

Police Aviation News

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Issue 272

December 2018

Jet in the rough *PC-24 for outback EMS*



LAW ENFORCEMENT

AUSTRIA

Airbus Germany are now test flying the latest brand new H135 with the Helionix cockpit for the Bundes Ministry of the Interior already in the full Polizei paint scheme. The airframe is serial number 2071 and test reg D-HCBB

The fleet consists of seventeen helicopters, the new Airbus H135s replace the remaining AS355Ns and two H125s are on order. The EC135 P2+ still represents the backbone of the unit's SAR operations, with the AS350 B1 and B3 being used in mountain areas due to the better performance of single-engine aircraft at high altitudes. The unit employs 44 pilots as well as 20 technicians who are responsible for aircraft maintenance.

It is noteworthy that the Austrian operation still prefers the flexibility offered by the very high skid option on their EC135s where such as the UKs NPAS has spent a great deal of money changing to low skids. Clearly the Austrians do not subscribe to the main complaint put forward by the UK operation that their officers are in danger of slipping and falling from the higher skids.

ITALY

GUARDIA DI FINANZA: Leonardo and Italy's Guardia di Finanza [Customs] have signed a contract for the supply of 22 new generation AW169M twin engine helicopters. The contract, valued at €280M, includes a comprehensive support and training package which could be further extended with optional services valued at an additional €100M. Deliveries are expected to start in summer 2019 and to be completed by 2024.

The aircraft will be used to perform a range of roles including patrol and reconnaissance, law enforcement, rescue and homeland security, complementing a fleet of 14 AW139 intermediate twins, six of which are already in service and the following eight due to be delivered in 2019.

The AW169Ms of Guardia di Finanza will receive a military qualification by the Italian Directorate of Air Armaments (ARMAEREO) and will feature a dedicated configuration including rescue hoist, emergency floatation system and life rafts, wire cutters, TCAS II (Traffic Collision Avoidance System), NVG (Night Vision Goggle) compatible cockpit, HTAWS (Helicopter Terrain Awareness Warning System), advanced communication system, OPLS

(Obstacle Proximity Lidar System), advanced HUMS (Health Usage Monitoring System), AFCS (Automatic Flight Control System) with SAR modes, searchlight, ice detector, fast roping and satcom. The aircraft will be also fitted with a range of Leonardo systems such as RW ATOS (Airborne Tactical Observation and Surveillance) system with advanced operator console, Gabbiano radar, LEOSS (Long Range Electro-Optical Surveillance System), M428 IFF transponder, V/UHF radio systems cockpit panels and lighting and provisions for SPHYDER (Smart Processing Hyperspectral Detection and Reconnaissance System).

Editor: Ask anyone and they will probably tell you that Italy is a failing economy – there are reports of the Defence spend on aircraft being significantly curtailed. They have a 7,000km coastline and yet are ordering new state of the art helicopters worth €380M to add to an already healthy fleet of customs aircraft for just one agency [Guardia di Finanza] that flies alongside large fleets of law enforcement, fire and coast guard aircraft.

Contrast that with the current air resources in supposedly 'booming' Britain with its Atlantic and North Sea coastline of 12,000km where Customs have 2-3 rented aircraft, the coast guard 22 helicopters and the police a similar number – then ask the politicians what they are doing about securing the country post Brexit.



AW169 ©Leonardo#

COVER: The very first PC-24 with medevac interior has been handed over to the Royal Flying Doctor Service of Australia. Configured for patient transport, this PC-24 was especially developed to meet the particular needs of the RFDS and has been equipped with an interior from Swiss Company Aerolite AG. Story on page: 9

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That one contract, and there are others in delivery, would reequip the whole of NPAS back to its original strength and more.

The big sale is of course supporting the local Italian industry [no UK option there, the home helicopter industry - Westland - went years ago, to the Italians]. In contrast we can expect that these new Italian aircraft will not actually be expected to fly a great deal – especially when contrasted with typical UK practice.

NETHERLANDS

POLICE: The latest example of the police H135 PH-PXE fleet arrived at Babcock, Staverton for mid-life upgrade on November 21. [MJ]

UNITED ARAB EMIRATES

DUBAI: It appears April 1 is being celebrated early this year. Twitter was alive with video and images of the police in Dubai training on S3 Hoversurf flying “motorcycles” built by a Russian company. Dubai Police, who already have Lamborghini patrol cars, self-driving robots and android officers, have now decided to take to the skies in what can only be described as a flying motorbike.

Dubai’s police force has started training its officers how to pilot the new personal flying craft, supplied at no cost by the Russian-owned California-based Hoversurf. The craft was unveiled at last year’s GITEX convention in the United Arab Emirates. After they signed an agreement late last year the manufacturer gifted Dubai police its first example to allow training to begin and to help get the promotional ball rolling. Dubai’s media office said the police force hopes to introduce the vehicles into service by 2020. – they are said to have exclusive rights to order as many units as they want, but others who are interested can buy the bike for \$150,000.

The prototype of the S3 was made of from aluminium, the current machine is a one-piece carbon-fibre composite, which both reduces the weight and adds structural rigidity. The craft now weighs 114 kg (253 lb) and has a battery discharging 12.3 kWh. The quad rotor craft have a maximum speed of 60mph (96km/h) and go up to 16 feet (4.8 metres) into the air. Hoversurf are said to be developing other EVTOL vehicles, including a “drone taxi”, which they claim can fly a maximum distance of 300km (186 miles) at 250kmph (155mph) for just over an hour.

@DubaiPoliceHQ

Ed: Most of the media coverage speaks of this being a Drone. As long as the rider is aboard and controlling it from the saddle it is simply a quad rotor flying machine – or helicopter. There is probably going to have to be an adjustment in language for drone taxis as well, there is certainly no intention that they will not have a human on-board.

