight planner, traffic and terrain, weather radar, engine displays, and more. [Metro]

FIRE

INTERNATIONAL: With much of the world imposing strict sanctions on all things Russian, the availability of some airborne fire suppression helicopters will be hit. Countries including Canada, Spain and South Korea place some reliance on variants of the Kamov Ka-32. The EASA certification has now been withdrawn from the type for purely political reasons.

South Korea is probably the most affected by the withdrawal of capability and is likely to have to lease or purchase alternative helicopters depending on the length of the sanctions on Russia.

With the oil and gas markets being depressed for larger helicopters the Milestone Aviation Group Limited, a major leasing company based in Ballsbridge, Dublin, Ireland face finding new outlets for the helicopters on their books. Milestone are the largest owner of the S-92A worldwide and they have partnered with Australian fire-fighting equipment designer, Helitak Firefighting Equipment Pty Ltd to develop a new fire-fighting mission capability for the Sikorsky S-92A.

The result is the Helitak FT5000, a lightweight 4,000-litre collapsible belly mounted fire suppression tank specifically designed for the helicopter. It was on static display at the recent HAI Heli- Expo in Dallas, Texas.

As a transport the S-92A will be capable of transporting crews of up to 19 firefighters to the front lines of wildfire events as well as acting as a water drop asset. The rear-loading cargo ramp and spacious cabin also offer operators the ability to quickly reconfigure the aircraft from passenger and equipment transfers to cargo hauling or medevac services.

The Helitak FT5000 system can be installed or removed in minutes and is equipped with a hover pump that achieves a fill time of 48 seconds. The tank's lightweight construction (325 kg) also allows for greater liquid carrying capacity, which can be dropped in easily configurable patterns through integrated controls. This means that while on site at an event, the aircraft can support fire-fighting ground crews with continuous water or retardant drops.

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UNITED STATES

SURPLUS: Offered for Sale at just $5M: 1945 Martin JRM3 Mars called “Hawaii Mars". With a 200 ft wingspan and almost 10,000 horsepower.

The Martin JRM3 Mars was the largest seaplane to ever go into production. Only five Martin Mars were built and entered service with the U.S. Navy in January 1944. They continued in service until being retired in 1956. In 1959 they were given a second chance. A Canadian company, Forest Industries Flying Tankers, purchased them to serve as part of their forest fire prevention inventory. The conversion enabled the aircraft to carry 7,200 U.S. gallons of water, covering an area of up to 4 acres.

The Mars in Coulson Colours©*András Mihalik*

The last two remaining Martin Mars, Hawaii Mars II and Philippine Mars, were purchased by Coulson Aviation in 2007 and remained in service until Hawaii Mars II eventually retired in 2015 - far beyond anyone’s expectations. Hawaii Mars II remains the only airworthy example of its type in the world.

SEARCH & RESCUE

CARIBBEAN: Canadian owned PAL Aerospace has signed a contract to supply aircraft for the continued provision of the Dutch Caribbean Coastguard.

This new contract, which was awarded after an extensive evaluation of tenders to determine the Best-Price - Quality-Ratio to the customer, will see PAL Aerospace upgrade and operate two fully missionized DHC-8 maritime patrol aircraft, provide crew training on all systems, and support the operation for at least a ten-year period, with options to extend.


DHC-8 Coast Guard staple©PAL

The DHC-8 maritime patrol aircraft will be upgraded with state-of-the-art sensor systems to continue providing industry leading air reconnaissance capacity. The aircraft’s taskings will include maritime surveillance, search and rescue, law enforcement including counter narcotics operations, sovereignty enforcement and customs enforcement and other missions.

This contract firms up PAL Aerospace’s relationship with consortium bidding partner JetSupport Amsterdam. An independent provider of aircraft maintenance and support based at Schiphol Airport in the Netherlands, JetSupport and PAL Aerospace are also partnered in the delivery of and support for the current Do228 Maritime Patrol Aircraft for the Netherlands Coastguard.

Ed: The GA Terminal at the Schiphol Int. Airport, Amsterdam, is flanked by companies involved in aviation services and support of both FRONTEX and the Coast Guard. The Dutch NL EASP Air provides airborne Maritime Surveillance and ISR as a service to FRONTEX and the UK Government. They have a 4-year service contract for FRONTEX, to provide airborne survey services over the Mediterranean Sea and has recently signed international teaming agreements to strengthen their capabilities for FRONTEX and UK Border Force surveillance missions. Spacemetric provides sensor data storage and distribution capabilities.

The global service provider for aerial maritime surveillance, Coast Guard- and ISR operations and Special Air Charter support utilises both turboprop and jet Special Mission Aircraft equipped with modern advanced sensors and systems. The customers include Border Control, Coast Guard and Civil / Military Authorities ranging from the EU [FRONTEX / Border and Coast Guard], United Nations, ESA, and various Air Forces and OEM’s.

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CHINA

RESCUE & SALVAGE BUREAU: Leonardo have announced that it has sold six examples of the AW189 to the China SAR service – the Rescue and Salvage Bureau of Ministry of Transport, PRC. They will be utilised across the coastlines of China for maritime SAR operations. Deliveries start this year and extend into 2023.


AW189©Leonardo

The PRC (MOT CRS) is China's only national maritime professional rescue and salvage force. It undertakes a range of missions, including emergency response to maritime accidents in Chinese waters, rescue of life, ships and property, salvage of sunken ships and wreckages, oil spill clean-ups, and other rescue missions for maritime transport and development of maritime resources. In addition, MOT CRS performs the obligations of relevant international conventions and bilateral agreements on maritime transport and rescue on behalf of the Chinese Government. MOT CRS currently operates a mixed fleet of 20 helicopters across eight bases along China's coastline. The six Leonardo AW189s will be joining MOT CRS in 2023 to extend its SAR capability to 200nm radius.

The AW189 is available with more than 200 certified kits and is delivered with a comprehensive support and training service package, tailored to meet specific customer requirement to maximise mission effectiveness and safety of operations. To date, the AW189 is the most successful helicopter in the super-medium category worldwide with more than 100 units on order for a range of missions. More than 200 Leonardo civil helicopters of various types have been sold to Chinese.
Ed: the known existing fleet includes examples of the Sikorsky S-76, EC225 and EC175.

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BELGIUM

Late in March a national newspaper claimed that faced with soaring numbers – 4,000 in the first quarter - the British Government was again paying other countries to take part in the operations to thwart migrants crossing the English Channel.

This time £10M is said to be being handed to Belgium for the establishment of a new command centre in Zeebrugge as well as paying for drones, CCTV and police equipment such as night vision goggles and beach buggies.
Ed: In this case it would seem that the money will not be purchasing much. It is doubtful that sort of money would fund any completed new command centre so as with each of the items it is probably simply a contribution towards the whole.

GERMANY: DRF Luftrettung and ARA Flugrettung have won this year's 'Rescue of the Year Award' from hoist manufacturer Collins Aerospace/Goodrich. The accolade was awarded for the professional handling of a highly challenging night-time hoist mission, which saved the life of a young mountaineer. It highlights once again the high level of hoist expertise that the two air rescue organisations have.

The award was presented at the annual conference held by Collins in conjunction with the HAI Heli-Expo at the Westin Dallas Downtown, in Texas. This niche invitation event attracts hoist operators, as well as anyone interested in using hoists for their search and rescue, law enforcement and fire, offshore/oil & gas, medevac/HEMS or utility operations.

Having considered a total of seven entries, the jury decided on the highly complex night-time hoist mission carried out by the Tyrolean ARA emergency helicopter in December last year. On the evening of the mission, a mountaineer lost her way in the Bavarian Alps and fell into a ditch after falling on the steep terrain. 'The crews of the alerted RK-2 emergency helicopter from Reutte and the Oberau mountain rescue were faced with extremely difficult conditions. It was pitch-black and the exact coordinates of the missing mountaineer were not known, so a thermal imaging camera from the mountain rescue service was used to locate her. The subsequent rescue with the hoist was a major challenge because the woman was not only extremely cold and badly injured but was also on unstable terrain.

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BREAKING NEWS STORIES (01/04/22)

In news that has been expected for some time Babcock International Group, is reportedly in talks to offload the bulk of its emergency aviation services division, which covers police and air ambulance operations in the United Kingdom.

According to Sky News Babcock is in advanced negotiations with Ancala Partners, a London-based infrastructure investor, about acquiring a substantial chunk of the business it acquired in 2014.

At this stage it is just talks and how they will affect the individual sectors in the medium term will probably take months to emerge. Meanwhile Babcock and Ancala are declining to comment.

Babcock has already sold the oil and gas helicopter aviation arm which services offshore oilfields in the UK, Denmark and Australia.

Babcock acquired the facilities at Staverton#

De Havilland Aircraft of Canada Limited has announce that it has launched the De Havilland DHC-515 Firefighter (formerly known as the CL-515) programme.

