Police Aviation News

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CAYMAN ISLANDS EC135 REPORT
US COAST GUARD PLAN 50
IRISH HEMS IN DIFFICULTY
JAPAN OLYMPICS 2020
FLAMES OVER AUSTRALIA
NEW EVENT IN COLOGNE

EDITORIAL

One day into the New World that is a United Kingdom that is nominally free of the European Union there might be an expectation that there would be general dancing in the streets and much flag waving. Well it seems that, but for the odd pocket of excess, life goes on as normal until the real deal is done at the end of this year. I expect that no-one really trusts any politician to get it right at all, never mind on time, so life goes on. As a supporter of Brexit the editor, Police Aviation News and PAvCon Europe, will continue serving the needs and aspirations of the airborne emergency services industry across the world – and Europe. I do not expect any period of the transition to be visible. For years now the police across Europe have welcomed the unique PAvCon conference event to their countries, and occasionally to hosting within their establishments. The Bundespolizei headquarters building in central Berlin hosts this year's event. Even without the modest award afforded the editor some years back in Munich, the new venue is itself seen as a rare and precious honour that is also appreciated by all the well-informed attendees currently signing up for the event.

Further thanks from the editor to the Helicopter Association International for the recent Law Enforcement Award, sponsored by MD Helicopters, and the Safety award from Airborne Public Safety Association last summer, again sponsored by MD Helicopters. After two decades of writing the newsletter and setting up the forum that is the leading European police aviation conference it is gratifying to receive recognition from peers in the United States as well as Europe.

Bryn Elliott

LAW ENFORCEMENT

CAYMAN ISLANDS

RCIPS: An AAIB report has now been published on the accident that took the 20-years-old Cayman Islands Police Service Eurocopter EC135T1 VP-CPS out of service as beyond economical repair.



Underlining the error of some pundits presumption that this accident was pilot error, this report concludes that the actual cause was mechanical failure. The longitudinal control of the helicopter was lost at low level, due to a tie bar within a main rotor actuator fracturing. This fracture was caused by the reduction in area of the tie bar through the propagation of a crack initiated by pitting corrosion. It is highly probable that the corrosion pits were caused by the accumulation of salt moisture in the end of the actuator, which had penetrated into the actuator through a gap.

EASA mandated an Alert Service Bulletin to operators to inspect the main rotor actuators to look for evidence of tie bar corrosion, or the time in service exceeds a defined period, then the tie bar is to be replaced. A review of the actuator design has been initiated with the equipment supplier to identify changes that could be made to prevent moisture ingress and a corrosion-initiated failure of the tie bar. The full report is on the UK AAIB web site.

COVER: — Anodyne Electronics Manufacturing Corp. (AEM), a subsidiary of Structural Monitoring Systems Plc. was selected to supply the loudspeaker systems for seven new Sikorsky S-70i Firehawk helicopters, three of which were delivered to California in December. United Rotorcraft and Sikorsky selected AEM's LS1320 loudspeaker system to provide air-to-ground communication for the Department of Forestry and Fire Protection (Cal Fire), the Los Angeles County Fire Department (LACoFD) and the City of San Diego Fire-Rescue Department, with more Firehawk systems on order.

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The RCIPS are looking for an additional experienced H145 pilot for their Air Operations Unit in the Cayman Islands. They now operate two H145's and the pilot workload is now greater than previously.

LUXEMBOURG

POLICE/DIRECTORATE OF DEFENCE: The second of two H145M helicopters acquired by the NATO Support and Procurement Agency on behalf of the Luxembourg Directorate of Defence has been delivered to the country. The first helicopter, delivered in November, has reached Initial Operational Capability ahead of schedule.

Both helicopters will be based at Luxembourg Airport, and will be initially operated by the police to conduct law enforcement, surveillance, and search and rescue missions. In addition, the configuration of the helicopters will allow the execution of military operations in the future.

The fleet is expected to reach Full Operational Capability by 1 January 2021.

NETHERLANDS

POLICE: Last August the Politie Nederland put out a request for information (RFI) relating to a Helmet mounted display system (HMDS) for the helicopters of the Dutch Police.

The police are investigating the possible procurement for the supply and integration of Helmet mounted display systems, to be used in both types in use with the Dutch Police. The air support unit operates six Airbus EC135 P2+ and three Leonardo AW139. By means of this RFI the Police intends to obtain answers to a number of questions from the contractors in the market, so that on this basis, it can position the possible procurement better in the market. In addition, it tries to reach contractors in order to interest them and encourage them to contribute ideas.

Although this process was hoping to lead to a tender in January it still remains in RFI status. [TED 371733]

Meanwhile the latest edition of the Leonardo AW139 for the police, PH-PX, has finished its preparation for service at Babcock in Staverton in the United Kingdom and headed home to Amsterdam without police markings.



SOUTH AFRICA

CAPE TOWN: Air support across South Africa is vested in the aircraft and helicopters of the South Africa Police Service (SAPS) but on occasion additional local resources are required.

During late December the City of Cape Town brought in a Bell 206B JetRanger III helicopter, ZT-REJ, to enhance beach safety at a time when the local populace was boosted by increasing visitors. The Bell was used to take Safety and Security staff to inspect beaches including Muizenberg, Strandfontein, Mnandi, and Strand along the False Bay coast.



It's a pilot project which the city embarked on at the beginning of December 2019 to support beach safety officials, Metro police and law enforcement officers patrolling the sea edge and the roads leading to beaches from above.

Not only did the 'eye in the sky' provide information about traffic patterns around the city, it also facilitated the detection of various other incidents. Car accidents and broken-down vehicles on major routes, a land invasion, fires, a kite surfer in distress, and fighting on beaches are but a few of the events detected by the helicopter patrol system.

After proving itself to be very useful over the festive season, the City is considering the permanent implementation of the helicopter patrol. [Bardien / Facebook]



UNITED KINDOM

NPAS: The original seven aircraft EC135T2 upgrade contract undertaken by Babcock Onshore Design and Completions at Staverton, Gloucestershire has been completed for NPAS.

The project was to upgrade a range of EC135T2 helicopters that, whilst nominally being the same, had been ordered by a range of different police forces and therefore had many disparate equipment fits. Even the belly mounted equipment bays associated with the high skid landing gear favoured at the time were individual to each of the aircraft, designed and constructed by McAlpine Helicopters to meet the disparate customers' requirements. In taking over the airframes NPAS needed to overcome maintenance and crew training issues that the differences presented.

The contract was to take each of these different aircraft and bring them together in a standard form more suited to the new owner and central maintainer. The first aircraft was completed and presented to the world at the October 2015 Helitech Show in London. Over the subsequent four years one aircraft at a time was withdrawn from service throughout the programme and each was re-registered to a series G-POL* on return to service.

Other than the first airframe, NPAS treated each conversion in a low-key manner with little publicity and even the final announcement on the completion of the contract was simply an announcement on Babcock social media.

"Congratulations to the Design and Completions team on completing a major multi-year programme of work for NPAS. As GPOLJ was pushed out of the hangar at Staverton it became the seventh EC135 handed back to NPAS by the Babcock team.

"The project has seen each aircraft receive a series of in-depth and complex upgrades including custom designed on-board workstations and new integrated technologies, making the NPAS fleet some of the most advanced police support aircraft in the world."



Ed: The contract may be completed but it is believed that an eighth aircraft has now entered the process under a new contract at Oxford. The eighth is G-XMII recently on lease to the police in Norway, it will become G-POLU. Last month's item that stated it was being upgraded at Staverton was incorrect. After this process this still leaves NPAS maintainers with managing two main models of EC135, the EC135P2 and the EC135T2, and the EC145. That leaves one EC135P2, G-EMID that is neither fish nor fowl in that it is still on high skids.

Currently G-EMID acts as a spare airframe, typically standing in for the EC145 at Exeter. Until the former Essex airframe [G-ESEX/G-POL*] came back into circulation G-EMID lived at Lippitts so it seems to have been assumed by NPAS planners to have some affiliation with the 145s. Question now is will they seek to put EMID on low skids On the wider scene rumours continue to abound. In the past couple of months I have successively heard that the unit in Birmingham is to close, then that the unit at Husbands Bosworth had to get the chop and finally that the helicopter based at Hawarden near Chester was to be transferred to Barton, Manchester. The NPAS world just seems steeped in negativity.

The only positive report I can offer is that the fixed wing thing flies. Months ago, I laid down a gauntlet to the NPAS fixed wing to fly over my office. Well it happened, at 1428hrs on January 10, by sheer chance, I was in my office and a single NPAS P68R curved around the town and headed back up north from whence it came. I understand that proving flights continue but that the availability of pilots remains a significant issue.