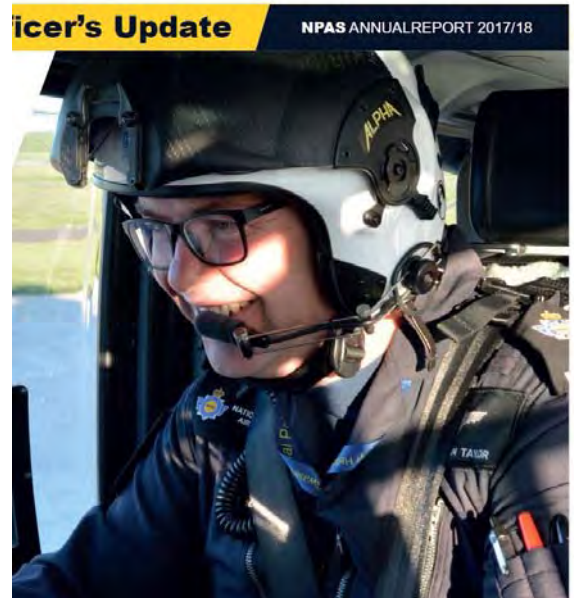


UNITED KINGDOM

NPAS: Last month was the one set for NPAS to reply to the broad allegations contained in Matt Parr's HMIPFRS report on the police air support organisation. Nothing has been made public but it is possible that the answer is in the wings for the much delayed NPAS Annual Report is due out shortly. It will be interesting to see whether the 'reply' to the open document allegations from HMIPFRS are made public and then if they are equally open and do not suffer from redaction.

We know the design of the cover of the Annual Report incorporates a portrait of an NPAS TFO based at Exeter Airport. The cover star is Ade Taylor [@NPASTFO_AT](#)

All we may need now is sight of the report and those pesky minutes. Still no sign as the month of November 2018 expired.



Airbus Helicopters has delivered the first of seven upgraded EC135T2+ (H135) helicopters to NPAS, under a £1.5M contract signed in December 2017 to equip and standardise the UK police helicopter fleet's Night Vision (NVIS) capability. Under the new configuration, all seven NPAS H135 helicopters will be capable of NVIS operations down to ground level, enhancing their night time surveillance capabilities at all heights and in all environments.

Caption: The aircraft undergoing the acceptance process within the hangar at Airbus Helicopters last month. The photograph says more than it intends. The figure right foreground is Richard Watson. Richard retired as a Superintendent from NPAS in August 2015 and went off to sell cakes. Rumour had it that he had tired of his cookery role and returned as a consultant to NPAS and this image appears to 'prove' the rumour correct. Mind you his personal Linked In page still shows him in cakes not consultancy. As he was i/c of manpower at NPAS I cannot see what his current input to NVIS completion might be! A jolly perhaps.

The first upgraded aircraft, G-POLF, was first delivered to Essex Police in 2002 and, with more than 15,000 flight hours, is a global H135 fleet leader. The standardised upgrade, common to all seven helicop-



The aircraft undergoing the acceptance process within the hangar at Airbus Helicopters last month

The photograph says more than it intends. The figure right foreground is Richard Watson. Richard retired as a Superintendent Manpower from NPAS in August 2015 and went off to sell cakes. Rumour had it that he had tired of his cookery role and returned as a consultant. It seems that he has taken up the poisoned chalice of developing the Home Office new radio system, so nothing much to do with an NVIS completion ! [Airbus]

ters, will deliver the latest NVIS capability and bring these aircraft in line with NPAS' current NVIS-capable EC135P2 (H135) fleet, allowing NPAS to benefit from commonality across the entire fleet.

Oliver Dismore, NPAS T/Accountable Manager, said, "Airbus Helicopters' UK design team is recognised as a European leader in the design and integration of night vision capabilities across the company's range of helicopters, while the company's 30-year heritage supporting the development of UK police aviation and their collaborative approach has meant the impact on fleet availability and operations has been minimised."

Colin James, UK Managing Director of Airbus Helicopters, highlighted, "Whether designing innovative rotary-wing solutions for UK and overseas customers or supporting UK helicopter fleet availability, our aircraft are the best fit for policing and emergency services missions and our UK team, working 24/7 from sites across the UK, ensures these can be relied on to deliver day in, day out."

The upgrade includes stripping and re-equipping the majority of cockpit instrumentation across all seven helicopters, including flight and mission equipment and new FENN700+ night vision goggles, to precisely the same standard. NPAS will now operate an enhanced night vision capability across its H135 fleet while standardisation ensures ease of use for pilots and crew.

Ed: NPAS two types of EC135s, it has Turbomeca and PWC variants that do not sit well under the all-embracing H135 name. This contract relates to the Babcock upgraded EC135T2+ versions which are arriving into service without this additional modification.

Meanwhile the latest Babcock upgrade underway is G-POLJ an EC135T2+ (c/n 0333) that was formerly G-NEAU.

At last some movement started on the building of the new NPAS base at North Weald on the afternoon of November 7. A portable building and a JCB type digger arrived to start the first scratchings into the grass on the site. By the end of the month the area of the future concrete hardstanding had been cleared. NPAS are officially saying that the facility will be completed in the summer but airport locals are expecting it to become operational as late as August.

Meanwhile the day before NPAS Boreham, currently co-located after being ejected from their former Chelmsford, Essex site, were acting out their rootless status by moving south from Lippitts Hill [sorry NPAS London] to fill in at Redhill for the day.



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CAMBRIDGESHIRE: A Russian-speaking man from Cambridgeshire has become the first person in the UK to be convicted of illegally flying a drone beneath a police helicopter during a search operation.

Sergej Miaun's antics with his DJI Phantom 4 on December 9 last year caused a search for a missing woman to be abandoned after police helicopter pilot Lee Holmes became aware of the quadcopter buzzing around beneath his aircraft. The NPAS helicopter had been helping workers on the ground look for the woman near the River Nene, around 16km (10 miles) east of Peterborough.



Once police had identified the drone, they followed it half a mile up a road running parallel with the river, and watched the Phantom land in Miaun's back garden. After Miaun allegedly told the first officer to go away, a police sergeant turned up, arrested him, searched his house and found the drone hidden behind a loft hatch in the bathroom.

His explanation was that he saw police lights over the A47 and flew the drone over there in first-person view (FPV) mode, controlling it from his iPad, thinking there may have been a road accident: Minutes later he realised the helicopter was there; it switched on its searchlight, and returned home.

Miaun was found guilty on two counts of breaching the ANO, one of breaching article 94(3), which states pilots of small unmanned aircraft "must maintain direct, unaided visual contact with the aircraft sufficient to monitor its flight path in relation to other aircraft"; and one charge under article 94(2), which states: "The person in charge of a small unmanned aircraft may only fly the aircraft if reasonably satisfied that the flight can safely be made."

Magistrates ordered Miaun to pay a total of £464, including a fine of £184, court costs of £250 and a £30 victim surcharge tax, as well as confiscating the £900 drone itself. The maximum fine for these breaches is £2,500.