The DHC-515 Firefighter will build on the history of the iconic Canadair CL-215 and CL-415 aircraft which have been an important part of European and North American aerial firefighting fleets for over 50 years. Important upgrades are being made that will increase the functionality and effectiveness of this legendarily rugged firefighting aircraft.

European customers have signed letters of intent to purchase the first 22 aircraft pending the positive outcome of government-to-government negotiations through the Government of Canada's contracting agency, the Canadian Commercial Corporation (CCC). De Havilland Canada expects first deliveries of the DHC-515 by the middle of the decade, with deliveries of aircraft 23 and beyond to begin at the end of the decade, providing other customers the opportunity to renew existing fleets or proceed with new acquisition opportunities.

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UNITED KINGDOM

MILITARY AID TO THE CIVIL POWER: Last month saw the publication of a report into Operation Isotrope from the Defence Select Committee. Much of the factual content has already appeared in the pages of Police Aviation News in the form of editorial comments or the input from Squadron Leader Tony Cowan but it does provide 'another viewpoint' on the same subject.

The Summary of the 39-page report states:
This Report focuses on a narrow issue - the announcement that the Royal Navy would be responsible for the operation to counter small boats crossing the Channel. Following the announcement, we sought clarity on the role which would be played by the Royal Navy, the assets which it would use and the details of strategic and operational responsibility. The Government has failed to provide that clarity. Furthermore, during this short inquiry we have heard numerous criticisms of the aspects of the operation which the Government has publicly announced.
We conclude that there are valid concerns about the objectives, the timeline and the measures for success of the operation. The impact which the operation could have on the Royal Navy's budget and the availability of its ships and personnel is worrying— particularly at a time when the tasks of the Royal Navy are increasing. There are also potential impacts both on the Navy's reputation and its relationship with its French counterpart. In short, this policy announcement was premature and the decision-making behind the policy is flawed.

You can read it in full at https://committees.parliament.uk/publications/9245/documents/160092/default/

INDUSTRY

DART Aerospace has acquired the aircraft equipment manufacturer **Paravion Technology Inc**. and Century Helicopters Inc., its maintenance, repair, and overhaul (MRO)/service arm.
Based in Fort Collins, Colorado, USA, Paravion Technology designs, manufactures, and sells a variety of aftermarket accessories and OEM equipment for a wide range of airplanes and helicopters. Paravion launched in 1985 and the evolved company of today offers an extensive list of products including environmental control systems such as heating and air conditioning, camera mount systems, and its trademark Heliporter® ground handling unit for helicopters. The company holds close to 70 FAA certifications and more than 200 foreign validations including EASA, TCCA, and PMA approvals for replacement parts. This includes environmental control systems certified under OEM type certificates.
DART's acquisition of Paravion will allow the mission equipment and replacement parts manufacturer to broaden and diversify its product portfolio in a wider world marketplace with over 1,500 items currently covered by STCs. The move will enable DART to offer several exciting new product categories to its global network of OEMs and helicopter operators.

The California Highway Patrol, Valley Division Air Operations, is the sixth search and rescue organisation to be operational in the USA with the **RECCO SAR** helicopter detector. The detector will be used to search for missing people in the outdoors year-round. Many Search & Rescue teams in California are equipped with handheld RECCO detectors for avalanche rescue and searching for missing people, but this is the first time the RECCO SAR Helicopter Detector system is operational in the State.
The RECCO SAR Helicopter Detector can quickly search large areas, covering one square kilometre within 6 minutes. Besides shortening search time, the helicopter-based detector can reduce the time and the exposure to risk for rescue workers during search missions. The rescue reflectors are commonly found in outdoor clothing and equipment, such as backpacks, hiking shoes, and helmets. Other applications include climbing harnesses, where Black Diamond recently presented their first ever equipped Technician RECCO harness.
Currently there are just 27 RECCO SAR Helicopter Detectors globally, with 9 in North America and 18 units deployed across Europe.
The RECCO reflectors are lightweight passive transponders which require no power or activation to function. They consist of a diode and an antenna. They are integrated in products from more than 150 brands, including jackets, pants, helmets, backpacks, back protectors, boots, transceivers, watches and harnesses. Reflectors are also available as single products to be attached to Helmets and Backpacks or within our own belts. The reflectors are designed to last a lifetime and do not age or wear out. If not mechanically damaged, they will last forever.
Ed: Developed in Sweden over the past 40 years or so RECCO has been a long time seeing widespread acceptance. The body worn detectors have widespread acceptance among the specialist apparel manufacturers and among those that elect to carry the detectors but there appears a danger that newer passive cell phone technology will overtake these 'must have' safety and rescue aids.

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Roll out has been slow since the idea was put forward in the mid-1970s and it was 2019 before RECCO was to be found in 28 countries worldwide. Importantly the roll-out has tended to be ski-resort area centric, the area where danger might be expected. Austria was the first country to be fully covered by the RECCO SAR Helicopter Detector, in collaboration with the Austrian Police and Austrian Mountain Rescue Organisation ÖBRD. The roll-out process continues parallel with first placements Switzerland, Italy, Sweden and Norway.
The clothing may have been out there, but Mt Hotham was the first ski resort in Australia to receive a handheld detector for avalanche rescue and it was not until last year that most of Italy became operational with the system. That amounted to just four locations (Aosta, Trento, Val Gardena and Abruzzo) three of which are in the north and one near Rome and therefore not truly nationwide.
It is arguable whether the new cell/mobile phone systems being pushed forward by Centum in Spain and Smith Myers in the UK will quickly overtake RECCO. On the basis that everyone carries a phone these days it is going to be easier and more flexible to find the lost or buried anywhere rather than just those relative few who are wearing winter clothing or have elected to carry a special detectable device in regions subject to avalanche.
The search RECCO search device is substantial and underslung where the modern technology versions are now small enough for carriage on drones as well as all helicopters. If they were to be adopted by the SAR industry as a whole, they would effectively remove the need for the Swedish device. That assumes that the current war in eastern Europe does not get out of hand and rob everyone of their personal telephones. There have been several instances of officialdom highlighting that merely carrying a phone can literally bring the roof and a lot more besides on individuals.

*The war – or **special operations** as Putin would have us believe – currently being undertaken in the Ukraine brings with it all sorts of extrication worries for the industry.*
India has even more to worry about it seems as it buys a broad spectrum of aviation goods from Russia. Their military has fighters, transports and helicopters and they seem forever on the cusp of purchasing a replacement for their Sud Alouette fleet. A few years ago, they decided on the AS350 but then changed their mind and headed off towards buying the Kamov. Not that they have got their examples yet.
Then of course there was the big deal about buying the EH101 from Agusta/Westland/Finmeccanica/Leonardo that got messy, but they resolved that one by cancelling the EH101, arresting everyone in sight (and some way out of sight) and ordering smart new Mil Mi-17s.

Vislink, a global technology leader in the capture, delivery and management of high quality, live video and associated data in the media & entertainment, law enforcement and defence markets, has announced the release of the AeroLink Transceiver, an entirely new product addition to its next-generation Airborne Video Downlink System (AVDS). Vislink was displaying AeroLink for the first time at the recent HAI Heli-Expo.
The combination of secure COFDM with public 5G or FirstNet connectivity enables the greatest agility for all users.
The Overwatch Imaging payload enhances the situational awareness capabilities of the TEKEVER AR5, namely for 360º automatic detection of small targets. Like a radar, the sensor automatically detects targets, and allows the operator to recognize and validate the information. Because it's based on visual data, the PT-8 Oceanwatch allows us to consider very significant information for automatic classification, such as the color of the targets, greatly improving mission effectiveness.

Airbus has successfully completed the Preliminary Design Review (PDR) for its system concept for the second-generation Galileo navigation satellites. During this important milestone, Airbus' proposed preliminary design and the customer's system requirements have been fully reviewed and agreed.
In parallel, the Airbus site in Friedrichshafen, on Lake Constance, is preparing for an industrialised production line for currently six second-generation Galileo satellites. The satellite integration centre is being completely upgraded to meet current and future requirements for efficient, environmentally friendly, safe and secure production for the Galileo 2nd generation satellites. Galileo second generation is a key milestone in European satellite navigation services that European citizens and billions of users around the world will benefit from, powered by Airbus know-how brought to the project by over 200 highly skilled space engineers. The first Galileo second generation are planned to be launched in 2024.
The world of navigation is changing, driven by rapidly emerging and changing user needs (availability and reliability), a growing number of security threats (jamming and spoofing) and the evolution of other navigation systems. The new batch of Galileo spacecraft built by Airbus is the answer to this changing context. It will make the Galileo service more accurate, secure and dependable, and adaptable over its lifetime spanning two decades.