NORTH WEALD: When the people of North Weald was delivered of the newly relocated London unit from Lippitts Hill to the outside world they were welcomed with open arms—but there were many local people with misgivings. Thanks to the 25-year lease the arrival of the unit put off the day that the airfield would be covered in housing estates and maintained a long history of aeronautical activity, but what about the noise? The airfield had once again become a 24/7 flying field and helicopters are noisy machines – as the people at Lippitts Hill could attest from decades of noise. All was not as rosy as the politicians were telling it and the occasional sleepless interludes were a growing problem.

Well, all that has changed since an incident early last month. Burglaries were reported in the village and police enquiries on the ground were instantly boosted by the presence of the police helicopters. Now I guess the NPAS crews can never do anything wrong ... "North Wealds Own" ... for a while at least. Ed: Having lived under the locally based cover of the same helicopters I can attest to the worth of true local air cover and he cosy feeling it engenders. Unfortunately, this is where NPAS failed to understand the importance of local people taking ownership of their own police air support. It is still plain to see in the charity air ambulances where people identify with their local emergency service and willingly pay massive amounts to support it.

Forty years ago, I originally worked under the umbrella of aircraft flying from Lippitts Hill – just down the road from my workplace and home – and took ownership of the sense of safety (real or spurious) it gave me when lone working. The operational control of the resource was at Lippitts Hill, a control room overlooking 'Downtown' London and readily accessible to local officers wishing to experience life at the base. There was always a cup of tea or coffee on offer and occasionally a flight. It was a close relationship with real people and the air crew usually had a sense of who they were hovering above because they had regularly gone out to promote their special kind of policing at the police stations they served. When the Bell 222s and later the AS355s inevitably broke off for fuel, for those on the ground the sense of being alone again was very real. It was real camaraderie.

Decades later, long retired, even sitting in my office I can still sense the differences between having locally controlled, local air support one mile away at Lippitts Hill and that of the unapproachable blue tent five miles away at North Weald. It no longer has a view on its prime area of operations and is totally reliant on commands from on high in Wakefield. Having the Control Room for NPAS located 200 miles north never made sense to anyone with an ounce of aviation policing in them.

NPAS are currently advertising for four Line Pilot's at NPAS North Weald, an application process that will close on 23 February 2020.

The minimum requirements to be considered for the role are Commercial Pilot's Licence (Helicopter) with RT Licence and Class 1 Medical (unrestricted); a minimum of 1,500 hours total helicopter flying time which must include 50 hours flying at night including 20 hours PIC at night, 500 hours PIC overland under VMC and significant low flying experience. Applicants will also need to demonstrate instrument flying experience [rather than certification].

Pilots operate a fixed 4 on 4 off (2 days, 2 nights), 12-hour roster pattern offering a stable working routine and the ability to plan many months ahead. Pilots operate in accordance with the approved Flight Time Limitation (FTL). Have 19 shifts annual leave per year (19 x 12hr shifts).



POLICE SCOTLAND: Last month PAN ran an item on how the police helicopter was undertaking less tasks than in previous years and ascribing that drop to the use of drones newly introduced in the region.

Police Scotland have requested that I clarify that the drop in number of sorties was incidental and not directly related to the availability of the drones. A Freedom of Information request showed that last year the aircraft have been dispatched on average 133 times per month, down from 153 per month in 2018. The PS Communications department point out that drones are mainly deployed in remote areas on the north and do not affect helicopter operations in the south west of Scotland. In addition, they think it is misleading to mention safety concerns. There is nothing to suggest this is the case, no safety concerns have been raised. To suggest the helicopter is being used less because of safety concerns is factually inaccurate. [Police Scotland].

UNITED STATES

FEDERAL: The US Coast Guard's [USCG] Airbus MH-65D Dolphin helicopter upgrade programme began full-rate production on 21 November last year. In it the USCG is to convert 22 examples of the MH-65D per year into the "E" configuration. The plans are to convert all 98 examples of MH-65 by fiscal year 2024.

The work commenced at the USCG Aviation Logistics Center in Elizabeth City, North Carolina. One air-frame entered the process in November, two in December and one in early January.

The MH-65D is the US Coast Guard's short-range utility helicopter. It is best known for its role as a search and rescue aircraft, but also is used for law enforcement and homeland security missions.

The USCG has been upgrading its fleet of MH-65s since 2007, when helicopter turboshafts were replaced with the Turbomeca Arriel 2C2-CG, increasing power by 40%. Later, the helicopters were upgraded with machine guns and the ability to land aboard US Coast Guard Cutters. The "E" configuration changes are the last phase of the service's upgrade plan.



"E" configuration upgrades are focused on the aircraft's avionics, including improvements to its automatic flight control system and a new digital flight deck with a Common Avionics Architecture System that is also found in the USCG Sikorsky MH-60 Jayhawk and H-60 variants in the Department of Defense's inventory.



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The work includes putting the MH-65 through a Service Life Extension programme to increase the service life of the helicopter by 10,000 flight hours, to a total of 30,000 flight hours. This work includes replacing five major structure components: the nine-degree frame, canopy, center console floor assembly, floor-boards and side panels. [USCG/Flight]

Ed: An interesting evolution with the MH-65 Dolphin, basically an Americanized Aerospatiale AS365 Dauphin, entering service with the USCG in the mid-1980's and it will now continue in service until at least 2035, possibly 2039. Illustrating that the military are more than happy to regularly upgrade their aircraft and keep them in service for 50 years, where others are keen to change their aircraft, especially helicopters, every 10 years!

NEW MEXICO: The State Police opened its hangar facility at Double Eagle Airport, on the west side of Albuquerque last month. The new H145 helicopter was present.

The facility has been named after a fallen police officer, Sergeant Andrew F Tingwall, the pilot of the first AW109 operated by the police. It was lost during a SAR operation a decade ago. In June 2009 the helicopter went missing shortly after its crew rescued a lost female hiker, university student Megumi Yamamoto, in the Santa Fe Ski Area. The last transmission from the Sgt. Tingwall stated they had flown into the mountain. A spotter, 29-year-old state patrolman Wesley Cox survived but was suffering from extreme hypothermia. Tingwall and the girl died. [NMSP/PAR]



PENNSYLVANIA: Dakota Air Parts is offering two Bell 206B3 JetRanger's for outright sale. These aircraft, formerly operated by the Pennsylvania State Police, are N176P a 1992 Bell 206B3 with a total airframe time of 9,509 and N192P a 1995 Bell 206B3 with a total time of 9158. Both aircraft have many optional mission equipment and STC's installed. Throughout their service life they have flown only around 400 hours annually.

TEXAS: Another new facility brought into service last month is that used by the Dallas Police Department. The unit operates Bell 206 helicopter's [images from social media]













AIR AMBULANCE

EUROPE

DRF: In a total of 40,738 missions, the crews of the 35 HEMS bases in Germany, Austria and Liechtenstein as well as the ambulance flight operations provided medical assistance to seriously ill or injured people last year.

The emergency crews were particularly frequently called to provide medical care for severe issues, mainly heart attacks and neurological incidents. Most of the accident victims treated were injured in traffic accidents or falls.

During the year the fleet received three new H 135 and H 145 helicopters, and a new Lear 35 A ambulance jet.

DRF is the European leader when it comes to night-time air rescue operations, with the most flying hours in the dark. Last year 22% of the deployments at these HEMS bases took place during the night hours.

The DRF Group with its headquarters in Filderstadt is one of the largest air rescue organisations in Europe. The crews at





13 of the 35 stations in Germany, Austria and Liechtenstein are on standby 24/7, and seven HEMS bases provide helicopters with rescue winches.

The Austrian ARA Flugrettung with two HEMS bases was integrated into the DRF Group in 2001, and the Northern HeliCopter GmbH (NHC), which provides air and water rescue services, was acquired in 2019. Furthermore, DRF Luftrettung is involved in the AP³ Luftrettung network at a HEMS base in Balzers/ Liechtenstein. In addition, DRF Luftrettung also brings back patients from abroad with its own ambulance aircraft.

For the continuous expansion of its vitally important tasks, the non-profit air rescue organisation depends on the financial support by well over 400,000 sponsors. [DRF]

IRELAND

AIR CORPS: An internal Department of Defence briefing has warned that there would be significant restrictions on emergency helicopter services because the air corps was not in a position to provide the service for four days each month in the early part of this year.

The Coast Guard would be tasked with providing "reserve cover" for the stoppages to allow the air corps four months to deal with "HR challenges" and "a reduction in personnel numbers".