Ed: The Daily Star, perhaps not the brightest tool in the box, followed this story with one ascribing a fair bit of law breaking to no less than the Greater Manchester Police (GMP).

It is said that the GMP are training pilots and will soon operate drones to follow villains home in a hi-tech crackdown on crime.

We can but hope that the targeted villains live in remote fields and not too far from the point of departure! It seems there is yet another police superintendent who needs to read the current version of the instruction manual for his newly acquired mini-aircraft to ascertain how long it will be able to stalk the prey and then check out the ANO law to ensure the drone remains in sight and not over crowds!

Supt. Chris Hill's reported desire to photograph offenders and track them as they return home includes tracking motor bikes and villains in crowded places. That would bring a whole new dimension to operating the average diminutive drone!

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Designed for Precision

During November NPAS were advertising for two Training Captains. The successful candidates will report to the Head of Training to plan, conduct training and examination tasks to meet EASA and CAA standards as detailed by the NPAS Approved Training Organisation and NPAS Operations Manual.

Candidates were required to hold a current EASA Part-FCL Commercial Pilots Licence (Helicopters) with single pilot instrument, multi-engine helicopter, TRI (H) ratings IR, RT Licence and a current EASA Class 1 medical certificate for single pilot operations carrying passengers. Applicants must hold EASA Type Rating Instructor (TRI) and Type Rating Examiner (TRE) H Licensing Certificate for single pilot, multi-engine helicopters, have evidence of a minimum of 2,000 flying hours of which 1,000 hours as a pilot in command overland with a significant proportion of low flying and 50 hours flying at night including at least 30 hours of Night Vision Imaging System flight time (using Night Vision Goggles) as pilot-in-command.

The online application closed on November 30 but other pilot vacancies have already been added.

Regular readers may recall that on page 5 last month there was a short item on a Parliamentary question from Louise Haigh MP the Shadow Minister (Home Office) (Policing) asked of the Home Secretary a question on NPAS.

PAN was not impressed with the answer and neither was the said MP for she asked another question and, referring to the rubbish answer to the question (180820) of October 26 she asked what assessment his Department has made of the adequacy of the operational capacity of the National Police Air Service.

The reply from Nick Hurd was a typically flaccid reply based on the patently obvious "... NPAS is a collaboration of English and Welsh Police Forces. The NPAS Strategic Board, comprised of Chief Constables and Police and Crime Commissioners, are responsible for overseeing the service. In addition, HM Inspector of Constabulary and Fire and Rescue independently assesses the effectiveness and efficiency of police forces and last year published a study of Police Air Support.

NPAS publish an annual report outlining the service's performance and financial position. The Home Office does not collect performance information on NPAS." [Hansard Citation: HC Deb, 7 November 2018] *Ed: Well, as stated last month the problem is that NPAS do not publish anything without a cat-fight and purile replies like this only serve to raise doubts on what the Home Office does. I keep reading they do not collect performance parameters on anything so what do they do?*

Still no sign of any real news and minutes for June and September – a situation exacerbated by the website apparently still "under development" since mid-September. We are directed to another site where there are no words other than please check out @NPASHQ on Twitter.

To be absent this long the Webmaster needs replacing. Is it so different from my local Nail Bar that has a sign stating its card machine awaiting repair? All the locals tell me that the absence of the machine is due to money laundering. Perhaps they are correct.

SCOTLAND: Reports that the Maritime and Coastguard Agency (MCA) helicopter crews were unwilling to assist with recovering bodies and helping to move volunteers reached Holyrood the Scottish Parliament last month.

Labour MSP Rhoda Grant asked at First Minister's Questions what support the Scottish government provides to MRTs. First Minister Nicola Sturgeon said more than £300,000 of annual grant funding was given to the service - the only government in the UK to fund mountain rescue in this way.

Ms Grant called for other agencies, including Police Scotland, to support and protect mountain rescue teams. It appears that Scottish government officials have already raised this issue with the MCA following earlier correspondence with the teams in the wake of the MCA taking over the helicopter role from the RAF and Royal Navy. A private company provides the crews and helicopters and it is as a result a very different service.

The MRT teams expressed frustration after having to undertake long, technical and difficult recoveries of bodies, following walking and climbing accidents, unassisted.

In a joint statement, the four rescue teams said: "The inescapable conclusion to this is that either the aircraft and crews are too thinly spread to cover requirements or that the agencies do not view the welfare of the volunteer teams in the same way as they appreciate that of the pilots and crew."

The MCA stated that the recovery of deceased bodies is not strictly speaking a SAR mission, but they may help under some circumstances.

From this exchanged it is now proposed that the MRTs will be supported by the Airbus Helicopter H135 police helicopter based in Glasgow in certain circumstances. "Police Scotland is introducing its helicopter to assist mountain rescue teams as a last resort for body recovery. I know that Police Scotland has written to independent Scottish Mountain Rescue about the changes and that the response has been positive."

Editor: As soon as you get a politician involved you can be sure it is headed for a bad place. How many times has it been demonstrated that the recovery of bodies from mountains is not a role for helicopters – any helicopters. The dead are beyond hope and not worthy of risking valuable and skilled practitioner lives even in good weather. Yes, the SAR and associated services options available from the private service are far lower than the military were offering prior to the privatisation but that does not excuse cut-cutting placement of a highly risky role on ill-equipped and stretched resources.