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Weighing around 2.3 tons, each satellite is designed to operate for about 15 years. The state-of-the-art and all-electric medium-Earth orbit (MEO) platform from Airbus, reuses flight proven building blocks from our Telecoms and Earth Observation programmes, taking advantage of a unique combination of heritage and in orbit experience. The flexible and modular navigation payload solution with future growth capability is also based on telecom elements for beam forming and signal generation.
Galileo is managed and funded by the European Union. The European Commission, ESA and EUSPA have signed an agreement by which ESA acts as design authority and system development prime on behalf of the Commission and EUSPA as the exploitation and operation manager of Galileo. The views expressed in this Press Release can in no way be taken to reflect the opinion of the European Union and/or ESA.

WINGX and **Parapex Media** have launched a joint venture to provide their combined market intelligence on the global helicopter market.

This venture combines the long-standing and deep expertise of Parapex, a leader in helicopter fleet ownership and deployment for over 20 years, and the business insight platforms developed by WINGX across the global business jet fleets.
By blending their relative capabilities, Parapex and WINGX aim to create and distribute valuable insights to stakeholders in the global helicopter business, including operators, sales and charter brokers, service providers and investors.
Covering every civil-operated turbine helicopter in the western world, the business insight is provided by a combination of graphs, maps, data tables and downloads. Each user can select from the flight activity data based on a wide combination of factors including country, type of operation, operator, aircraft type, engine type and many others.
Richard Koe, MD of WINGX, said “We think this is a great opportunity to materialise the obvious synergies between our two businesses, and good timing, given the emerging and exciting convergence of business aviation and next-gen short-haul and eVTOL operations”.
Jeremy Parkin, MD of Parapex Media, added “This collaboration opens up new opportunities for the helicopter industry that have never been seen before. In combining our complementary knowledge and expertise, customers are afforded the ability to make better business decisions on the basis of accurate and well-presented data”.

Airbus Helicopters puts the spotlight on recently developed improvements for its single-engine helicopter family aimed at enhancing performance and flight safety. Following the European Aviation Safety Agency (EASA) certification in April 2021, the Federal Aviation Administration (FAA) in the U.S. and Transport Canada (TCCA) in Canada have recently certified the H125 power upgrade, which increases the aircraft’s performance by up to 10% by making full use of the available power of the existing Safran Helicopter Engines Arriel 2D engine. This major evolution, allowing H125 operators to benefit from up to 320 lb (145 Kg) of additional payload and already proposed as baseline in Europe, will be included as a standard feature at no additional cost on all new H125s delivered in North America as of Q2 2022.
The additional payload gains get even bigger when the power upgrade is coupled with the BLR FastFin tail rotor enhancement and stability system, which received FAA certification last month. The cumulative payload gain is up to 485 lb (220 Kg).

At HeliiExpo2022©Alan Norris

Among the new safety enhancing technologies, a new light data recorder will be available as optional equipment for H125 operators in the last quarter of 2022 and later for H130 operators; hardened and lightweight, this system will record flight data so that all information can be retrieved in the event of an incident. In parallel, all forward-fit H125s and H130s will be equipped, by the end of 2022 and in early 2023 respectively, with a wireless airborne communication system (wACS) from Astronautics Corporation of America as baseline equipment. This system will allow H125 and H130 operators to automatically retrieve their flight, mission, and maintenance data via a 4G or WiFi connection. They will also gain access to Airbus Helicopters’ connected services such as FlyScan predictive maintenance and Flight Analyser flight data monitoring. In addition, the system will have the option to act as an onboard server to interconnect devices and provide passengers and crew with air-to-air and air-to-ground internet on board.

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Airbus Helicopters also announced the extension of a series of commercial incentives in 2022 to support H125, AS350 and EC130 B4 customers with the retrofit of their fleets with the Crash Resistant Fuel System (CRFS). Airbus Helicopters is introducing a new € 13,000 ($ 15,000) voucher for each CRFS kit purchase, that can be used at any Airbus Helicopter's approved service centre to pay for CRFS installation and labour costs

MidTex Aviation, LLC has entered into an asset purchase agreement to acquire substantially all of the assets of The Enstrom Helicopter Corporation ("Enstrom"), and plans to reopen the factory in Menominee, MI. The asset purchase agreement was approved by the United States Bankruptcy Court for the Western District of Michigan as part of The Enstrom Helicopter Corporation's Chapter 7 bankruptcy process.
MidTex expects to operate through a new entity, to be named Enstrom Aerospace Industries. The new business will provide parts and support to existing owners, as well as new helicopters. In addition, the new company plans to expand into providing engineering services and component manufacturing for other OEM's. Upon closing, MidTex will acquire all of the former Enstrom parts, owned aircraft, tooling, materials, drawings, intellectual property, factory buildings and airport lease.

In happier times. A press photo issued by Enstrom for an earlier Heli-Expo

BLR Aerospace announced its UH-60 FastFin® certification is underway and expects FAA certification in the 3rd quarter of 2022. The FastFin system for the UH-60 utilizes the same proprietary and patented technology that BLR has commercialised and certified on other civilian and military aircraft models. A significant portion of the engineering and flight testing has been completed. Data analysis shows an impressive improvement in useful load and low speed controllability commensurate with other BLR certified FastFin systems. As with all BLR's rotorcraft performance enhancing products, once completed and certified, BLR will offer the system along with an FAA certified flight manual supplement allowing expanded operations.
BLR is also working with Skywork Helicopters Limited, New Zealand, a provider of helicopter services, to certify the BLR FastFin® on the Airbus Helicopters AS355 model. Certification is expected by the end of the 2nd quarter of 2022.
AS355 is a twin-engine variant of the AS350 so operators can expect similar performance benefits as were demonstrated on that model. The modification to the AS355 will be nearly identical with just a few minor changes. The BLR FastFin System includes an Advanced Tailboom Aerodynamic Cowling (ATAC), a Tailboom Strake, and Vortex Generators. Benefits include significant improvement to aircraft stability, precision hover-hold including enhanced yaw axis control when hovering in challenging crosswinds. Skyworks's entire AS350 fleet is upgraded with the BLR FastFin system; it's seen as an essential addition to the fleet that undertakes roles including firefighting and SAR. skyworkhelicopters.com

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Uniflight Global has announced its partnership with Spectrum Aeromed for installation of multiple HEMS interiors. Uniflight began completions on Leonardo AW119Kxi helicopters in the first quarter of 2022. The STC-certified custom cabin interiors are being installed on six aircraft for two major HEMS operators and long-standing customers of both Uniflight Global and Spectrum Aeromed. Installation will be completed within 2022.

Precision aerospace manufacturing company, **Aerometals** has announced Federal Aviation Administration (FAA) concurrence for a new flat filter inlet barrier filter (IBF) design for the AS350 and H130 airframe series with both single and dual hydraulic configuration. The new design will be offered as a new filter assembly as well as an upgrade to existing filter assemblies. Benefits of the new flat design include an increased service interval from 100 to 150 hours, improved cleaning and oiling, a two-pound reduction in weight along with simplified pre-flight and inclement weather inspection. Aerometals designed, manufactures and distributes the advanced filtration system that protects critical engine components from corrosion, fouling, erosion and foreign object damage (FOD). Additionally, the IBF can provide up to 96.8% separation efficiency of airborne salt nuclei for salt laden or offshore environments. Modification of older IBF systems can be accomplished with simple hardware removal and replacement with no composite repair required. Based in a suburb of Sacramento, California, Aerometals headquarters include a 150,000 square foot manufacturing and production campus with over 170 highly skilled employees. Aerometals is a civil, commercial and military aerospace manufacturer offering PMA parts and components, engineering, testing, precision assembly, obsolescence recovery and support.

Smith Myers formally launched its North American expansion strategy with a US event debut at Heli Expo to showcase ARTEMIS, the award-winning Mobile Phone Detection and Location system designed specifically for airborne SAR (Search and Rescue) and Disaster Relief. The global specialist in the design, development, manufacture and support of application specific cellular network and handset capabilities is celebrating 35 years since it was established by a team of UK design engineers. ARTEMIS turns any mobile phone into a rescue beacon, only requiring two antennas to generate a latitude/longitude fix at up to 19 nautical miles (35km), offering a radical and effective alternative to traditional airborne sensors: Texting and calls in no service areas Possible automatic cueing of EO/IR (Electro -Optical/Infra-Red) Deployment as a stand-alone with embedded mapping or integrate with leading mission system providers Making missions in low light/ IMC (Instrument Meteorological Conditions) safer and increasing the odds for a positive outcome Available in several SWaP configurations for manned/unmanned platforms The move to integrate the solution across manned and unmanned aircraft in North America, follows the announcement by Smith Myers in February that the ARTEMIS Mobile Phone detection, location and communication suite has been integrated into the new Robotics Centre Echo SAR (Search and Rescue) payload for small Unmanned Aerial Systems (UAS) built by Teledyne FLIR Defence. Already proven with service with AW101 Norwegian all weather SAR helicopter, this life-saving technology can be deployed across payload categories down to a small quad-rotor UAV, providing a whole new capability to SAR operators working in the most difficult conditions.
Ed: A fast moving and focus of interest market sector at the moment with two main players in Europe (Smith Myers and Centum) set to be attending the PAvCon Europe in June, a chance to see both in the same hall but not necessarily 'together'!