The Coast Guard Sikorsky S-92 helicopters were based along the coast rather than the central location of the air corps in Athlone and the shift pattern of the contracted service tended to result in less availability in the mornings. In terms of EMS coverage, the crews included less skilled paramedics. The single Irish



Community Rapid Response (ICRR) helicopter, an AW109, was similarly based in a different location (Cork), offered shorter range and faced longer transit times to the likely area of need.

The air corps provide both the air ambulance and police pilots and have well-documented ongoing HR challenges brought about by fall-out from the world pilot shortage. The air corps has pilots trained and certified to EASA standards and this exacerbates the situation in terms of pay and retention. The four-month stall in service is to allow the air corps to train staff to operate normally from March but sources suggest that this is not guaranteed. [Irish Examiner]

ICRR: With most charity air ambulances finding funding hard in the early days it should be no surprise that the newly established operation in the south of Ireland has hit problems. Less than six months after it was launched the ICRR air ambulance service in County Cork found itself at risk of being grounded as it entered 2020.

The operation based in Rathcoole near Mallow, began on July 30, 2019 and having completed nearly 250 missions for the National Ambulance Service they were busier than anticipated. The air ambulance had flown 17 missions more each month than planned and each mission has drawn additional resources from the funds collected from public donations.

After trying unsuccessfully to raise €400,000 by crowd funding the operation scaled back its flight operations to just five days a week to stretch out its current funds. The problem has not gone away, just receded.

ICRR Operations Manager Ruth Bruton stated that the operation had planned for 350 missions in its first 12 months based on mission figure from the Air Corps which carried out 310 missions in 2018. In the event in a little over five months, the operation flew over 270 missions, raising the actual annual rate of operations to something like 600.

Ed: ICRR based its fundraising model on those of the United Kingdom. The British versions are well-supported by the public and generally financially 'comfortable' but they each have a far larger population to draw from when compared to the Eire version. The population in Eire is under 5 million, the same small core of taxpayers having to also fund the IAC and the Coastguard.

ICRR appealed to the public to help them in meeting this shortfall by finding an additional €400,000. They marketed it as an immediate problem, but it remains one of long-term sustainability. The original agreement with the Government was that the community would fund the running of the aircraft at an annual rate of €1.5M, leaving the Government to fund medical staff.

In the past numerous start-up air ambulances have set up alerts like this as a publicity exercise (and it usually worked in their favour), but this appears to be something much more terminal. The financial model was clearly strained by flying more missions than the budget allowed for and in further crippled by volunteering to use a second helicopter and pilot to fill in where the Air Corps AW139 air ambulance service was unable to meet its own commitments four days a month. Too much, too soon. This to be set against an operation that had staff members that were already talking of expansion long before it had even secured adequate funding for its single helicopter. Air ambulances are new to Ireland, and it was never a



guaranteed 24/7 service. The expectations of the fundraisers are outrunning capability and funds. On standard performance they have no real expectation of ever moving to a multi-airframe operation.

It is thought that the Health Minister Simon Harris has told the HSE to save the Irish Community Rapid Response air ambulance even as it is clear that the charity is struggling to get the public to donate the massive amount of money it needs to pay for the service. The service-level agreement the charity signed with the government states that if ICRR runs out of cash, they will not pick up the tab.

It has also emerged that in order to get the agreement signed in the first place, the charity told health chiefs it had wealthy "benefactors" who would fund the air ambulance. The latest fundraiser has proved a dismal failure suggesting that these fund givers actually have a limit on their giving.

The population of EU member Eire is the same as Scotland (Which wishes to divorce from the UK and become an EU member in its own right).

Clearly Eire is struggling to finance each of the emergency air services from a modest taxpayer base. The IAC also supply pilots to the Garda, are having to use relatively old pilots of Lt Col rank to keep the assets in the air but are struggling with retaining staff in the face of commercial pressures from the airlines and cannot do fill the gaps four days a month at the moment.

It is notable that Scotland with a similar population to Eire can afford to have two NHS funded helicopters and two fixed wing and are also funding two £2M pa charity air ambulances from just 5M people. Scotland has other invisible earnings including an effective subsidy funded by the rest of the United Kingdom known as the Barnett formula. It permits the UK Treasury to support the economies of Northern Ireland, Wales and Scotland at a level far higher than the rest of the United Kingdom.

JAPAN

OLYMPICS: This year Tokyo, Japan hosts the Olympics between July 24 and August 9, and the Paralympics from August 25 to September 6. All of the dates fall within Japan's hottest season and it is ex-



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pected that even without injuries and accidents there will be a massive call of medical services simply to deal with heat exhaustion. The local Olympic organisation aims to have sufficient ambulances standing by at athletic facilities and elsewhere.

The fire department has a total of about 260 ambulances. Typically, each new fleet is taken out of service after six years, with older ambulances kept in reserve for some time before being scrapped.

Japan is perceived as a safe and upstanding destination - ranked as 'low risk' by insurance and risk management firms – but with the Olympic Games officials are preparing for a myriad of potential risks, ranging from simple collapses through cyberattacks to unpredictable natural disasters including typhoons and earthquakes.

Tokyo Metro is currently ensuring that watertight doors are in place and serviceable at around 400 entrances to the subway system to control potential flooding.

It is said that there is concern about the resilience of their air ambulance resources and there is a plan to improve the existing fleet but there are no specific pointers.

Unlike air ambulances in western countries [Europe/USA] there have been significant restrictions on where and how the air ambulances can land. The current permissions system is nearer the restrictions found in China than those in the west and it does affect flexibility.

At the moment the public face of air ambulances is the EMS equipped Dr Heli, this being bolstered by less sophisticated police aircraft and state/prefecture disaster airframes most of which feature poor equipment and specific staff medical training. [All detail from PAvCon sources and non-attributable]

UNITED KINGDOM

NATIONAL: The Association of Air Ambulances (AAA) trade membership body and national charity, Air Ambulances UK, merged with effect from January 1, 2020.

The new single nationwide organisation will support the UK's air ambulance sector and will provide a national voice and platform on behalf of the air ambulance community. The organisation will retain the charitable status and name of Air Ambulances UK.



The merger follows a joint review of governance and effectiveness with extensive stakeholder consultation across the two organisations looking at key areas of work, including: Government policy and lobbying, operational and clinical development, national fundraising partnerships, engagement and commercial investment.

Supporting, representing and advocating the work of the UK's 21 air ambulance charities and the wider air ambulance community, over the coming months the organisation will appoint a new Chair and CEO to drive forward its plans for with innovation, energy and momentum.



Liz Campbell, Air Ambulances UK Interim Chair, said: "This is an exciting time for the UK's air ambulance sector, as we look forward to a new era delivering greater benefits and impact with the overall mission of saving more lives together in 2020 and beyond." [AAUK]

Ed: Historically, the "National Lead" organisation for air ambulances in the UK has consistently been something of a lame duck without a clear income stream. Until this latest development the prime organisation has not been a charity and found many difficulties in funding itself. It remains to be seen whether the new set up resolves the funding issues.

The first attempt at creating a national body was when the Automobile Association [AA] teamed up with the National Air Ambulance Service [NAAS] to deliver start-up funds sourced by the AA to the new charity air ambulances in the late 1990s. That sought to reflect the format of HEMS funding in Germany [ADAC] and Austria [OAMTC] in having a motoring club as a lead.

The AA were reported to be very interested in air ambulances and promised to put forward £25M of the £30M required. The planned financing fitted well with their "Fourth Emergency Service" marketing. It was to prove a wildly optimistic promise and came with many restrictions including carrying the signage of the sponsor. At the time badge carrying was unheard of and it did not go down well. Times change and many aircraft bear several sponsorship badges these days. The stated intention that by 2002 the AA would steer the whole of Britain to a position where daylight cover, 365 days a year, by dedicated air ambulance services was enjoyed by all areas. It was not to be their place in history.

In 2003 NAAAS became the Air Ambulance Foundation. It was very short lived, it closed in April 2004 having notably failed to secure a great deal of the promised "£10M in three years" from corporate support and national fundraising. The grip of the AA was cast off, but each successive new organisation had notably failed to make its mark.



So far, after a little over a decade, the AAA proved the most long lasting. It was however a difficult organisation to steer through the minefield of charity law and commercial needs as the National Director (CEO) Clive Dickin found during his six years in post between 2012 and 2018. Whether the commercial aims of the old AAA will sit well with the charity status of the merged entity as overseen by the Charity Commission remains to be seen.

ANNIVERSARIES: Thirty years ago, UK Charity Air Ambulances were being created, happily most survived and indeed prospered and today they are both revered and well-funded by the public and the government of the day.