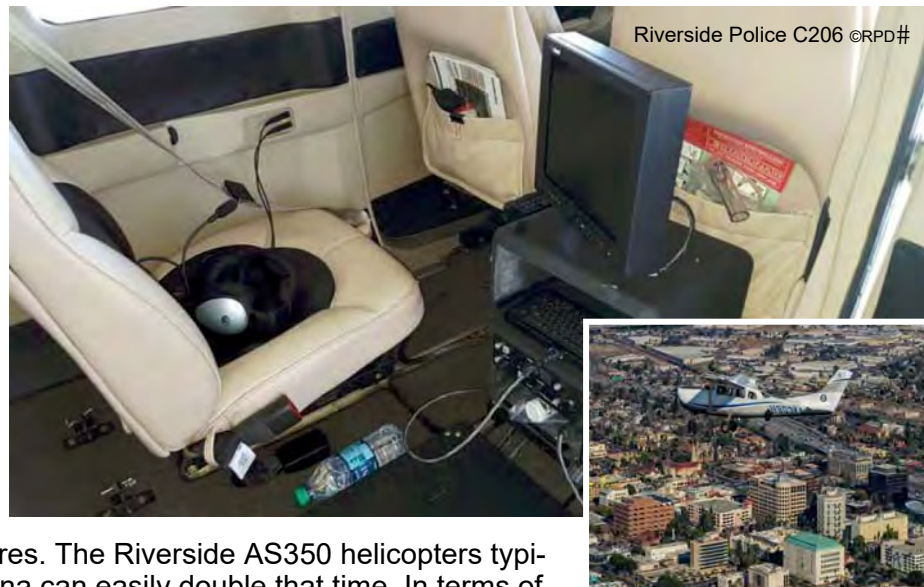
Police Scotland would not consider bolstering its sole Glasgow based helicopter with additional resources, they stopped a proposed aircraft buy, but now they seek to add inappropriate additional tasking in an area where there will be no funding to train for on top of the new extended range expectations brought about by imposing the whole of Scotland upon what was a one force [Strathclyde] resource. Even if the Mountain Rescue Teams in Scotland are working in among large hills rather than giants among mountains it remains extremely dangerous territory for an urban based helicopter.

UNITED STATES

CALIFORNIA: In Riverside Police Department they have been promoting their latest fixed wing aviation solution. The Turbo 206 Stationair N903KA has been with Riverside for around a year now but only in October did it get involved with assisting in its first high-profile arrest.

Riverside police Pilot Jeff Ratkovich, flying above central Riverside with Corona police Officer Jake Westall, were able to direct ground officers to a man suspected of undertaking an assault and robbery and using the EO/IR camera fitted on the Cessna's left flank Westall was able to spot the 22-years old running suspect. Corona police moved in, with K9 'Duke' putting an end to the chase.

The Cessna was obtained to use mostly for surveillance in narcotics and other investigations, but normal patrol was always an option to supplement the helicopter patrols offering its longer loiter time and faster speed as additional features. The Riverside AS350 helicopters typically patrol for two hours where the Cessna can easily double that time. In terms of cost it returns DOCs of \$190 compared to a rotary wing \$400.



The plane is equipped with a mapping system and a camera that can deliver sharp, high-resolution colour images from 6 to 9 miles away to officers on the ground. It can fly higher and quieter than helicopters and tends to blend in with other air traffic, making it ideal for surveillance. The negatives are that it usually takes longer to get into the air because of getting to a suitable runway and other traffic where a helicopter can typically get airborne in two minutes.

The city paid for the \$982,870 airplane by selling one of its three helicopters and spending unused police vehicle lease funds, money in an evidence account and state asset forfeiture dollars. The operation relies on MD Helicopters for rotary flight having operated a range of elderly machines beforehand. When the Cessna was delivered last year, it joined a fleet that included three helicopters, one 34 years old with 11,518 flight hours, another 21 years old with 12,834 flight hours and one 8 years old with 5,226 flight hours.

NEW YORK: The New York State Police Aviation Unit has apparently acquired a fifth UH-1H. The Huey II was registered as N61SP on 25 Sep 18. It had previously been operated by the US Department of State Air Wing at Patrick AFB, Florida. Ex-US Army serial is 74-22370. [Tom Kaminski]

VIRGINIA: The Virginia Beach Police Aviation Unit (VBPD) took delivery of its new MDHI MD 530F helicopter in October 2018. It is the first MD Helicopters-brand aircraft to join the VBPD Aviation Unit since the Helicopter Operations unit was established, the new MD 530F will be a powerful, reliable addition to their fleet, and will deliver improved operational efficiency and increased mission versatility. It replaces a

ten-years-old Bell that wore the same tail number. The Virginia Beach Police Department operates 20 hours a day, 7 days a week, in service of the 450,000 citizens that inhabit the city's 310 square miles. Two-person flight crews support ground officers in the execution of air patrol, search and rescue, surveillance, and crime scene and damage assessment.

MD Helicopters' all-new certified glass cockpit featuring the Garmin G500 [H] TXi Electronic Flight Instruments (EFIS), Howell Instruments Electronic Engine Instruments and Crew Alert Systems (EICAS), and Garmin GTN 650 Touchscreen NAV/COM/GPS is the focal point of an advanced NVISB interior designed to enhance safety during night-time patrol, surveillance and tactical operations. In addition to its powerful Rolls-Royce 250-C30 650shp turbine engine, extended landing gear, Fargo 21 gallon auxiliary fuel tank and wire strike protection system, Virginia Beach's MD 530F has been custom-configured to include High-contrast main rotor blades, an MDHI Nose/Side Mount, a FLIR® SAFIRE 380HDc EO/IR system, Church-ill ARS-600 airborne mapping system, TrakkaBeam® A800 searchlight, IMT Skymaster TX Down-link, Macro Blue MB12 monitor and command station and an EM TS300 Public Address System, LSC22 Control head, and LSA400 Amplifier

AIR AMBULANCE

AUSTRALIA

FLYING DOCTOR: Late in November the first PC-24 with medevac interior has been handed over to the Royal Flying Doctor Service of Australia (RFDS Western Operations). Pilatus presented the key to PC-24 VH-VWO, serial number 105 to RFDS CEO Rebecca Tomkinson at the Pilatus factory in Stans.

Configured for patient transport, this PC-24 was especially developed to meet the particular needs of the RFDS and has been equipped for medevac missions all over Australia. The interior was installed under a supplemental type certificate procedure in partnership with Aerolite AG, a Swiss company specialising in aircraft medical interiors. The RFDS Western Operations is the first organisation to use the Super Versatile Jet as a medevac aircraft. Service entry will take place early next year.



The spacious pressurised cabin can accommodate medical equipment and beds for three patients and additional seats for medical personnel. Depending on the type of mission, the cabin is designed to allow fast, flexible modification for maximum freedom. The large cargo door and bespoke electric stretcher loading device facilitate safe, ultra-easy loading and unloading of patients. The PC-24 is the world's first jet to offer this possibility thanks to the cargo door which comes as a standard fit from the factory.

Individual oxygen, vacuum and power systems ensure multi-parameter patient monitoring and support. Additional security is provided in the form of a second and separate power system for the cabin and dedicated communication systems for the medical crew, thereby ensuring uninterrupted medical assistance.