Applied Video Imaging, a provider of rugged video products for airborne, ground, and marine surveillance missions, were exhibiting at HAI HEL-EXPO 2022 in Dallas, Texas and recently signed up to exhibit at the PAvCon Europe in Austria,
Based on nearly a decade of experience in designing and building airborne mission displays, AVI introduced a new generation of rugged displays suitable for airborne, ground and marine applications, including helicopters and open cockpit boats and vehicles. The new displays feature hardened cover glass with touch screen and NVGS options, direct sunlight readable, Projective Capacitive (PCAP) controls, 3G-SDI input and output, up to 16 selectable video layouts for the four 3-G SDI inputs, fully IP68 rated and many other outstanding features.
AVI's new range of displays use a modular approach to provide higher reliability, lower life-cycle costs, and greater installation flexibility. Each display consists of three modules – the LCD Module, the Display Electronic Unit (DEU), and the User Interface Module (UIM). The displays are available in 23.8", 21.5", 17.3", 15.6", 12.1", 10.1", and 7" (7" display has integrated LCD, DEU and UIM).
Since the last HAI show in 2020, AVI has also introduced IP68 versions of our DVI/HDMI to 3-G SDI Scaling Video Converter and 3-G SDI to DVI/HDMI Scaling Video Converter with MIL-STD 38999 circular connectors. AVI also displayed rugged 16×16 and 8×8 video switches, small, lightweight and rugged switches that allow SDI video inputs to be dynamically routed to any or all of the switch outputs.

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Amid lacklustre sales and costly new certification requirements, **Sikorsky** is no longer accepting orders for the S-76D, effectively shutting down the 45-year-old medium helicopter programme – at least in its own factories.
It appears that Sikorsky has been in talks with other organisations and may well be seeking to enter into a partnership to set up license production outside the USA.
Currently production takes place in Oswego, New York, with a backlog of a VIP and two search-and-rescues configured as S-76Ds.
With the FAA now requiring aircraft to have a crash worthy fuel system the company was faced with a major investment that it decided was simply not viable given the recent sales record of the model. There is demand for the S76D, but it is simply not strong enough to support the big spend on it meeting certification requirements.

Much was expected of the D model when it launched at the Dubai Helishow©PAR

The S-76 first flew in 1977 and entered service in 1979. More than 800 have been sold across several variants, the latest of which was the reengined S-76D. Deliveries started in 2013, although sales never matched expectations. [Aviation Week]

Paraclete Aviation Life Support further strengthens its global presence in the rotor- and fixed-wing helmet market, extending the company's international footprint with the recent expansions into South Korea, Brazil and Australia, as well as its continued relationships in Europe, South America and Asia. Paraclete is emerging as a global provider of aviation helmets building strategic partnerships in 28 countries throughout the world in commercial and military markets throughout 49 of the U.S. states since its launch in 2014.
Paraclete is the only manufacturer to offer DOI-certified helmets in every size, S-XXL. Paraclete is committed to the safety and protection through continuous innovations through evidence-based research science and technology.
Paraclete is an ISO 9001:2015 certified manufacturer providing design, development, and manufacture of Aviation Life Support Equipment [ALSE], as well as education and training services. www.paracleteaviationlifesupport.com

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ACCIDENTS AND INCIDENTS

27 January 2022 Pilatus PC-12 N129JW Air ambulance of CareFlight of the Rockies based in Grand Junction, Colorado operated by Air Methods. On the return leg from Centennial Airport 16 miles from Denver, Colorado, United States to Grand Junction Regional Airport, Colorado, the fixed wing Pilatus PC12 experienced a depressurization event. The depressurization occurred during cruise flight. The cabin pressure went from the preset of 5,000' to 10,000'. This was a slow depressurization, though the cabin temperature did drop. The single pilot notified the crew and began to trouble shoot the cause for the depressurization. Pilot requested and was granted from Denver Center a lower flying altitude. While descending the pilot reset the environmental control system. This reset fixed the issue and the cabin pressure returned to 5,000'. The cabin temperature steadily climbed. The flight to GJT resumed. It was found that when the floor air/ heat is turned on full, the system will draw power from the pressurization system. This is a known fact, but the new pilot was unaware of it. [Concern]

12 February 2022 Leonardo AW109E N951AL. Air ambulance of Airlift Northwest operated by Air Methods out of Seattle Washington. The team was on board N951AL (manufactured 2005) on return to base (RTB) from Harborview Medical Center around 2300 on a very clear night and pilot flying VFR. Over the water off Elliot Bay, the pilot advised he was going to turn the heat on, which he did. The nurse, flying in the front-left, reached to the dash to turn the vent after the heat was turned on, but reached up instead of out and inadvertently engaged the BATT OFF switch on the top panel by hitting the switch bar that is used to cut auxiliary power supply to the aircraft.
By doing this, several things occurred; communications and interior lights shut off in both the cockpit and the rear cabin. Also, the autopilot disengaged, which caused trim actuators and the stability augmentation system (SAS) to react, causing the aircraft to dip significantly. The PIC retained control of the aircraft and, knowing what likely occurred, re-engaged the battery almost immediately. The dash/navigation began to turn back on.
The med crew is unsure if GPS coordinates remained programmed (advised later that they likely had to be re-programmed), but the PIC never lost control and advised the crew that if things didn't re-boot as expected, they would land and attempt to restart the system.
The nurse in the patient compartment, not fully hearing this conversation or having a visual on what occurred, was understandably shaken. Components rebooted and the team was able to RTB safely. [Concern]

4 March 2022 Sikorsky S-92A G-**** UK Coastguard rescue helicopter. A woman aged 87 died after an incident involving the helicopter that was landing on the helipad at the Derriford Hospital, Plymouth. Due to the effect of the downdraft of the helicopter two people on the ground were injured, one fell over and suffered fatal injuries and the other, a local woman in her 80s, was struck by a car door as she entered or left the vehicle and suffered a broken pelvis among other injuries. The Maritime and Coastguard Agency said the helicopter was flying a patient to hospital from St Mawgan in Cornwall at the time of the incident. The two people affected were not aboard the helicopter and not apparently together.
Derriford Hospital helipad is a ground level purpose-built, properly surfaced, drained and lit helipad, certified for night operations. It is surrounded by a wall and has been operational since Jun 2015. The new pad, covered the northern part of Car Park B, replacing a grassed area nearby.

6 March 2022 Dornier Do228-101 CG756 Indian Coast Guard. Flying from Chennai Airport it suffered an engine malfunction, shut down the engine and diverted to land at Kanpur Air Force Station, India. During the landing rollout it left the runway (14), suffered a gear collapse on rough terrain and collided with a structure with four on board. All safe, no fire.

6 March 2022 Eurocopter EC145 N29VA Virginia State Police. The helicopter made a heavy-landing at its home base in Abingdon VA when it returned from a Med-Flight mission with the pilot and medical crew aboard. As it was landing the helicopter spun around, landed heavily upright spreading the landing gear. The pilot suffered minor injuries, but the others were not harmed. [VSP/ABC3]

7 March 2022 Eurocopter AS365N3 Dauphin 2 JA90MT Kumamoto Air Rescue Team. The Dauphin had been instructed by ATC to hold short of runway but made a runway incursion incident while a Cessna/ Textron 172S Skyhawk (JA47UK, c/n 172S11684) performing touch-and-go training. No injuries or damage. JTSB launched an investigation as a serious incident. [ASN]

10 March 2022 EH Industries CH-149 Cormorant 149903. Royal Canadian Air Force The helicopter crashed during a training flight at the 9 Wing air force base at Gander airport near the intersection of runways 13-31 and 03-21. There were six crew members aboard the CH-149 aircraft, and all of them were taken to hospital. Two were kept in hospital receiving treatment, while the other four were released.

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Weather conditions were favourable in the area, with mostly blue skies and light winds through the afternoon.

12 March 2022 Sikorsky S-76D N761AF Air ambulance of Arkansas Children's Hospital. Substantially damaged at Wadley Regional Medical Center, Texarkana, Texas, USA when the tail rotor struck the heliport structure on landing.

13 March 2022 Airbus Helicopter H145 D-HYAM Air ambulance of ADAC Luftrettung. Answering to a medical emergency, the helicopter landed in Riepe on an open meadow on the Reiherstraße in darkness. The pilot failed to notice a wooden pole sticking up from the meadow. As the helicopter came down it impaled itself on the pole. It passed through the floor of the cockpit. There were no injuries, but the aircraft was grounded awaiting a low-loader. Current practice is that rescue helicopters do not normally carry out so-called external landings outside of an airfield in the dark. Since the medical emergency involved a child, the pilot had made an exception. [Michael Mau]

19 March 2022 Eurocopter AS332L1 Super Puma N952JH. Los Angeles Sheriffs Department Air 5 rescue helicopter based at Long Beach, California. Responding from Huntingdon Hospital Heliport to pick up a child patient at a car accident on a road 200 feet above a sheer drop above Morris Dam, San Gabriel, California. Crashed on its left side with serious damage to MRB and tail boom and injuries to five of six on -board on a mountain road in Angeles National Forest. No fire reported.