The **Kent Air Ambulance** – now known as the Kent, Surrey and Sussex – had a shaky start but again survived to team up with its neighbouring counties. Initially set up in 1990 to use an AS355 Squirrel heli-



copter leased to it by McAlpine Helicopters it moved to flying a similar Squirrel leased from Medical Aviation Service (part of the Specialist Aviation Services Group) based in Staverton, a company it remains loyal to decades later.

The founder of the Kent Air Ambulance was a lady with a great deal of medical knowledge but little knowledge of helicopters. She states she will never get over a 1998 helicopter crash in which all three crew members were killed in their AS355. The former chief executive Kate Chivers said the pilot and two paramedics who died near Rochester would never be forgotten.

The Squirrel hit wires as it returned to its base at Rochester Airport and plunged to the ground. A memorial to the crew was set up in the Kentish hills above the base. Within months the unit was back in business. Two years later they took delivery of a new MD902 Explorer a type they were to be closely associated with until the recent delivery of the Leonardo AW169. Rochester Airport was then under threat, but Kate had already arranged a move from the airport to a new facility in Marden, Kent that effectively circumvented that. The closure of the airport failed to materialise which was fortunate as the new AW169 helicopters could not continue at Marden and moved back into Rochester Airport recently.

Meanwhile Kate Chivers retired but retained strong links with what is now Kent Surrey and Sussex AA and finds herself invited to most important change in 'her' charity. Furthermore, she continues to faithfully read her monthly edition of PAN to this day.

Another charity marking thirty years is **Wiltshire**. They were originally set up as a joint police air ambulance operation on playing fields located behind the police HQ for Wiltshire and only relatively recently were set up as an independent entity.

The idea for a joint emergency services helicopter came about in 1988, when a temporary helicopter hired by Wiltshire Police to use for its Stonehenge summer solstice operation was used to airlift a woman seriously injured in a road traffic collision to hospital.

A year later, the police hired a helicopter for an extended period of three months and invited Wiltshire Ambulance Service to provide a paramedic to be part of the trial. This successful experiment led to a full-time joint emergency services helicopter which first flew on March 15, 1990 from Wiltshire Police headquarters in Devizes.

This joint helicopter partnership came to an end in December 2014 with the establishment of the National Police Air Service. Effectively the new police entity forced the closure of the existing joint police air ambulances despite the local police in Wiltshire wishing to continue the service. Wiltshire Air Ambulance then became a stand-alone air ambulance and charity on January 9, 2015.

Wiltshire Air Ambulance pilots and paramedics have saved countless lives around the county over the last three decades and hope to do so for many more years to come. The service now relies wholly upon public subscription and fundraising. They receive millions of pounds a year in generous donations to keep its modern yellow and green Bell 429 helicopter up and running.

Wiltshire AA CEO David Philpott a senior executive who played a part in running air ambulance operations in Essex, Kent and London in the past, took the charity through the difficult transition period, He said: "The crews serving on Wiltshire Air Ambulance have saved a generation of people.

"As a result, those people have gone on to have children, welcome siblings, cousins, nephews and nieces into the world or become grandparents.

"Wiltshire Air Ambulance is part of the fabric of the county and the public understand the importance of our service.

"In our rural communities, the speed of our helicopter and the expertise of our pilots, specialist paramedics and doctors have made the difference between life and death.

"Throughout our existence, we have been funded by donations and we are truly thankful to everyone who has supported our charity. Every donation enables us to keep our lifesaving service operational.

"We've saved lives for 30 years and, with the help of our supporters, we want to be here to save the next generation."

For its anniversary year, Wiltshire Air Ambulance has planned a series of fundraising events to help meet its £3.75M annual operating costs. Other than one off grants, it receives no government funding or National Lottery grants.

EAST ANGLIA: After making an application to improve its facility at Norwich Airport in July 2019 the Norwich City Planning Department agreed the application with a few amendments in mid-November.

The former Sterling Helicopters Hangar 14 at Gambling Close on the edge of the airport is to receive an extension and recladding of the existing hangar and mezzanine floor, a new car parking area and landscaping. The alterations will facilitate 24-hour operations from the base. The operation has another base located at Cambridge Airport.

Sarah Atkins, of the East Anglian Air Ambulance Executive Team, said: "We're absolutely delighted that Norwich City Council have unanimously approved our application to extend and renovate our Norwich base. We've been working on this project for a long time as it is crucial in enabling us to realise our ambition of being operational by helicopter for 24 hours a day in the future. This will transform our operation and the level of care we will provide across the region.

"Getting the planning approved is a very important milestone and means we will be able to start pushing ahead with the new base build in early 2020. We're hugely grateful to all of our supporters who keep us airborne and have being instrumental in helping us raise the additional million pounds we will need each year to fund the extra flying hours."

[NCPD Ref. No: 19/01009/F]



Not a great deal has changed in the last three decades. The top image is of the first BO105 air ambulance operated by Sterling Helicopters in August 1996 and below the newest H145 outside the same doors. ©PAR/EAAA





GREAT NORTH: Although it has another newer airframe coming the GNAA seems wedded to the economics of operating the oldest air ambulance fleet in the UK. They have flown several types since operations started thirty-years ago but have firmed up on the AS365 with three in service. Since 2010 it has operated AS365N2 Dauphin G-GNAA built in 1991 with a total of just 4,533 hrs in May 2019. That is an average of 162 flying hours per year and overall not an aircraft that's been worked very hard.

LINCOLNSHIRE & NOTTINGHAMSHIRE: Last month PAN carried news of a plan to build a new facility, this month news that a generous donation of £69,000 from the HELP Appeal, new helipad lighting has recently been installed at three different landing sites frequently used by the crew at Lincs & Notts Air Ambulance. HELP is a charity dedicated to funding landing pads and helipads used by the emergency services.

The installation by FEC Heliports Worldwide Ltd of the new helipad lights will prove to be an invaluable addition for the crew on board the AW169 helicopter, who regularly use the landing sites located at the ambulance airbase at RAF Waddington as well as those at Fenland Airfield in South Lincolnshire, and Nottingham Airport (Tollerton). The new lights include an update in technology required for the wider use of Night Vision Goggles and the proposed 24/7 operations, pilot-controlled functionality, and the use of solar technology.

WALES: The Wales Air Ambulance Charity has launched a new campaign to fund a 24-hour helicopter operation. The charity currently operates 8am to 8pm seven days a week, the intention is to extend its operating hours at some point in 2020.

Established in 2001, the helicopter charity has responded to more than 30,000 missions in the 19 years it has served the Welsh public at an annual cost now put at £6.5M to support four helicopters at four bases in Llanelli, Cardiff, Welshpool and Caernarfon.

FIRE

AUSTRALIA

WILDFIRES: The impression given on news media in Europe that the whole of Australia is a blackened desert littered with carbonised tree stumps. A popular graphic looked like the continent had turned into a glowing cinder. Nothing could be further from the truth; it is a large continent and, thankfully, many areas remained totally free from the flames right into the period where it cooled and rain fell.

Yes, many scattered parts of the country have been devastated, lives and property lost, but the fires are an annual occurrence that rarely, if ever, encroach upon news-time in Europe. This year is very different, the devastation and extent of the fires was worse than usual and causing wider disruption. Driving the increased news coverage were stories that the flames were licking on the doorsteps in major conurbations, including Sydney.

Thankfully fire seasons are seasonal. This allows some of the aircraft used to fight the fires in the northern hemisphere summer to migrate south to help out in the southern hemisphere during their summer. As a result, both large and small fixed wing aircraft from Spain can be seen across the world firefighting across Europe and much further south. It is the same with helicopters of all sizes. The logistics of moving the short-range types is slightly more complex than the larger types derived from former military aircraft and airliners. Moving the smaller airframes provides basic business for the air cargo companies.

The large McDonnell-Douglas DC-10 Tankers, mainly owned and operated in the USA, have been used in Australia seasonally since at least 2016 but there are no reports of the even larger Boeing 747 being operated yet. NAFC list three DC-10-30's this season, Bomber 910 (N612AX), Bomber 911 (N17085), and Bomber 912 (N522AX).









The first and second images were taken at Albury (YMAY) on New Years' Day, 01/01/20. The first is of BAe146 Tanker C-GVFT (c/n E.2253) of Conair (Canada), landing after a mission to refill and go again, and a Lockheed L.382C, (EC-130Q) N130FF (c/n 382-4901) of Coulson (U.S.A.), taxying in to the fill-up area between missions. On January 23 another Lockheed C-130Q N134CG of Coulson Aviation crashed in a fatal accident near Cooma, NSW.