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THUNDERBIRD: The Australian Aeromedical Innovation (AIA), a charity dedicated to improving the access of aeromedical aircraft to the interior of remote areas including Australia is promoting Project Thunderbird is an inaugural initiative of AIA to improve clinical outcomes and increase efficiency of aeromedicine for rural Australians through the integration of tiltrotor aircraft. The project has been running for over a year and relies heavily on the eventual success and certification of the Leonardo AW609.

The active elements of Project Thunderbird aim to build up pressure via campaigning, Social Media and conferences to generate evidence and proof of concept leading to the trial of an AW609 in operations to remote areas. To that end AIA was at the recent Dubai Helishow to share with the audience the progress of Project Thunderbird. Fixed wing aircraft like those currently operated by such as Flying Doctors traditionally need runways or roads to take off and therefore are not able to land directly at the scene of many rural emergencies. AIA see tiltrotor technology as an avenue to overcome the current operational restrictions; to that end they are promoting the deployment of tiltrotors for aeromedical retrievals in Australia. *Ed: It would seem that the aims of the promotion by this charity require the coming together of Leonardo and their AW609 and the Australian Flying Doctor Service. Neither is known to be exhibiting at the Dubai Helishow so the assumption might be that they were seeking finance for the project in the oil rich state.*

CANADA

MANITOBA: The doctors responsible for operating Manitoba's LifeFlight operation seem poised to quit should the government privatise its air ambulance services. The province has been exploring the options of taking on private companies to run its LifeFlight air ambulance and water bomber services.

The air ambulance options in the region include commercial contractors, STARS [see below] and The Southern Air Ambulance Program was developed to provide inter-facility transportation to patients in southern Manitoba where land transportation would take more than 2.5 hours. The program operates in the daytime only and is staffed by aeromedical attendants. It typically uses a Twin Otter capable of transporting two stretcher patients at a time. LifeFlight operates out of the Manitoba Government Air Services Hangar at 900 Ferry Road in Winnipeg and is available 24 hours a day, 365 days a year.

The Manitoba Government and General Employees' Union (MGEU) said the request for proposals that could privatize those services went out in July. They believe that could result in the sale of aircraft, the unique water bombers would likely be leased out to private operators.

LifeFlight provides rapid inter-facility air ambulance transport for critically ill or injured Manitobans from areas outside a 200km radius of Winnipeg. It is staffed by flight nurses with advanced critical care training and experience and may be supplemented by critical care or emergency physicians, obstetricians, neonatology physicians and respiratory therapists depending on a patient's needs.

STARS: The Airbus Helicopters H145 has been selected by Canada's STARS air ambulance to replace its ageing aircraft fleet. These will be the first H145 helicopters in helicopter emergency medical service (HEMS) configuration for the Canadian market. The first tranche of H145s will be delivered in 2019 and will be based out of STARS' Calgary, Alberta base.

The H145 is Transport Canada Civil Aviation certified and is easily customised for intensive care transport, offering easy and safe loading/unloading of patients through wide side sliding doors and large rear clam-shell doors. The H145's extremely low external sound levels allow neighbourhood-friendly operations around hospitals and in urban areas.

Shock Trauma Air Rescue Society (STARS) is a charitable, non-profit organization non-profit organization contracted by the Manitoba government to provide rapid and specialized emergency medical care and air transport for critically ill and injured patients. Oversight is provided by the Winnipeg Regional Health Authority.

NEW ZEALAND

EMERGENCY MEDICAL: Helicopter Emergency Medical Services New Zealand Limited has selected Airbus' H145, in response to New Zealand's Health Ministry's call to enhance its helicopter emergency medical services (HEMS) industry.

Due to be delivered in the second half of 2019, the two helicopters will become the first HEMS-configured H145s to enter New Zealand, and will bolster the country's capacity to provide modern, state-of-the-art air ambulance services in the nation's south.

The two helicopters will be operated on the South Island by the consortium formed by Helicopters Otago

(Dunedin) and GCH Aviation (Christchurch), and will become the flagship of their already in-service fleets of the BK117 and EC145.

The global fleet of more than 1,400 H145/BK117 helicopters has accumulated more than five million flight hours. In New Zealand alone, there are currently 41 helicopters of the BK117 line of helicopters operating aeromedical, SAR, utility and business aviation purposes.

UNITED KINGDOM

NATIONAL: Late in October the Right Honourable Philip Hammond MP the UK Chancellor of the Exchequer announced he will be making £10M available to air ambulances to help the organisations provide care to some of the most vulnerable and critical patients.

Air ambulances are run as charities and do not usually receive government funding but in recent years the government has found a variety of reasons to provide them with limited funding. This specific payment was part of the central Government Budget statement, in the past other amounts of money were provided to air ambulances under the guise of being 'spare' money derived from banking fines.

In November the Association of Air Ambulances [AAA] held its Annual Conference, small exhibition and Air Ambulance Awards of Excellence Ceremony hosted by presenters Richard Madeley and Angellica Bell. The new venue this year was the Millennium Chelsea Harbour Hotel in Fulham, London. The day-long Conference saw speakers discuss topics in three prime areas - charity, operations and clinical. The exhibition of sponsors brought together delegates and suppliers to the industry in a relaxed and refreshing environment in which they could conduct business and catch up with old friends.

As usual the awards event recognised the nation's finest clinicians, aviators and fundraisers at the Air Ambulance Awards of Excellence ceremony in the presence of 310 guests. Twelve awards to outstanding individuals and teams, whose stories were inspirational, astounding and humbling. The awards, which are independently judged, went to pilots, paramedics, doctors, fundraisers and volunteers who collected their trophies at the ceremony.

The prestigious Lifetime Achievement Award sponsored this year Specialist Aviation Services went to Angela Hughes, Chief Executive of Wales Air Ambulance. Angela was the charity's very first employee and now oversees an organisation with an annual income of £12M, 110 staff, 650 volunteers and four helicopters serving the people of Wales. Wales Air Ambulance's remarkable story is rooted in the determination and leadership of Angela.