20 March 2022 Cessna 172P Skyhawk N98763 US Civil Air Patrol. Departed Lihue Airport, Kauai Island, on aerial patrol crashed in mountainous terrain at Kalalau Lookout Mountain in Lihue, Hawaii. Two persons killed. [ASN]

UNMANNED

TEKEVER, the European leader in Maritime Surveillance, and US-based Overwatch Imaging, a leader in airborne imaging systems for both piloted aircraft and drones, have successfully integrated the PT-8 Oceanwatch payload on the TEKEVER AR5 UAV, adding 360º automatic small target detection capabilities to the system. The news was announced in Riyadh, during the World Defense Show.

The University of Nevada, Reno has launched Nevada Autonomous, to manage and enhance Nevada's Unmanned Aircraft Systems (UAS) Test Site activities. The UAS Test Site service was created following Nevada's designation by the Federal Aviation Administration as one of seven states to serve as a centre for the development and testing of unmanned autonomous vehicles and systems.
Nevada Autonomous will be responsive to opportunities statewide and will collaborate with projects developed through the University of Nevada, Las Vegas and Desert Research Institute. The new alignment better incorporates UAS test activities with the aeronautical, autonomous vehicle and robotics research happening at the three research institutions of the Nevada System of Higher Education, while continuing to also facilitate testing opportunities with business, industry and government agencies. Safety will remain a primary emphasis.
The team envisions creating a Uncrewed Aircraft Systems Beyond Visual Line of Sight (BVLOS) corridor for aerial and vehicular testing that extends from Reno to Las Vegas, a north to south connection extending roughly 500 miles.

In the USA the BVLOS Aviation Rulemaking Committee (ARC) issued its final report to the FAA recently and, in early March, the FAA published it on-line – all 381 pages.
Mark Colborn, the former Dallas, Texas police pilot and something of a sage on all things US drone commented "I have to admit, the 80 or so individuals on the Committee (many of which I have worked with on other projects) did one hell of a job. There is one recommendation that is an absolute stroke of genius; it involves determining right of way in the airspace below 400' above ground level.
"For drones, the ARC recommends automatic means for see-and-avoid from crewed aircraft operators. Crewed aircraft will be required to yield to drones operating within 100' of a structure or critical infrastruc-

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ture (Shielded Operations).
“Crewed aircraft NOT equipped with Automatic Dependent Surveillance Beacon (ADS-B) or Traffic Awareness Beacon System (TABS) will essentially be responsible for staying clear of drones below 400' AGL (Non-shielded Operations). If they are equipped, the responsibility falls on the drone operator. Since nearly 50% of the crewed aircraft world is NOT equipped with ADS-B or TABS.
“This will level the playing field, share the responsibility and liability, and solve the airspace awareness problem in the low altitude space. It will encourage the crewed aircraft world to equip, especially if they want to play in the drone space.
“Drones are here to stay, it's not just a fad!”

Steadicopter and Smart Shooter, a manufacturer of innovative fire control systems that significantly increase the accuracy and lethality of small arms, have unveiled a joint project, Golden Eagle. Although not the first drone to demonstrate the airborne firing of and rifled weapon it claims to be the first-ever unmanned helicopter with precise hit capabilities.
Based on the combat-proven Black Eagle 50E platform, the AI-based technology and Smart Shooter’s SMASH Dragon system. The AI-based technology enables superior situational awareness and autonomous multi-target classification and tracking. The SMASH Dragon, a remotely-operated robotic weaponry payload, locks on the target, tracks it and ensures precise target hit. The system can employ various types of assault rifles, sniper rifles, 40mm and other munitions.
The Golden Eagle has vertical take-off and landing capability www.steadicopter.com

LETTERS TO THE EDITOR

Bryn,

I'm curious my good man...is hare coursing still a huge problem in England? I had to look that one up, and apparently the practice is illegal, which is good to hear.
Also, I suspect wildlife poaching and other crimes of that nature are local police functions, or do you guys have a separate Wildlife service like our state services here, i.e.: Texas Parks and Wildlife Service and Colorado Division of Wildlife, etc.?

Mark Colborn, Dallas Police Department, Texas, USA

To be honest I do not know any more!

In my day (we say that do we not, us ex-officers of the law), on the rural edge of London, we only had a low incidence of Hare Coursing, wildlife poaching and stock rustling. We usually turned up single handed and the offenders obligingly went away in the opposite direction not to be seen again for several days/weeks. Job done and cheaply. But we were the townie cops and we did not really do country things too willingly. Scaring the criminals off seemed an economical option.
Then the new kids on the block, air support, got in on the act, and then the ever-larger firearms branch (because increasingly the ‘villains’ had guns but fortunately they had time on their hands as the criminal still rarely used them) and things started to get complex because with more resources assigned the perpetrators were surrounded and more often caught! But city air support and firearms soon tired of the activity, they remained city cops at heart and there were far bigger fish to fry just down the road. The antidote largely reverted to one man in a car or on a push bike.
However, in flat rural areas like Norfolk and Suffolk they have less terrorism and such and Hare Coursing is a more important crime…. Their helicopter was always involved with Hares. And when NPAS came along the country boys met a new lot of City Slickers from the north who also said this was a nothing event…. As a result, despite the complaints, no helicopter was made available.
Well now they really have no helicopters to answer any jobs anywhere so there is little surprise that they have decided to revert to drones!!!! And not just for Hares either!!!!

PEOPLE

CNC Technologies, the aviation technology and wireless communications company serving the law enforcement, military and government markets, announced that law enforcement veteran **Shannon Mack** is their new director, law enforcement sales. Mack joins CNC following a distinguished career with the Anne Arundel County Police Department where he served across a broad variety of roles, including as a SWAT team officer and as the Commander of Anne Arundel’s Aviation Unit, a role he held for 14 years. At CNC, Mack will work closely with local, national and international agencies to assist them in building high-performing aviation technology and wireless communication solutions for their airborne fleets.

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Marwan Khalek, co-founder of **Gama Aviation**, entrepreneur and prolific crusader of on demand aviation is this year's recipient of the British Business Aviation Association's prestigious Michael Wheatley Award for Outstanding Services to the general aviation industry. BBGA Deputy Chair Alex Durand presented him with the accolade at the Association's annual conference and AGM on 10 March at Luton Hoo.

Marwan is a respected, successful entrepreneur with a proven track record over nearly four decades. Together with business partner Steve Wright, he has evolved Gama Aviation from a fledgling air taxi business in the early 80s to a global aviation services group spanning business aviation, special mission, technology and outsource sectors, employing 1,000 people.

Marwan graduated as an engineer and originally worked in the furniture trade. During his studies he learned to fly and gained a PPL on the Isle of Wight, swiftly identifying an opportunity to merge his business and aeronautical skills. Acquiring its first piston-engined Beech Baron in 1983, Gama Aviation's first passengers were jockeys and sponsors for horse races. In 1984 coming out of the recession Marwan moved the Fairoaks Airport-based business into Beechcraft King Airs, spotting a gap in the market when Leavesden-based Eagle Aircraft Services ceased operations.

Steering what is now the Gama Aviation Group from these formative beginnings into the global business it is today is recognised as a remarkable achievement. The Award is recognition of an unwavering commitment to business aviation, far beyond the interests of Gama Aviation - for 40 years.

Gama Aviation has operations in the US, UK, Poland, UAE and Hong Kong. With a multi-national reach, servicing the aviation needs of airlines, lessors, governments, corporations and private individuals, it is one of a few business aviation service companies listed on the London Stock Exchange's AIM market. Headquartered in Farnborough, Hampshire it has a primary operating base from Bournemouth Airport. It has AOC's from the UK CAA, Cayman, Isle of Man and UAE with accompanying airworthiness, maintenance and design approvals to support of FAA, UK CAA, EASA registered aircraft. Gama Aviation holds MAOS and DAOS from the Military Aviation Authority and BCAR privileges for state aircraft.

BBGA is the UK's national trade body representing business and general aviation. Now in its 49th year, (formerly known as GAMTA) its member companies span all facets of the business aviation sector. It represents over 180 companies, including airports, corporate flight departments, operators, aviation services organisations and aircraft manufacturers. In a partnership with EBAA, all members of BBGA enjoy dual membership of both associations. Similarly, any UK based organisation seeking to join EBAA can do so via BBGA.

In recent weeks **HeliOperations** based at the Heliport, Portland, Dorset has taken on strength **Brian Baldwin** to cover Regulation & AOC development. Brian was a former RN pilot, flew with the Empire Test Plots School and before taking on a regulatory job with the Civil Aviation Authority was the Chief Pilot of the Metropolitan Police ASU at Lippitts Hill some 17 years ago.