Below are images of two Australian aircraft fighting the fires pictured last year. The AT-802A VH-FZX(2) (c/n 802A-0612) of Field Air (Operations) P/L, Ballarat, parked up at Tocumwal (YTOC) in Southern NSW on October 23, 2019 with the fire-drop pod under the belly. The last is Bell 412EP VH-ESB (2) (c/n 36087) of Kestrel Aviation, parked up at Shepparton (YSHT) in Victoria, November 20. [all images via Stewart Kedar Air-Britain]





UNITED STATES

CALIFORNIA: Widespread power shutdowns helped make last year California's mildest fire season in eight years. Although downed power lines have caused many of the state's wildfire disasters, in much of California, it is still considered that more than 90% of the wildfires are started by people or their equipment. Neighbouring regions in the West have taken more aggressive steps to stop human ignitions of blazes on high-risk fire days.



SEARCH & RESCUE

INDIA

COAST GUARD: Indian Coast Guard aims to expand its aircraft inventory by acquiring 16 advanced light helicopters and fifty waterborne vessels to move forward plans to have 200 ships and 100 aircraft by 2025.

Coast Guard Director-General Krishnaswamy Natarajan told media attending the latest India-Japan Coast Guard Exercise that the service currently has 145 ships and 62 aircraft. There are 50 ships under construction in various Indian shipyards and 16 HAL advanced light helicopter Mark III in production. The first of the new order are expected to come online in March. [Express]

SOUTH KOREA

COAST GUARD: Korea Aerospace Industries has delivered two KUH-1 helicopters, a sub-type based on the Surion to the Korea Coast Guard. The police helicopters will be deployed to the East Sea and the Korea Coast Guard at Jeju Island.

The new helicopters have added a variety of advanced mission equipment to maintain maritime security to crack down on illegal fishing, search and rescue and prevent marine accidents. For three-dimensional surveillance, they are equipped with navigation radars that can automatically track up to 200 targets, electro-optic infrared cameras capable of 360-degree detection, equipment to identify locations of helicopters and ships, navigational rescue direction finders and external hoists. [Herald Corp.]

UNITED KINGDOM

MIGRANTS: Although it has yet to reach the numbers experienced in the southern flanks of Europe the total of migrants known to have attempted crossings of the busy English Channel in small boats in 2019 reached almost 1,900, with three more boats intercepted off the Kent coast as the year ended.

In December 2018 the Home Secretary Sajid David declared a 'major incident' after 138 migrants arrived in boats. During December 2019 more than double that number - 283 migrants - landed on the Kent and Sussex coasts facing mainland Europe. At least 1,892 have successfully crossed the Channel this year, according to research by the BBC, with a further 1,235 people have been intercepted by the French authorities during 2019.

The numbers remain a small fraction of the number crossing the Mediterranean to continental Europe — more than 100,000 last year, way down on the million recorded by the United Nations in 2015. In that sense, compared with the situation in the Mediterranean the crossings have been remarkably safe, a massive rescue effort was launched in August when Mitra Mehrad, aged 31, fell from a small boat off the coast of Kent and drowned. Her body was later found in Dutch waters and two men were subsequently jailed for manslaughter in France.

The notable differences are that the dead are known people and few enough to allow their names to be printed. All too often the Mediterranean deaths are simply anonymous bodies in the surf that some years exceeded the number of actually crossing to England. Perhaps there are others dying in the cold waters off England but, thankfully, we do not know of them.

Even those making landfall in Britain stand a chance of being returned to the mainland – over 120 people were sent back to European countries during 2019 – but the odds remain in their favour for them to stay.

Bridget Chapman, from the Kent Refugee Action Network, said it was an "extremely irresponsible statement," which "appears to be politically motivated and designed to whip up ill-feeling towards desperate people".

Ed: There are official figures and researchers figures but nobody seems to have an accurate figure for migrants crossing, or attempting to cross the English Channel in small, often overloaded boats. In its reporting, The Daily Telegraph gave a total of 2,358 for 2019 and 586 for 2018. The BBC offers up 3,127 for 2019 and the official British Government figure for 2018 is 562. Whichever figures are used there has been a significant increase in 2019 and with the doors now nominally closed the British may step up the

defence against migrants. They have all too few resources to do so. Even if they can be found and funded getting people to do the work is not an easy task. The recently elected Government are seeking thousands of new police as well as new doctors and nurses and there are simply not enough people out of employment to fill those kinds of numbers. One positive result of Brexit is high employment levels. The requirement therefore is to convince sufficient people to leave their current jobs to fill those posts. It is simply a big ask.

There is the volunteer sector but, except when it very occasionally suits them, officialdom does not like volunteers. They simply do not have enough regulars, a factor complicated by a misguided programme years ago when they turned away British born people in an effort to make each of their groups more inclusive and ethnically diverse. That National Police Chiefs led tactic largely failed. Those fitting the preferred demographics rejected the overtures even as the keen locals went away and did other stuff that does not involve restrictions on their lives and doing shift work.

Nevertheless, HM Coastguard relies heavily on its volunteer, auxiliary coastguards for cliff and mud rescue, as well a routine patrols at ground level. They operate extensively with the RNLI a charity primarily staffed by volunteers who are only made acceptable because they are ancient history and that alone seems to cloak their very volunteering in some sort of uneducated mystique.

It is perhaps only a small step from these volunteers to following the US example and forming a Coast-guard Auxiliary Air Unit with pilots flying their own aircraft to enhance border security with inexpensive volunteer flying of aerial patrols along a coastline with which they are familiar. It has already been done in training sorties just not as a sensible experiment. Not that most senior police officers and senior coast-guard officers even begin to understand the principles or that there is no real difference between volunteers in powerful RNLI sea boats and volunteers in aeroplanes. The biggest restriction lies in the perception of senior ranks. Mother told them about the historic RNLI but they missed the bit about Civil Air Patrol because it is relatively young!



Channel Patrol 2019: Langdon Stairs and the east end of Shakespeare Beach near Dover. As well as Dover Coastguard and the lighthouse at South Foreland. Taking from a Cessna 172 on the January 11, 2019.

There are several like-minded operations in the USA. The USAF operate the Civil Air Patrol, widely used in SAR flights using military own airframes. There is also AUXAIR, an Auxiliary operational programme associated to the US Coast Guard and organised on a district level rather than on a flotilla and division basis. AUXAIR aviators have varied aviation backgrounds and many have prior military experience. AUXAIR aviators volunteer their aircraft for use as facilities, just as surface operators volunteer their boats.

All Auxiliary aircraft meet strict U.S. Coast Guard and Federal Aviation Administration requirements. These aircraft are inspected annually per the Commandants instruction. These aircraft undertake many Coast Guard missions including SAR, port, waterway and coastal security and some transportation.





Also catching the eye of the media last month were these two widely published imaged of the Severn Bridge spanning the Bristol Channel and the effective border between southern England and Wales. They were captured by an NPAS helicopter.

Late in the evening of December 9, 2019 an unmanned aircraft appeared over the English Channel. The aviation website FlightAware showed the meandering track of the aircraft at an altitude of 240 metres off the county of Dover. After four hours the craft landed at Lydd Airport in Kent.



FlightAware labelled the flight under the tail number G-TEKV, a code that the Civil Aviation Authority (CAA) database registers as a 7.3m x 4.0m Tekever AR5 model manufactured by the Portuguese IT, defence and aerospace group. It is registered to their UK office. According to the BBC the primary mission was to monitor people attempting to cross the channel from France by boat.

Ed: The ill-fated light-weight BAE Systems Herti UAV and the South Coast Project of a decade ago predicted just this sort of scenario but it clearly was something ahead of its time. There was insufficient inertia in BAE, and they dropped Herti and did not continue along similar lines.

INDUSTRY

In words that are clearly couched in a fear they have it wrong EASA has guardedly started to ease the strict age limits for commercial pilots operating in the emergency services sector.

EASA set up a study to investigate the issues relating to raising the current age limitations for commercial air transport pilots (CAT). For single-pilot CAT operations the limiting threshold is the age of 60 and in multi-pilot CAT operations, pilots can continue to operate until the age of 65. These age limits were developed by the Agency without conducting a specific impact assessment on safety, health or social issues.

A recent study on the effects of ageing pilots on safety of helicopter flights (the emergency medical service - HEMS - operations) has heightened interest in the issue and some Member States have already been granted exemptions under Article 14.4 of Regulation (EC) No 216/2008 for commercial single-pilot operations for pilots over 60 in HEMS operations.

The scope of the study is considered to be too narrow to provide a complete risk assessment for increasing the current age limitations for pilots in commercial air transport (CAT).

A more systematic study is therefore required to extend the scope to the European level and to include pilots involved in different types of CAT operations.

There is now a recommendation that the age limit of CAT pilots flying single pilot operations from 60 years to the pilot's 65th birthday, providing that additional measures are taken.