The winners were:

Air Ambulance Campaign Award, Wiltshire Air Ambulance. Sponsor: Lottery Fundraising Services [pictured right]

Charity Staff Member of the Year, Jen Easton, East Anglian Air Ambulance. Sponsor: Bayards Heliport Solutions

Charity Volunteer of the Year, Colin Smith, Wiltshire Air Ambulance. Sponsor: Tower Lotteries

Air Ambulance Doctor of the Year, Dr Paddy Morgan, Great Western Air Ambulance. Sponsor: Leonardo Helicopters

Innovation of the Year Award, North West Air Ambulance. Sponsor: Sloane Helicopters

Air Ambulance Paramedic of the Year, Mark Williams, Dorset & Somerset Air Ambulance. Sponsor: BMW Government and Authorities Division

Air Ambulance Pilot of the Year, Gavin Rowley, Scotland's Charity Air Ambulance Sponsor: Safran UK
Special Incident Award, Midlands Air Ambulance Charity. Sponsor: Airbus Helicopters

Air Operations Support Staff Member of the Year, Paul Smith, London's Air Ambulance
 Sponsor: Allianz UK

Outstanding Young Person Award, Ali Layard, Great Western Air Ambulance. Sponsor: Babcock MCS Onshore

AAA Chairman's Award, Paul Westaway



Image Wiltshire Air Ambulance team at the awards. Two awards were collected, one for a fundraiser [Charity Volunteer of the Year, Colin Smith] and the second recognising the quality of the fundraising campaign run to raise funds for its new airbase. The latter won in the face of an equally deserving campaign by Essex & Herts AA.



GWAAC



NPAS Twitter

GREAT WESTERN: As reported last month, the Great Western Air Ambulance Charity (GWAAC) has moved into its new air base in Almondsbury near the motorway junction of the M4 and M5 at Bristol.

The charity, which will share the facility with the National Police Air Service, have a 10-year tenancy agreement at its new station. Moves are in hand to acquire the base to ensure continuity of service, this would put NPAS as the tenants of the GWAAC.

SCOTLAND: Aberdeen has been confirmed as the base for a new charity air ambulance helicopter from late next year. Aberdeen will house one of Scotland's four Major Trauma Centres in the future Scottish Trauma Network and it makes sense for a HEMS to be based nearby to add to the capability the Trauma Centre represents.



©SCAA#

Scotland's Charity Air Ambulance (SCAA) has been busy raising £6M to acquire the aircraft. Since 2013 the charity has operated a helicopter—currently an EC135T2 air ambulance - from Perth, it operates alongside two H145s funded by the Scottish government from bases in Glasgow and Inverness.

The SCAA hopes to launch the new Aberdeen-based service as Helimed 79 next year as an additional resource to the charity's existing helicopter. [SCAA]

UNITED STATES

NORTH CAROLINA: PAC International, a Metro Aviation company, recently delivered three refurbished Airbus EC135P2+ helicopters to Wake Forest Baptist Medical Center's AirCare Program. Metro Aviation became the air operator for the 3-base operation based in Winston-Salem, North Carolina in May.



The aircraft interior components were refurbished to include crew and medical attendant seats, all storage pouches, and complete reconditioning of the Metro EMS interior. The completion also included a new composite med floor with Ferno 28A-1 litter and Metro litter load ramp system, new interior and exterior paint, all new windows, Devore tail recognition lights, Metro exterior EMS lighting kits, Technisonic TDFM9100 FM communication system, Garmin GDL69 XM weather system and GTX330ES ADS-B certification, Honeywell MKXXI EGPWS, Outerlink's IRIS flight tracking and data monitoring system and Aviation Specialties Unlimited supplemental NVIS lighting system. The aircraft are equipped with sophisticated

life support and patient care equipment for the medical crew, which consists of a flight nurse and paramedic.

The operation is part of an EMS network serving patients in North Carolina, Virginia, West Virginia, Tennessee and South Carolina. The service includes air and mobile ambulances stationed in strategic locations to provide fast, safe transportation for critically ill and injured patients. [Metro/PAC]

SOUTH DAKOTA: On November 14, Avera Health, a US healthcare provider located in Sioux Falls launched its new CareFlight base in South Dakota, cutting the ribbon at its new hanger at Pierre Regional Airport.

The new base will operate a Pilatus PC-12/47E N986AC c/n1786 fixed-wing single and supplements the Avera fixed-wing plane and helicopter based in Sioux Falls and helicopter over in Aberdeen. The new hanger is 13,000-square feet in total, including sleeping quarters for crew, training space, a meeting room, common area and storage space. Three members of staff – including a nurse, a paramedic and a pilot – will be stationed at the hanger at all times and will be ready to respond to a mission within 15 minutes.

[McKenna Avera]

FIRE

The Federal Aviation Administration has granted full certification to Thrush's newest firefighting variant of its agricultural aircraft, the Thrush 510G Switchback. The Switchback is designated as a Single Engine Air Tanker (SEAT) aircraft with the ability to deliver 500 gallons of water, retardant or fire suppressant with pinpoint accuracy – all while operating in tight environments. The Switchback is unique in that it offers operators a variant that has the ability to switch from agricultural spray duties to firefighting capabilities in a matter of minutes – thanks to its unique fire gate delivery system built by Transland.



Thrush 510G Switchback ©Thrush#

When in SEAT firefighting mode, Transland's gatebox allows the Switchback to deliver a full 500-gallon salvo drop in less than two seconds while providing an excellent, narrow drop pattern for an effective fire line. Combined with the superb visibility, light control response and high degree of manoeuvrability that are hallmarks of every Thrush – the Switchback offers a cost-effective initial attack platform in the battle against wildfires.

The ability of the Switchback to convert back to agricultural spray operations, allows operators to keep the aircraft working and generating revenue, both in and out of fire season – unlike other firefighting-only aircraft. The type offers the ability to land on unimproved surfaces and thereby allows the aircraft to reload and be back in the air in a matter of minutes, rather than the much longer turnaround time required by larger aircraft. The Thrush 510G is available in both single and dual cockpit-dual control configurations, allowing operators even greater mission flexibility – from spray operations, to firefighting, to training and observation.



The first two 510G Switchbacks have been delivered to the Georgia Forestry Commission where they are being put into service for fire detection, rapid response firefighting and training. Both aircraft feature advanced avionics for navigation and situational awareness, as well as to provide the pilots with numerous options for delivery of materials when making a firefighting drop.

Ed: Thrush Aircraft Company is Headquartered in Albany, Georgia. They manufacture a full range of aerial application aircraft used in agriculture, forestry and firefighting roles worldwide. Founded in 2003, Thrush is well-known for building the most durable aircraft in the aerial application industry, all models provide superb visibility, light control response, and a high degree of manoeuvrability and speed, along with low direct operating costs. Today there are more than 2,400 Thrush aircraft operating in some 80 countries around the world.