In 2005 Brian was part of a multinational team that met up ALEA and PACE to improve cooperation. It led to the police aviation conferences that are now called PAvCon Europe.

Also newly arrived is **Ollie Dismore**. He was taken on part time to undertake future projects but is now working for HeliOps pretty much full time. He also has a background flying with the Royal Navy but more recently was heading up NPAS until made redundant.

Herve, Bavazzano, Alexnder Shephard, Glenn Daley Bryn Elliott, Brian Baldwin, Dan Schwarzbach ©ALEA/PACE

SRT Helicopters based in Bakersfield, California, a full service helicopter company that provides flight training, specialized training and commercial operations around the world has announced that one of its Senior Instructors Matt Novellino has died.

Matt was an accomplished USCG Rescue Swimmer, a Highly Decorated U.S. Army Special Forces Soldier serving with the 19th Special Forces Group.

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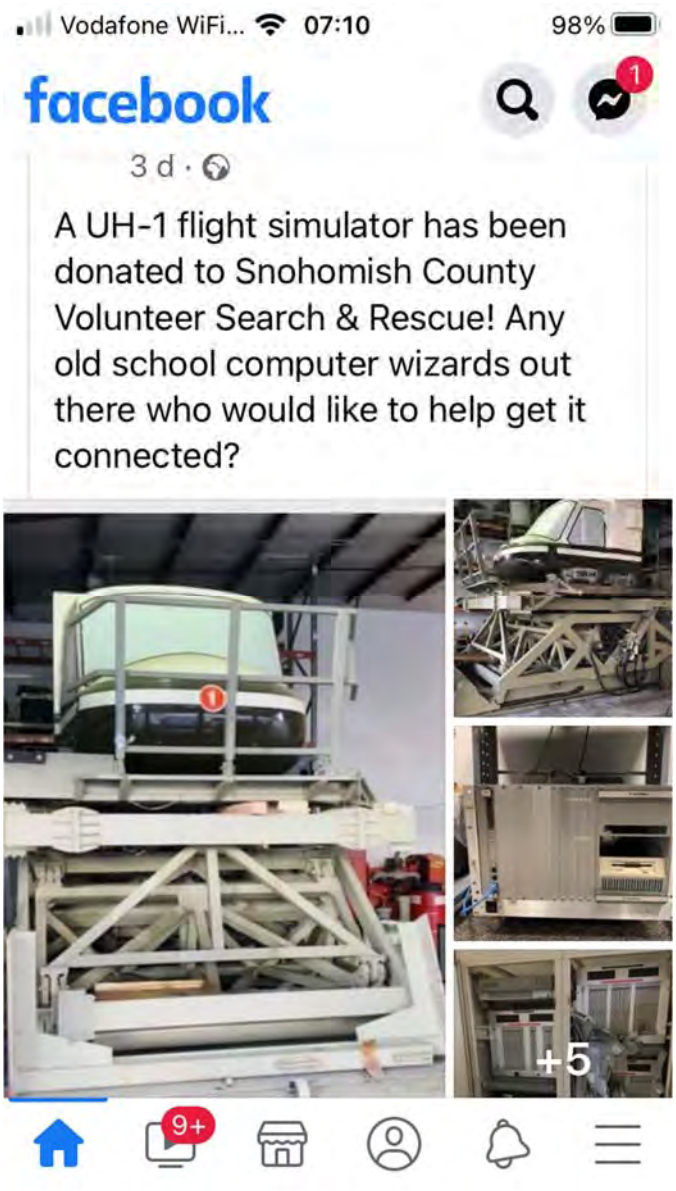
MOVE ALONG THERE

Is it not strange that last month the former House of Commons Speaker, John Bercow was given a life ban from holding a parliamentary pass, after being found guilty of bullying House of Commons staff by Westminster's standards watchdog and yet very senior police officers found guilty of similar behavior towards their staff in recent times seem to have not only forgiven but rewarded with promotion?

In another example of expensive technical systems being bought and proved useless the Greater Manchester Police has announced that it is to replace part of its troubled computer system.
The £60m iOPS system was was installed in July 2019 to replace three systems critical to how the force functions.
Her Majesty's Inspectorate of Constabulary inspectors found it caused a delay in answering emergency calls and "serious" backlogs in dealing with abuse cases. As a result, the part of the system which controls records management would be scrapped. It is hindering their ability to fulfil essential policing tasks.
GMP intend to move away from the Police Works system and to replace it with a tried and tested product already in use by other forces, rather than start again.

And talking of questionable decision on computers, sometimes there are gifts that should be refused but not everyone has got the hang of saying "Thanks, but no thanks".
Last month the Snohomish County Volunteer Search & Rescue based near Seattle Washington triumphantly announced that they had been offered – and apparently accepted – a Bell UH-1 Huey simulator.
The post was accompanied by several images of their acquisition, and it is clear it is a real museum piece, several crates and boxes that reek of valve technology. A real project for which they are attempting to attract some caring person with yesterday's technology in their bones and at their fingertips.
I suspect the resultant simulator would take five years to rebuild and, even if it works, barely match the performance of a $100 Microsoft Flight Simulator.



This could be interesting. Not a flat screen in sight and those "Five and a Quarter" floppy disk drives were a nightmare when new. Are those equipment cabinets or mobile Rest Rooms?

They will have to train the trainers in the old technology before they can hope to oversee the efforts of the young pilots!

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Advertisement

IMPORTANT INFORMATION FOR PAvCon EUROPE EXHIBITORS.

Sending exhibition material to the PAvCon in Austria this year. Personal 'Carry on' on the day is not affected. This is for the direct delivery of larger items to the venue.
CEVA Logistics based in the UK and Netherlands will be using an agent in Austria. The PAvCon agent Edwin will handle the detail but the address for delivery must be to the agent off site as the local holiday arrangements will preclude deliveries direct to the venue. Do not forget the Carnet unless an EU member.

Advanced warehouse shipments:
Delivery address:
Lagermax International Spedition GmbH
Am Messezentrum 6
5020 Salzburg
C/o CEVA Showfreight – PAvCon quoting stand in hall.
Arrival Deadline for road freight shipments: 30. May 2022
CMR Consignee should be the delivery address + Name of Exhibitor & Name of Exhibition

Airfreight Shipments:
Airport of Arrival: Salzburg International Airport (SZG)
Arrival Deadline: between 22. – 24. May 2022
Airway Bills, Invoice & Packing List should be consigned as follows:

Consignee	Notify
Lagermax Internationale Spedition GmbH Wilhelm-Spazier-Strasse 2 5035 Salzburg Airport Mr. Michael Neuwirth / T: 0662 4090- 2364 **For: CEVA Showfreight - PAvCon**	Name of Exhibitor…….. Name of Exhibition: Show Name [PAvCon Europe] Venue : Airborne Technologies, Wiener Neustadt, Austria

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The National Law Enforcement Museum in the USA unveiled a virtual exhibit on February 21 called "Eyes to the Sky: A Century of Law Enforcement Aviation and Airborne Public Safety". This is the said to be the first professionally curated exhibit about law enforcement aviation in the USA, and it showcases pilots, paramedics, and other law enforcement aviation experts. The museum is providing virtual access to the exhibit free of charge.

The NLEM exhibit, curated by the Smithsonian National Air and Space Museum, takes a trip through time to learn about the varied history of law enforcement airplanes, helicopters and drones. The exhibit dives deeply into the efforts of departments that spearheaded the effort to add helicopters to the law enforcement toolkit and serves as an exploration of how helicopters have played an important role in the ways that law enforcement uses them.

APSA is acknowledged at the beginning of the exhibit and *Air Beat* is cited in the credits at the end. Several APSA members stepped up to assist in this project and deserve to be acknowledged: Glenn Daley (NYPD), Ken Solosky (NYPD) and Jim Di Giovanna (LASD). And Zack Mullikin, *Air Beat* Art Director, combed the archives, providing photos and stories. "While there is so much more to the public safety aviation story, this is a good start and nice tribute to some of the pioneering agencies," said APSA Executive Director/CEO Dan Schwarzbach. [National Law Enforcement Museum]

SPECIAL REPORT

COUNTERING THE 'SOFT' INVASION OF THE UK BY MIGRANTS IN SMALL BOATS

James A Cowan MBE

INTRODUCTION

Whilst the news headlines have, quite correctly, been dominated by the invasion of Ukraine by Russia there is another invasion, a 'soft' invasion of the UK, which started in 2018, when the former Home Secretary, Sajid Javid declared a 'major incident'. This invasion, with migrants crossing the English Channel in small, inflatable boats began with just 299 and then, year on year, the numbers have increased with a new record of 28,526 migrants arriving in 2021. Many of the migrants arriving in the UK by boat, often in a grossly overloaded purpose-built inflatable, are young men under the age of 40. Some boats also set off from France, or Belgium with a 'token' family on board before being 'rescued' mid-Channel by the UK Border Force, or the Royal National Lifeboat Institution. The annual estimate for 2022 is in the order of 60,000, not including those refugees arriving from Ukraine. At the beginning of the year the UK Government decided that the Royal Navy would take overall command of Channel operations with Rear Admiral Mike Utley in charge of all UK assets including the Border Force and HM Coastguard - Operation Isotrope.