This study has been carried out for the European Aviation Safety Agency by an external organization and expresses the opinion of the organization undertaking the study. It is provided for information purposes only and the views expressed in the study have not been adopted, endorsed or in any way approved by the European Aviation Safety Agency. It is 125 page report so this is just a snapshot.

https://www.easa.europa.eu/sites/default/files/dfu/EASA_REP_RESEA_2017_1.pdf

Aviation services specialist **2Excel**, founded in 2005 by two Royal Air Force pilots, has become the latest carrier to join Airlines UK, the association that represents UK-registered carriers.

Founded in 2005, the company has grown from five people and four Blades aerobatic aircraft to more than 400 and a fleet of 30. In 2018 it became 51% employee owned as an Employee Ownership Trust.

The company has bases at Sywell Aerodrome, Stansted Airport, Doncaster-Sheffield Airport and Lasham Airfield, with customers including government departments, the defence and oil industries, airlines and airline brokers. It famously moved into its current base at Doncaster-Sheffield in 2017 with its surveillance and oil spill Boeing 727 fleet, displacing Vulcan to the Sky (and PAvCon). It operates the surveillance fixed wing for the UK Coastguard from that base.

All activities are underpinned by the airline, which holds a global Air Operators Certificate and lays claim to be the world's only aerobatic airline thanks to its heritage as The Blades display team. [BTN/PAN]

At the end of January textile manufacturer **Openhouse Products** launched a competition to find a nominated charity partner for 2020.

Their competition is open to any emergency service charity registered and operating in the UK. Entries are being invited from anyone who wishes to support a charity of their choice, whether they are a volunteer themselves or may have been helped by that charity in the past.

The winning charity will receive £1,500 worth of bags from Openhouse, which they will work directly with the company to design in accordance with their needs. They will also receive £1,000 funding to support their aims for the year ahead. The company hopes the competition will raise awareness of the vital work these charities do and, in particular, of small and underrepresented organisations.

Research conducted on behalf of insurance firm Ecclesiastical found that financial insecurity was the primary concern currently facing charities, with cuts to public sector grants causing uncertainty over their futures. With the charity sector under more financial pressure than ever, many have even been forced to close after losing a main source of income on which they were reliant.

General Manager Chris Ward commented:

"The sponsorship requests we receive on a regular basis are a clear indication that charities from all around the country are in need of support. As an SME ourselves we understand the challenge smaller charities face of getting their name heard when there are bigger organisations with bigger budgets in the mix, and we hope we will be able to offer some much-needed investment.

We know that getting properly kitted out is expensive, so we want to alleviate that pressure by offering quality kit that will last for years. Our personalised service will ensure the winning charity receives bags that suit their exact needs, for whatever field they specialise in. The financial support will be able to help in other areas such as purchasing new uniforms or training new volunteers."

Entries can be made before the closing date of February 21 via the Openhouse Website. Alternatively you can contact clair@openhouseproducts.com or call her on 0151 647 4044

Openhouse Products, based on Merseyside, supply medical goods and design textile medical bags to emergency services and have been a leading provider of medical gas installations in helicopters.

With the continued delays in the new UK **Emergency Services Network** radio system existing users of the earlier Airwave system continue to complain about unnecessary expenditure. Durham Police have reported a £700,000 spend on replacement handsets that will become useless when the new system comes on line

Last year, the Tyne and Wear Fire and Rescue Service said it did not expect the new system to begin its rollout to the 470 organisations slated to use it, including police forces and fire brigades, until 2021 at the earliest

According to a National Audit Office report on the project, the predicted final cost has ballooned by £3.1 billion, to £9.3 billion by 2037, with £1.4 billion spent on extending the use of the current Airwave system $_{\text{[media]}}$

Precision Aviation Group, Inc. (PAG), a provider of products and value-added services to the worldwide aerospace industry has acquired Toronto, Ontario based World Aviation Corporation (WAC). WAC spe-

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



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cializes in the rewind and repair of rotary and static electrical (air and oil-cooled) generator and motor subcomponents.

Norwegian company Axnes has announced the integration of the PNG wireless intercom system for multimission provider, Travis County STAR Flight, Based in Austin, Texas, STAR Flight has recently taken delivery of three AW169 airframes as part of a fleet modernization program to support their air medical transport, hoist, and fire suppression operations.

Designed to improve crew safety, situational awareness, enhanced communication, and efficiency in flight operations, the PNG wireless intercom system was integrated by Leonardo prior to final delivery. Each airframe has an internal PNG base station and control panel integration along with two MP50 handsets. The waterproof wireless handsets have an average range of 2-3 miles and allow full duplex crew communication while performing external airframe tasks such as swift water rescue, hoist operations, remote accident scene response and other critical missions.

Some of the many features include a battery life of up to 15 hours of continuous operation or 40 hours of standby capability and the latest airborne environmental and software standards. A night vision goggle (NVG) compatible handset and control panel screen are standard, in addition to MP50 voice activated (VOX) and push to talk (PTT) function which allow users to easily integrate the MP50 into multiple critical and routine civil and military mission profiles. Secure AES 256-bit encrypted voice technology ensures that communications by MP50 handheld users cannot be compromised by others.

It appears quite likely that two recently troubled offshore [oil and gas and SAR] operators helicopter companies will merge. The pair, ERA and **Bristow**, have now pulled themselves out of receivership protection but continue to face hard times. They have decided to operate under the Bristow name, although the connection with Alan Bristow [the world's first police helicopter pilot] is by now very tenuous.



ACCIDENTS AND INCIDENTS

29 September 2019 Airbus Helicopters EC145 N145UC. Air ambulance of UC Health Air Care and Mobile Care, Cincinnati, Ohio, USA. Operated by Metro Aviation. After completing a flight with the Children's Team, Air Care 1 was returning to their base in Walton Kentucky from UCMC. Approximately four minutes after departure, the #2 Engine Oil Pressure indication was noted to be decreasing. The aircraft is equipped with the Outerlink IRIS flight Data Monitoring system which allows post-event data analysis to reveal the following historical information: Initial indication upon retrieving the numeric values, was 1.8 bar. Fluctuations were noted. Upon reaching 1.5-1.4 bar the #2 Engine Oil Pressure caution light illuminated. FRM data also confirmed the #2 engine was shut down in-flight per the published emergency procedure. The pilot then turned the aircraft toward closest airport 7.3 NM away. The pilot performed a single engine run-on landing in 20-30 ft. Dispatch and OCC were made aware of the situation. The entire event was tracked/monitored in real time on the Outerlink Silver Eye console at the Metro Aviation OCC. Mechanics found a piece of debris had clogged a bleed-air line causing internal gearbox pressures to rise forcing oil out of the breather tube. [Concern]

9 January 2020 Bell-Garlick UH-1 Iroquois VH-ONZ "Lucy" Firefighting. Water dropping helicopter belonging to Aerial Agriculture Pty Ltd and flown by Lachie Onslow contracted to the NSW Fire Service ditched into a drinking water reservoir in the Bega Valley Shire, New South Wales, Australia. The reservoir is in the Ben Boyd National Park at Edrom, on the coast roughly 50 kilometres north of the Victorian border. The helicopter was working on the Clyde Mountain fire, one of a series of massive blazes in the South Coast area. It is more than 80,000 hectares in size. The pilot was refilling the helicopter's water supply when it crashed close to the bank of reservoir. He swam to shore uninjured. Airframe damage believed substantial. [Media/ASN]

16 January 2020 A Beechcraft B200 King Air N547LM. Air ambulance of LifeMed. The air ambulance crashed while taking off at Unalaska's Tom Madsen Airport, at a major fishing port city in Alaska's Aleutian Islands. The aircraft with three people aboard ended up about 500 yards offshore between the end of the runway and Hog Island in Unalaska Bay. They were picked up and taken to the Iliuliuk Family and Health Services Clinic. There was no immediate word on the nature of their injuries. [Media/ASN]

20 January 2020 Airbus Helicopters EC135T2 G-HIOW Air Ambulance of the Hampshire and Isle of Wight operated by Babcock. The air ambulance suffered a mechanical issue after landing in a field by St Catherines Road, Niton Undercliff, Ventnor on the south side of the Isle of Wight to deal with a patient. It was left grounded overnight but able to fly out again to its base at Thruxton at first light the next day. [media].