INDUSTRY

About a little over a year ago today, **DART** departed on a new quest – eCommerce. The company had the goal to develop a new platform that would ease the purchasing process for clients and partners. Before embarking on this eCommerce adventure, DART's objectives were to improve customer experience with 24/7 access to net pricing, product availability and technical publication using a system with intuitive search, filter and checkout processes via a responsive website that adapted to the various mobile devices.

In conjunction to this eCommerce project DART made a crucial change to the classification of the company's product lines, in order to match customer buying habits. This led to the new positioning - GEAR UP, TUNE UP and TOOL UP.

The GEAR UP category now includes all DART specialty equipment manufactured to ensure mission readiness.

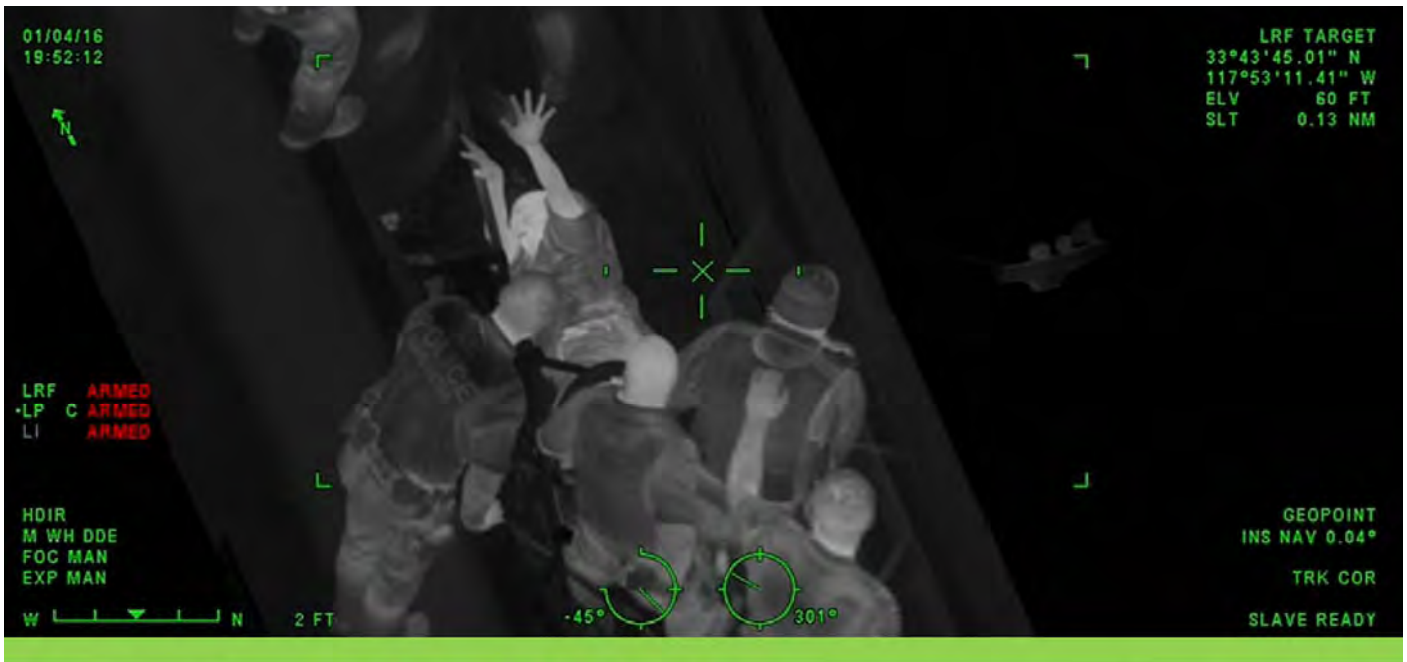
The TUNE UP category includes OEM replacement parts and consumables such as skid-tubes, wear-plates, cross-tubes, transparencies, engine mounts, interiors, and more.

Lastly, the TOOL UP category comprises tools and ground support equipment.

Launched earlier this year at the HAI Heli-Expo the system has been trialed by customers to clear any unexpected glitches and via their feedback as the system moves towards making the eCommerce functionality available to all.

Gemstone Aviation has been announced as UK and Ireland sole distributor of Diamond Aircraft. The directors of Gemstone Aviation, Chris Dawes and Henrik Burkhal have worked with Diamond since 2004 and were chosen for their vast experience of our aircraft and their reputation in the industry for exceptional customer service.

Henrik Burkhal from Gemstone Aviation commented: "We are very excited for our customers in the UK and Ireland who will have access to the full Diamond Aircraft range. We are all about matching the right aircraft



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to each owner based on their usage needs. This partnership allows us to deliver that better than ever before.”

Gemstone will offer customers aircraft and can broker the sales of existing aircraft to maximise the customers capital return. They also offer to manage the new aircraft, provide advice about registration paperwork, insurance, management and maintenance.

Gemstone Aviation is soon to receive a DA62 demonstrator and through that will boost the sales performance in the UK market www.gemstoneaviation.co.uk Gemstone also acts as the UK representative for Stemme.

S.A.F.E Structure Designs — a design, engineering, and manufacturing company offering aircraft and marine maintenance stands, fall protection platforms, and hangar equipment — has delivered its RW-SS1-B206-S (left) and RW-SS2-B206-S (right) Engine, Transmission, and Main Rotor Head maintenance stands to United Rotorcraft Air Methods in Decatur, Texas for their fleet of Bell 206’s.

SAFE Structure worked with United Rotorcraft Air Methods to enhance and improve their SAFETY and efficiency when working on the aircraft. SAFE’s RW-SS1-B206-S (left) and RW-SS2-B206-S (right) maintenance stands were designed to support the Bell 206, Bell 407, Bell 429, and OH-58, and have been sought after and tested by aircraft mechanics worldwide.

CNC Technologies, an aviation technology and wireless communications company serving the law enforcement, military and government markets, recently concluded a successful appearance at this month’s IACP event joining the Broward County Sheriff’s Office (BSO) in showcasing its CNC-designed airborne mission suite at the Airbus booth. Tapped earlier this year to develop the mission suites for the BSO’s two H125 helicopters, CNC has continued its rapid growth over the course of 2018, recently signing contracts with the Florida Highway Patrol and the Orange County Sheriff’s Office.