Many of the migrants arriving in the UK by boat, often in a large, purpose built, grossly overloaded inflatable, described by the National Crime Agency as 'death traps', are young men under the age of 40.

More recently, following an enquiry, the Government Cross-Party, Defence Select Committee expressed a doubt that even the Royal Navy has the ability to control Channel crossings by migrants. Moreover, although the RN has deployed three, 35-year-old Archer class (P2000) patrol vessels to Ramsgate in Kent, a recent report acknowledges that these patrol vessels with their high freeboard are unsuitable for 'rescue' missions. In the meantime, the UK Border Force has been allocated £234,000 to charter a new boat of an unspecified type. The Defence Committee reported that, *It is clear that the UK can only manage the symptoms, rather than the cause, of this issue. To truly address it, the cooperation of the French Government is required*." In its conclusion the 'Committee stated that, *"In short, the Government has not attempted to persuade us that Operation Isotrope is anything but an ill-defined policy, prematurely announced.*

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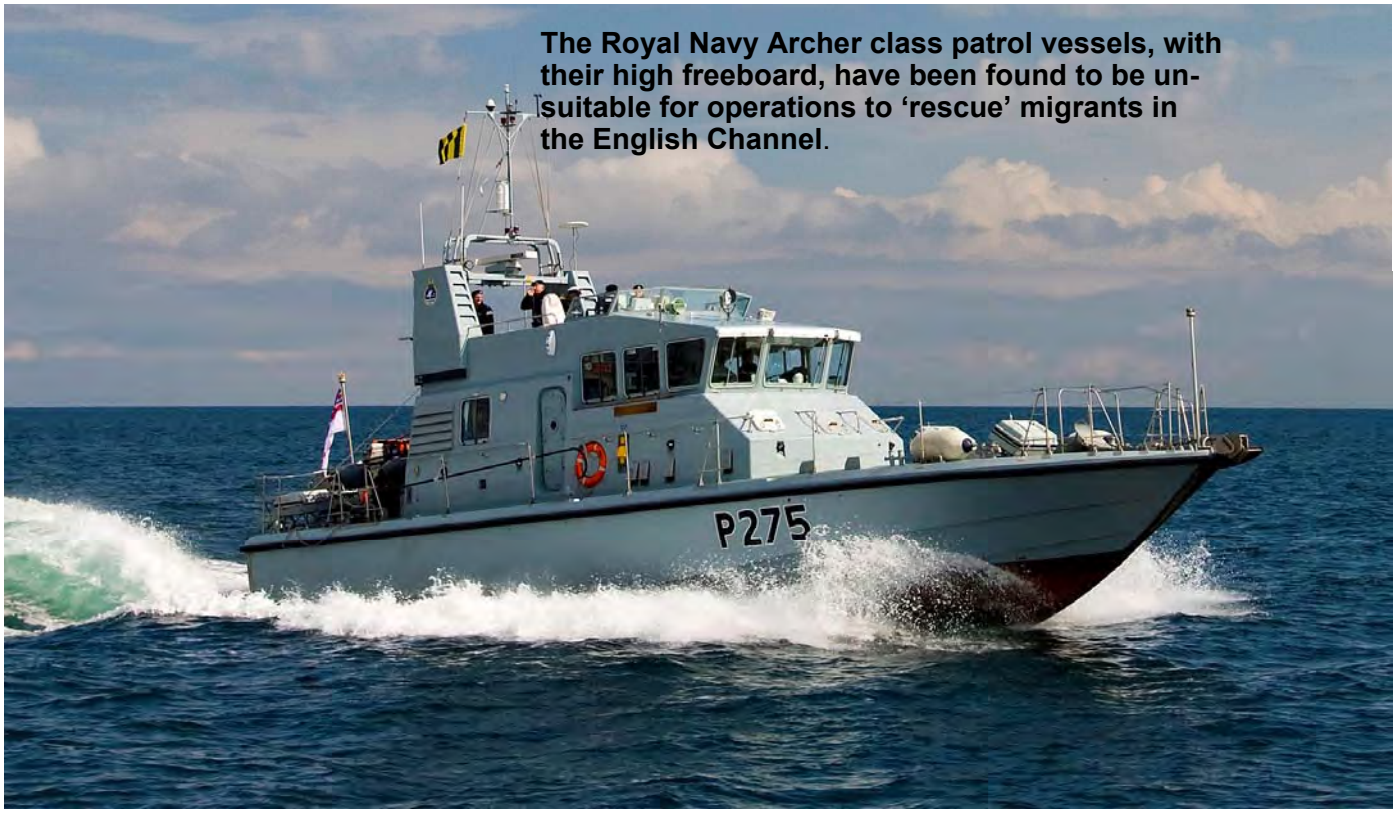
The best-case scenario for the Royal Navy is that it will leave with its reputation unharmed: there is no prospect of leaving with its reputation enhanced." (2)



The Royal Navy Archer class patrol vessels, with their high freeboard, have been found to be unsuitable for operations to 'rescue' migrants in the English Channel.

LAND, SEA AND AIR

With a wealth of British and French government assets, land, sea and air, on both sides of the English Channel the application of air power is of particular importance. Aircraft, with their proverbial 'eye in the sky' are good for detecting objects and people on the ground and at sea. During WW2 one aircraft that deserved more credit than it received was, together with the Piper Cub, the Taylorcraft Auster which equipped RAF Air Observation Post Squadrons to direct artillery fire onto enemy positions. According to one unsolicited German testimonial, *"We cursed the little dark-green high-wing aeroplanes. We knew that one of them in the area would precede a barrage and we tried our hardest to shoot them down. If we gave them too hard a time, they were impudent enough to fire off a few flares and call up the Typhoons to rocket us. We dreaded these little observation aeroplanes."* (3)

Today, light observation aircraft should still be regarded as a prime resource, a first line of defence, to thwart the flow of migrants crossing the English Channel in inflatable boats. Moreover, following the loss of 27 migrants who were in a large inflatable which deflated near Calais on the night of 24 November 2021, described by the National Crime Agency as a 'death trap', the British Prime Minister, Boris Johnson recommended to President Emmanuel Macron of France a new initiative with joint Anglo-French land, sea and air patrols. This recommendation was rejected, but the French did turn to the European Border and Coast Guard Agency (Frontex) for additional air support, to supplement the occasional patrols by a Cessna 172S Skyhawk belonging to the French Police Aux Frontiere (Border Police).

Aircraft used by Frontex, include the Royal Danish Air Force (RDAF) Bombardier CL604 Challenger. But is this 'biz jet' too large and too fast to patrol the coast of Belgium and northern France to counter migrants crossing the English Channel in inflatable boats?

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Since the beginning of December 2021, Frontex has responded with a range of aircraft from Denmark, from Italy and, most recently, from the Netherlands. However, if we look at the numbers of migrants crossing the Channel in 2022, up to the end of March, then, subject to Home Office confirmation, the total is well in excess of 4,000. This total of more than 4,000 migrants crossing the English Channel in the first 3 months of the current year more than doubles the total of 1,843 for the whole of 2019! Also, in the same quarter in 2021, just 1,362 migrants made the same journey. At the time, some 12 months ago, this was thought to be a large number arriving in the first 3 months of the year, in the winter! The current figures show that the aircraft being used by Frontex to counter migrants entering the UK without permission are the wrong type; too big and too fast to be truly effective. Also, the current strategy of just one air patrol, lasting a few hours each day, certainly doesn't dissuade the people traffickers, or their migrant customers.

The Italian Guardia di Finanza (Border Police) has also patrolled the coast of Belgium and northern France with the large ATR-72MP.

Interestingly, the French would seem not to have made any contribution to the Frontex mission with any aircraft of its own, other than the occasional use of the Cessna 172 Skyhawk of the Police Aux Frontiere. Unlike the UK response, there's also a noticeable lack of drones capable of being flown beyond visual line of sight (BVLOS) along the Belgium and French coast. The aircraft used by the UK Border Force and HM Coastguard include a Beechcraft King Air, a Piper Navajo, a Tekever AR5B drone and, occasionally, the smaller Tekever AR3A drone which, together, patrol that part of the English Channel north of the median line between the UK and France.

A third, large aircraft used by Frontex to support the French Gendarmerie and Police Aux Frontiere (Border Police) to counter the flow of migrants across the English Channel is a Dornier 328 belonging to the Dutch contractor EASP Air.