22 January 2020 Bell 206LT Twinstar C-GSQA Quebec Provincial Police (Gouvernement du Québec, Service aérien gouvernemental). While taking part in the search-and-rescue operation in Lac-St-Jean 500km north of Montreal crashed into snow- and ice-covered water. Sûreté du Québec said a pilot conducting searches in the l'Ile Beemer sector on the eastern side of the lake suffered non-life-threatening injuries. He was alone aboard. [Media/ASN]

23 January 2020 Lockheed C-130Q N134CG. Fire tanker aircraft operating for the NSW Rural Fire Service in Australia via Coulson Aviation. Reported missing near Cooma, NSW while operating in the Snowy Monaro area. Three died when it impacted with the ground and burst into flames. [ABC]

SAFETY

2019 saw a reduction in fatal aircraft accidents involving large passenger aircraft over the previous year, according to a worldwide civil aviation safety review conducted by Netherlands-based aviation consultancy To70. The review, which covers passenger-carrying commercial air transport operations in aircraft with a maximum take-off mass of 5700 kg (about 12,566 pounds) and above, found an accident rate of 0.18 fatal crashes per one million flights. The rate was 0.20 per million flights in 2018.

Despite a number of high-profile accidents, the Boeing MAX springs to mind, the fatal accident rate is lower than the average of the last five years.

In 2019 there were 86 accidents, 8 of which were fatal, resulting in 257 fatalities. ... In 2018 there were 160 accidents, 13 of which were fatal, resulting in 534 fatalities. The data does not include accidents involving military flights, training flights, private flights, cargo operations or helicopters. [AVWeb]



I was unsure whether to feature this item in Unmanned or Safety but as you can see, I decided upon the last as its scope may be wider than it seems.

Over the past few years visiting drone promotion events it is clear that many of the manufacturers selling drones 'that do everything' were totally unprepared for operating in typical European weather – rain. I am aware that on more than one occasion the Belgian Police challenged a would-be seller manufacturer to confirm that rain was not a problem. It seems that some of them firmly believed that Europe was warm and dry. All too often they were prouder to display gleaming wires than cover them!

As time has passed the situation has greatly improved but this incident proves that even the best and most popular manufacturers have chinks in their waterproofing technology.

Just under a year ago, on 16 March 2019, a DJI Matrice 210 drone/UAS was operating on a commercial flight at Temple Newsam, Leeds, Yorkshire when it effectively entered the drone equivalent of inadvertent IMC – it started to rain.

The Matrice, a small unmanned aircraft was being operated commercially to record video footage of an outdoor athletics event. The pilot started to position the aircraft back towards the landing site due to an increase in the rainfall. The pilot then saw the aircraft "wobble" slightly and as it neared the landing site it flipped over before descending rapidly to the ground from a height of about 3 m (10 ft). No one was injured but the craft was damaged. During the accident flight the aircraft had been operating at heights of up to about 30 m (100 ft) near to, and above people on the ground. The subsequent investigation by the Air Accidents Investigation Branch (AAIB) reviewed other similar accidents and the risk of injury to people on the ground. The conclusion in the AAIB report published in January was that the Matrice crashed whilst operating in rain. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/853608/AAIB_Bulletin_1-2020_Lo_Res.pdf

The manufacturer stated that the accident had been caused by a fault with the No 4 motor Electronic Speed Controller [ESC]. Moisture was also found on the No 3 motor ESC, but it was not established if this contributed to the accident. However, information showed that other Matrice 200 series accidents involving aircraft operating in rain had been caused by ESC failures due to moisture ingress. Other types of DJI Matrice 200 series failures included contamination of the motors by fine particles that the IP43 rating did not provide protection against.

Failures of the Matrice 200 series aircraft resulted in a loss of power and control, with the aircraft typically falling vertically to the ground. This poses a risk of injury to people on the ground which is not mitigated by the current UK regulations or the published guidance material. To address this, two Safety Recommendations were made to the CAA. Two Safety Recommendations relating to this incident were made to the UK CAA and subsequently published as http://publicapps.caa.co.uk/docs/33/SafetyNotice2020002.pdf http://publicapps.caa.co.uk/docs/33/SafetyNotice2020001..pdf.

UNMANNED

Swift Tactical Systems won a \$17M contract to provide the Bahamas government agencies and ministries with a comprehensive Unmanned Aircraft Systems (UAS) system. The multi-agency drone program includes the purchase of 55 short and medium-range drones, immediate surveillance capabilities, training and support, and the establishment of a regional drone academy. The contract was awarded to Swift

Tactical Systems more than one year after the government released a worldwide request for drone and services proposals. Swift's comprehensive plan beat 25 other companies that were part of the multiagency selection process. All law enforcement agencies, immigration



and customs, corrections facilities, and the military will have access to the drones for various activities.

In response to numerous enquiries, DroneShield is now offering to lease customers their counter drone equipment. Leases can be done either on short-term (weekly), medium-term (monthly) or long-term (annual) basis and might suit event-based requirements, product evaluations without a commitment to purchase, or for customers who have a preference to lease vs outright purchase.

All leases offer access to a Field Service Engineer to assist in set up, review the customer's counter drone SOPs and training. All products are available subject to the customer being legally able to utilise them according to local legislation.

In mid-January Operational Solutions Ltd., [OSL] announced that their Anti-Drone System is deployed at Heathrow to protect the UK's busiest airfield. This unique system works by detecting and tracking drones in surrounding airspace and alerting airports of unauthorised drone use. This new and innovative system also works to locate the drone pilots themselves and can be used to identify their location. This technology has been specifically designed for Heathrow Airport by Operational Solutions Ltd, integrating for the first time a variety of leading counter drone technologies from different manufacturers.

This installation follows the introduction of legislation, introduced in March 2019, prohibiting unauthorised drones from being flown within the Flight Restriction Zone (FRZ) which extends out to 5km of any airport boundary. Pilots who break the law and fly without permission within a Flight Restriction Zone in the UK can face a prison sentence of up to five years.



PEOPLE

Dr Tom Hurst is the new Medical Director of London's Air Ambulance. Currently a consultant in prehospital care with London's Air Ambulance and a consultant in intensive care medicine and major trauma at King's College Hospital he trained in Manchester before undertaking a secondment to London's Air Ambulance in 2008. Tom was Clinical Lead at East Anglian Air Ambulance from 2011 to 2014 and the subspecialty lead for training in pre-hospital emergency medicine in London from 2014 to 2019.

Tom's appointment follows the departure from the medical director role of Dr Gareth Davies, who stepped down this year following the end of his tenure as Trustee to the Board of Directors. Gareth held the role from 1996 – 2019 and remains a consultant in pre-hospital care with the service.

In the USA the Board of Directors of Helicopter Association International (HAI) have named **James A. Viola** as the organization's next president and CEO effective mid-January. Viola replaces Matthew S. Zuccaro, who announced his retirement last year.

Viola most recently served as director of General Aviation (GA) Safety Assurance for the Federal Aviation Administration (FAA). In this role, he oversaw 78 Flight Standards District Offices (FSDOs) and 2,500 employees across the United States and was responsible for maintaining consistency and standardization in the application of safety oversight activities for the GA community. Additionally, he ensured stakeholder and public needs were met quickly and efficiently and was responsible for starting the US Helicopter Safety Team (USHST), serving as the initial government co-chair.





Laurence Petiard has been appointed Head of External Communications for Airbus Helicopters, effective January 2020. In this new role, she will be in charge of coordinating Airbus Helicopters' media relations, web, and social media activities.

Laurence has worked for the last five years in the Airbus Helicopters media relations department, where she was in charge of external communications for a variety of civil and military helicopter programmes, while also acting as the main contact for French media, amongst others.

She has been with the company since 2005 in various project management roles, including four and half years with the H160 programme team.

A Franco-British citizen, Laurence holds an MA (Hons) in English Literature from the University of Glasgow in Scotland with additional media relations certification from the Paris based school of Journalism (ESJ-Pro).

Pattonair, the global aerospace and defence supply chain provider, has welcomed **Kieran Murphy** and **Martin Cole** into the newly created positions of Innovation Manager at its Derby headquarters. Pattonair has facilities in Singapore, China, Poland, Brazil, France, Italy, Canada and five cities in the USA. Its supports blue chip engine and airframe manufacturers and MRO customers with tailored supply chain management solutions providing C-class parts.

The appointments come at an exciting time for the company, which has embarked on a \$1.9 billion merger with US-based Wesco Aircraft Holdings and acquired aircraft spares company Adams Aviation.

Kieran, 37, from Nottingham, has more than 20 years' experience in the industry and has a widespread knowledge of digital technology and artificial intelligence (AI). A previous role saw him working at Rolls-Royce's R² Data Labs identifying and implementing opportunities for digital transformation within the business. Martin, 36, from Wolverhampton, brings more than ten years' experience in the automotive, nuclear, aerospace and defence sectors to his new role.

Martin has acquired a strong technical knowledge base in manufacturing & supply-chain automation from his years of experience working as a consultant and system integrator. Martin previously helped large enterprises unleash potential, in his previous role as a managing consultant at the multinational professional service network. Deloitte.