NEW LEGISLATION

Now, with migrants also arriving from Ukraine there's an urgent need to redouble the effort to permit but, at the same time, control legitimate migration. Simply wishing to live in another country, with the prospect of a better lifestyle, does not necessarily make a person a refugee, or an asylum seeker, either. In the future, both manned aircraft and drones will have a crucial part to play to counter the anticipated surge of migrants wishing to enter the UK without permission by sea in small boats, but so will new legislation; the UK *Nationality and Borders Bill* which is due to become law this year. Nevertheless, many aircraft are, for a variety of reasons including size and speed, less suitable than others. As the Royal Air Force found out when it deployed a large Airbus A400M Atlas transport aircraft to patrol the English Channel in August 2020 with the crew carrying no more than a pair of stabilised binoculars!

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Would a larger number of small 'spotter' aircraft, typically the Saab T-17 Supporter of the RDAF and RNAF, or the ubiquitous Cessna 172 Skyhawk, prove to have more utility and be more successful at detecting and deterring migrants hoping to cross the English Channel in inflatable boats than just one, daily flight by a large 'blue water' maritime patrol aircraft?

CONCLUSION

A small fleet of light utility aircraft, typically the ubiquitous Cessna 172 Skyhawk, or the Saab T-17 Supporter, currently flown by the Royal Danish Air Force (RDAF) and the Royal Norwegian Air Force (RNAF), would, in this case, have more utility for a mission that requires 'persistent surveillance' (together with a policy of 'detect and deter') than one large maritime patrol aircraft flying just one mission, for a few hours, each day. A small 'spotter' aircraft flying 'low and slow' over the beaches of northern France would provide a more proportionate, as well as a better response to migrants attempting to cross the English Channel in inflatable boats. The crew, pilot and observer, would, from their aerial vantage point, target and then direct land and sea assets to those secluded beaches favoured by the people smugglers, much the same as the RAF's AOP Squadrons did in WW2, flying the Taylorcraft Auster.

Many experienced airmen believe that light aircraft patrolling the beaches of Belgium and norther France would be both more successful and, at the same time, be a more cost-effective option than using large maritime patrol aircraft. Moreover, how many more migrants will be permitted to cross the English Channel in small boats before this route is closed, permanently? More to the point, will the new legislation, the UK *Nationality and Borders Bill* make a significant difference and will, as highlighted by the Defence Select Committee, the French Government ever provide the cooperation which is so very obviously lacking? Or will the British Home Office look back on another year when the numbers of migrants crossing the English Channel has continued its upward trajectory?

To date, the Home Secretary, The Rt Hon Priti Patel MP, together with her colleagues at the Home Office and in the UK Border Force, have turned a 'deaf ear' to those wishing to provide good advice and practical support. Some of whom, like the author, have experience of the US Civil Air Patrol, together with the US Coast Guard Auxiliary (Air). These 2 organisations, one an auxiliary of the US Air Force, the other an auxiliary of the US Coast Guard, both use light aircraft, typically the Cessna 172 and Cessna 182, to complete both search and rescue, as well as Homeland Security missions.

Note:

1. The author, the former Royal Air Force maritime patrol captain, Tony Cowan is credited with the longest operational flight by a BAe Nimrod, with Crew 7, No 201 Squadron, during the Falklands conflict. He is also a former police and air ambulance pilot, a Fellow of the Royal Institute of Navigation and a Churchill Fellow.
2. 'Operation Isotrope: the use of the military to counter migrant crossings.' HC 1069. Published 11 March 2022.
3. 'Above the Battle' by Ronald Lyell Munro. ISBN 978 1 47387 275 2.

The Portland SAR base, in the shadow of Portland Castle, closed down as part of the UK Coastguard SAR operations years ago. It continues today as a training resource operated by HeliOperations a commercial operator mainly focussed on supporting Westland Sea King training and support but with clear aspirations to widen its future market penetration.

The heliport has been in continuous use supporting helicopter operations for over 60 years. The site was commissioned as a Royal Navy Helicopter Station in April 1959. It became one of the busiest helicopter stations in the world, operating 24 hours and with as many as 30 aircraft present any one time.

In terms of buildings much has changed with even the original control tower being converted into private residential use. The Naval Base was closed from 1993 and the Air Station closed as a Royal Navy facility in 1999. The current heliport is just a small section of the original Naval Air Station, hence original features finding themselves repurposed as housing.

Between 1999 and 2017 the site was operated by the Maritime and Coastguard Agency as a Search and Rescue (SAR) helicopter base but following the rationalisation of the UK's SAR provision the site was purchased by HeliOperations in 2017.

The transition coincided with the withdrawal from operational service of the Westland Sea King from across the world. Although it was a fairly fast process in the British services, for others it was slower and left countries with a training gap that needed servicing. For smaller users of the Sea King, it had paid to rely upon Britain to supply the support but that fell increasingly to the manufacturer, and it was expensive.

HeliOperations drew in pilots, rear crew and maintainers drawn largely from ex-military personnel skilled in operating the Sea King aircraft, younger local individuals and companies provide other services. They bought a fleet of surplus naval and RAF Sea King helicopters to provide a source of aircraft and spares.

As a smaller, less costly, operation HeliOperations' were able to step into offer training for nations at a more reasonable price and they bought into the existing infrastructure to provide the service. The initial and current focus is the delivery of Search and Rescue (SAR) pilot training to the Federal German Navy (FGN) using Sea King Mark 5 aircraft, formerly operated by the Royal Navy. They provide representative training for students to allow them to operate their own Sea King Mark 41s in Germany, providing SAR cover, principally over the North and Baltic Sea, which will include

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Portland HeliOps©PAR

areas where UK military aircraft operate. The aircraft used remain military registered and activity audited by the Central Flying School (CFS) & Regulated by the Military Aviation Authority (MAA). Other arrangements are in place for other nations including India, Norway and Pakistan.

HeliOperations owns the majority of the potentially operational UK MOD's Sea King airframes, engines and other major rotables. All of the stored equipment was transferred with intact airworthiness provenance. The eight HAR Mk 7 aircraft have an average of 50% of life left and are 100% complete in terms of spares recovery. At the moment no-one envisages a need for these airframes to be returned to service and they will eventually transition to become museum pieces.

None of the existing contracts are expected to have a particularly long life, both Germany and Norway are weaning themselves off the Sea King on to NH-90, although that aircraft type has issues. As a result, the company is evolving new strategies and bidding on further SAR and other contracts that draw upon their skillsets, most are a long way from the big Westland helicopter. Forward plans include new modern aircraft and additional buildings on site – outline planning permission was sought and granted late last year for a new hangar

When it was a UK civil SAR base what is now the main hangar was used by CHC. In recent months that has been reconfigured internally to add offices, classrooms and stores to better serve the current and projected needs for the Portland based business.

The company operates two other bases, one in Cornwall is located within RNAS Culdrose, with a Sea King simulator in a stand-alone building. When they were setting up their commercial model, they managed to buy previously unused time slots on the Navy facility. As the Sea King left service (the Navy replaced it with the Merlin) it became surplus to their needs and in late 2018 HeliOps took over ownership of the facility and to operate it in support of their international training schemes although it is 180 miles west and a long road journey.

Much closer to hand is the third base at Somerton where in a 45,000 Sq. Ft warehouse & Maintenance facility the Sea King airframes and spare parts are stored, and maintenance undertaken. At Portland itself three of the Sea King's are maintained to flight standard to meet operational needs. Typically, this places one machine in use with the other two in maintenance.

Just to inject a current and topical subject, one of their lines of research is focussed on BVLOS drones. The nearby waters of the English Channel have existing restricted flight zones over them and that will greatly assist any practical work they need to undertake in that marketplace.


Future Plans for Portland ©HeliOps

FUTURE EVENTS

6-8 June 2022 PAvCon Europe Police Aviation Conference, Austria.
The planning and organisation of this event is going well. True there are war clouds way over the horizon that may make some potential visitors nervous about attending, but so far that has merely left them deferring final travel decisions and maybe adding something with armour plate to the hire car options.
The conference programme addresses such as mobile phones being used to find survivors under snow drifts that is appropriate with the backdrop of Austria but of course snow is now required, this type of technology can find people pretty much everywhere as has been poignantly demonstrated recently in the Ukraine. There will be an air demonstration by the Austrian Police, live outside demonstrations of loudspeakers, items on CRM, back seat crew training, flight safety and accident survival, ice rescue and how to design your future police aircraft. Currently attendees will be coming across Europe and the USA. As the COVID situation settles we may yet see the return of officers from the Antipodes.
The Exhibition area is filling well, with well over half of the current target of 40 exhibitors already in place. I expect a mild scramble to confirm attendance this month but if it slips into May it will not be a problem.
The only potential problem for exhibitors is space for a display area. It is finite and some may well be obliged to attend without the option to have displays.
The event is free to all airborne emergency services fliers – subject to pre-booking this month. The funding will as usual come from the 40-45 exhibitors and event sponsors including generous support from two leading Italian companies FlySight and Leonardo.
The basic package is UK Pounds £1,300 for and exhibitor space or £350 for individual conference/ exhibitor attendees.
Details of the event are on-line at www.pavconeurope.eu

2022 Heli-Expo Dallas, a selection of airborne emergency services images of exhibits ©Alan Norris

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