The men are joining a team of seven innovation and data specialists and will report to Jason Rance, Pattonair's Global Innovation Director. Their appointments build on the company's commitment to recruit the best talent in the region to maintain its position as the aerospace sectors leading provider of innovative supply chain solutions.

Meanwhile, it has been announced that the [former] CEO of the independent Adams Aviation Stephen Gosling, will be leaving at the end of February. Many of the original staff will be remaining.





MOVE ALONG THERE

Sort of underlining the comments last month in PAN concerning the differences in nations (weapons of choice being "fire extinguishers and narwhal tusks") come news from the USA.

As an estimated 330,000 people welcomed 2020 in Las Vegas, and the local police helicopter reported celebratory gunfire around the Las Vegas valley as the clock struck midnight.

Predictably the authorities warn against celebratory gunfire each year which has a history of seriously injuring and even killing people. For aviator's celebratory gunfire poses a relatively low risk but the danger is higher for those on the ground from falling bullets.

So as belatedly 2019 slipped into 2020 (it had of course been 2020 in New Zealand for nearly a full day) both the police helicopter and the local newscopter [KNTV Chopper 13] informed ATC that they were vacating the area for their own safety.

They were not the only airborne craft at risk, at the same time, tour helicopters were also nearby.

The Las Vegas police helicopter reported illegal fireworks near to the approach path into the local McCarran airport as well – oddly no reports of drones.

Sure, enough it turns out that in the USA there were injuries, were attributed to celebratory gunfire. The victims just about made it into 2020.

In dear old England where there are no guns to speak of, they just got drunk and set off fire extinguishers. No deaths by gunfire or impaling on narwhal tusk were reported.

Mysterious drone sighting in Nebraska, Colorado and Kansas have caused quite the scare on social media. An air ambulance was coming into land at a hospital landing pad at night and, it is said, the aircraft was said to be misidentified as a drone. The incident brought social media to life and elicited comments pretty typical of the USA such as shoot it down. Very much a worry for the operators of manned aircraft at night. And, as the UK Gatwick Airport sage proved, even in some daylight conditions. Fortunately, guns are hard to come by in the UK.

Companies including UAV Recon and VOLT use their devices to inspect electric utilities and have reported instances where landowners were threatening to shoot down their drones.

As a result, both the drone operators and the night flying air ambulances are speaking with a common voice in telling the public not to point their guns at any object you don't know what it is, in the air or on the ground. Pretty basic really.

PAvCon FUTURE

Although companies including Avalex, Axnes and Rocket Route had indicated that they were intending to be in Berlin for the 2020 PAvCon Europe at the time of the Helitech Replacement show in Farnborough during November 2019 it was a close run thing between Axnes and a new attendee from Germany as to who was going to sign up. In the end it came down to invoices versus receipts!

Munich based LICO Stahl- und Kunststofftechnik GmbH's signed and paid on January 3, probably something of a record. Their products are high-quality machines and accessories with outstanding functional characteristics and a proven high degree of usability, compared to others in the industry. Thus, thanks to their unique performance characteristics, our products always offer our professional customers the desired solutions for their specific area of use.

They supply the aviation and automotive industry with perhaps their aviation star turn being the Heli-Loader 3600 a helicopter lifting device that must challenge the TLC Helilift in flexibility.

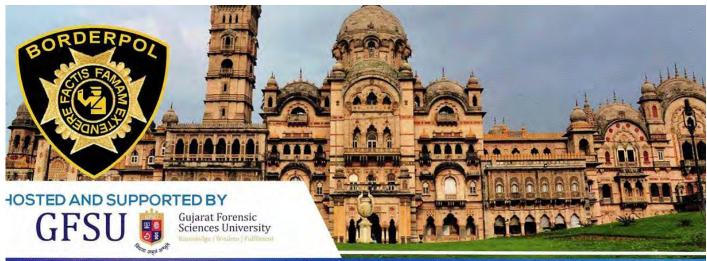
The Heli Loader 3600 enables a helicopter weighing up to 3.6 metric tons to be moved without a towing vehicle. A single operator can easily transport the helicopter. Thanks to precise handling, helicopters and other aircraft can be manoeuvred to the desired position even in cramped hangars. Because it is simple and compact to handle, the Heli Loader 3600 is very safe and also has a wide variety of integrated security systems. This minimises the danger of accidents and consequent damage to the helicopter. Its high-



performance capability and variable speed control up to 6 km/h mean that it has no problem covering longer distances. Even minor inclines and uneven ground are no obstacle for the Heli Loader 3600, which can easily get over them thanks to its two separate lifting devices controlled by a steering drawbar or optional remote control.

LICO Stahl have been in the business for 30 years developing and producing ground support equipment for helicopters, especially for Airbus helicopters.

They count among their customers Airbus, the German Bundeswehr, Babcock, ADAC/ALT, DRF and German helicopter operations. If you want to know more ahead of the event contact Thomas by e-mail on thomas.kabilka@lico-solutions.de or check out their website www.lico-solutions.de



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NEW SHOW ANNOUNCED

The next stage of the 'out of Helitech' shows was launched in Europe during January and further promoted at the HAI Heli-Expo Show in the USA. The mainland Europe event has attracted the vital support of the main manufacturers – an important aspect that last year's Farnborough, UK event failed to do.

The European Helicopter Association (EHA) and the European Union Aviation Safety Agency (EASA) are joining forces to offer the international rotorcraft community a new rotorcraft orientated event scheduled for November 10-12, 2020 at Koelnmesse, Germany. It will incorporate the EASA Rotorcraft and VTOL Symposium.

The market leaders Airbus, Bell, Leonardo and Safran are supporting the new format, both through their presence as exhibitors and with an advisory function.

"I am proud to announce the launch of European Rotors in cooperation with EASA and with the great support of all our members," stated Peter Möller, chairman of the organisers, European Helicopter Association, at the opening press conference held on 21 January in Cologne. "The new gath-



ering for the industry marks an important milestone in our endeavours to promote the social and economic value of rotorcraft operations for European society.

"We will offer operators, manufacturers, aviation authorities, the supporting industry, mechanics, pilots, customers and suppliers the opportunity to network and also to be informed on state-of-the-art equipment and services. Visitors will additionally have the chance to discuss present and future regulations as well as to participate in dedicated training."

Another fundamental component of the three-day event will be the integration of the renowned EASA Rotorcraft and VTOL Symposium.

David Solar, head of VTOL Department at EASA explained: "Through our participation in European Rotors, in collaboration with EHA, we are integrating our very successful and established Rotorcraft and VTOL Symposium to reach out to the broader industry, enabling better collaboration and mutual understanding to enhance global aviation safety. Direct exchange with manufacturers, operators, Approved Training Organisations (ATOs) and maintenance organisations will provide us with valuable 360° feedback for our work."



The venue for European Rotors will be Hall 8 and the Congress Centre North of Koelnmesse. Beside the organisers, the service partner is Messe Friedrichshafen, an experienced exhibition and fairs company, which also stages the established aviation show AERO Friedrichshafen. Alongside the exhibition section, an additional focus of EUROPEAN ROTORS will be on the varied conference components with a large number of seminars and individual training sessions that visitors can book.

In keeping with the motto of European Rotors "It's for everyone", the show also aims to present topics for the general public and political leaders on a separate stage inside the exhibition hall, thus increasing interest in helicopters. Recruitment also plays a prominent role for the industry, which is why there are favourable conditions for students and free admission for everyone as from the afternoon of the third day.

The major involvement of the leading OEMs is an important added value for the three-day gathering. www.europeanrotors.eu

Ed: The press release [above] put out by the organisers is reasonably clear but does not address the reason behind the winter date or the location. They explain that the November date was selected to find a space in the calendar where the main exhibitors were not busy. That seems to have worked, and has led to the renewed support of the MROs. The event is again indoors and precludes flying into the event (one of the major complaints about Helitech in recent days). As it is late in the year it is unlikely that flying is a real option, a point evident at the Farnborough event last year.

Other elements, including associated conferences, within the control of this new event are currently being discussed and details may come to light in coming weeks.







COMING SOON

3-5 March 2020 Home Office Security and Policing Event, Farnborough International Exhibition and Conference Centre, Farnborough, Hampshire UK. The official UK Government global security event, offering a world-class opportunity to meet, network and discuss the latest advances in delivering national security and resilience with UK suppliers, colleagues and Government officials. The three-day event is attended by senior Government officials and it is planned there will once again be a line-up of senior keynote addresses led by Ministers. Over 300 exhibitors will showcase their latest products and services, along with a variety of product demos, panel discussions and immersive experiences addressing security and law enforcement challenged faced in the UK today. https://www.securityandpolicing.co.uk