At IACP, the BSO brought one of its H125s to the show floor along with a CNC-equipped mobile command post to provide live demos of the mission suite for conference attendees. Built from the ground up to match the BSO’s specific mission requirements, the comprehensive surveillance and downlink solution was designed around Churchill Navigation’s industry-leading ARS700C augmented reality moving map system. Other key components include the FLIR Star SAFIRE 380-HDc imager, Spectrolab SX-16 enhanced searchlight and Troll microwave video downlink system.

Orbx Simulation Systems, one of the original producers of flight simulation add-ons, is working with Bluesky to develop new products and technologies for the UK. Utilising nationwide coverage of UK based Bluesky International’s aerial photography, Orbx will use its in-house developed tools to create realistic in-flight imagery of the underlying landscapes. Additional detail, derived from Bluesky’s National Tree Map and Heighted Building datasets, is being used to add 3D objects to produce accurate and realistic simulations.

The Bluesky data used by Orbx includes nationwide coverage of high resolution orthorectified aerial photography, which is continuously updated on a rolling three-year programme. Orbx is also using Bluesky’s unique National Tree Map database, which details the location, height and canopy cover of



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nearly 300 million trees and its Heighted Building database, which provides accurate height measurement for around 40 million buildings.

The team behind Orbx developed its first terrain project for use in Microsoft Flight Simulator 2004 (FS2004). Encouraged by an overwhelming response the series, known as Vista Australia or VOZ, became the most popular download for Microsoft FS2004 with a thriving user community and growing interest from designers and developers. With the advent of Microsoft's Flight Simulator X (FSX), Lockheed Martin's Prepar3D (P3D) and Laminar Research's X-Plane 11, Orbx continues to capitalise on new engines redefining the boundaries of high-resolution terrain scenery and airports. <http://www.bluesky-world.com> <https://orbxdirect.com>

Erratum: Last month, my reporting of the fuel system tweaks for the **EC135** went a little too far in ascribing deaths to the perceived problems with the system fuel sensors. Yes, it is a system redesign based on decades of experience but reference to any link between it and a fatality was incorrect.

The first phase of the new **Istanbul Airport** was completed in 42 months and became operational on the 95th Anniversary of the Foundation of the Republic. Turkish President Recep Tayyip Erdoğan opened the new airport last month with a magnificent ceremony that was attended by many Turkish government officials, including the Minister for the Interior Süleyman Soylu and representatives from surrounding countries.

The first phase consists of the main terminal building, two runways, an Air Traffic Control Tower and supporting buildings.

Priority 1 Air Rescue (P1AR), a leading helicopter Search and Rescue (SAR) mission operational support and training organisation has been awarded a contract by the United States Coast Guard (USCG) to provide instructor led ab-initio to advanced level helicopter hoist operator training for flight mechanic aircrews operating both the MH-65 D/E and MH-60T helicopters. The up-to-five years contract will train approximately 475-500 students. The USCG flight mechanics will attend the P1AR Search and Rescue Tactical Training Academy (SART/TAC) located in Mesa Arizona, to participate in ground school instruction, practice with USCG specific SAR equipment, and complete hoist procedural tower and synthetic training utilizing the virtual hoist simulator with P1AR instructors.

More information: Visit www@Priority1AirRescue.com or contact them at info@Priority1AirRescue.com


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Working together is an important part of this industry and I have worked with Jeremy Parkin for a long time now, so when he came asking how we could work together in the future, the least I could offer is PR for his new venture **Parapex Media**. In 1999, he founded the world's first online news website for the helicopter industry Rotorhub.com which he sold to Shephard in 2003, and then set up **HeliHub.com** along similar lines before recently adding Parapex as another string to his bow.

Parapex Media is dedicated to helping small and medium enterprises (SMEs) get the best out of Social Media and PR through carefully planned management. This size of organisation rarely has the financial ability to employ someone for this sort of work, and they often end up with an employee or relative who likes using Facebook but has neither the understanding of how businesses use Social Media, nor do they keep up with the way that these networks change and adapt every week.

Parapex manages all aspects of media for SMEs, bringing great experience and skills in the Social Media world for a price they can afford. All the detail of the options can be found on the website [linked straight from the advert in this issue]. Or simply [contact Jeremy](#) for more details.

Diamond Aircraft Industries GmbH in collaboration with Siemens AG have announced the first flight of a jointly developed multi-engine hybrid electric aircraft on October 31, 2018 at Diamond Aircraft's headquarters in Wiener Neustadt, Austria.

The main objective of this project is to develop an aircraft that has a lower fuel consumption (higher efficiency), as well as a lower noise footprint. The hybrid powertrain will allow for full electric take-off capabilities (without the added noise and pollution of a combustion engine).

To demonstrate this serial-hybrid technology, a DA40 aircraft was reconfigured to support a hybrid electric powertrain. In this system set-up, one combustion engine is powering two independent electric drive systems consisting of one motor, battery and inverter each. Two electric engines have been added on a forward canard, which combined can generate 150kW of take-off power. The diesel generator is located in the nose of the aircraft and can provide up to 110kW of power. Two batteries with 12kWh each are mounted in the rear passenger compartment, and act as an energy storage buffer. With a dedicated power lever, the pilot can control the energy flow between the generator, batteries and motor. The pilot can select either pure electric mode (generator off), cruise mode (generator provides all power to the motor), and charge mode (generator charges the batteries). Pure electric, the aircraft has an endurance of approximately 30minutes. The hybrid system extends this to 5 hours.



It looks like the air industry is getting serious about these electric aircraft as another company announces an associated project.

Bothell, Washington-based **Zunum Aero** which is backed by Boeing's HorizonX venture arm, is among several start-up's looking to develop a hybrid-electric aircraft.

The company's first plane, the ZA10, coming closer to a reality. The 12-passenger aircraft's design features slender wings and two rear-mounted ducted fans but was still seeking a critical component. The plane needs a power source for accommodating flights up to 700 miles in order to be commercially viable. The plane needed a generator capable of providing up to 500 kilowatts of electric power and it looks like a

solution has been found in the form of a modified Ardiden 3Z engine made by Safran Helicopter Engines. The output will allow the planes to not only meet the conditions for the flight but meet the FAA safety requirement of being able to fly for 45 minutes longer than it takes to reach the destination. The engine system will be adjusted to meet the unique needs of air travel, including the greater power needed for functions such as take-off and fighting headwinds. Electrical power for less intense functions, like cruising at altitude, will rely on smaller, more economical batteries.

Zunum will start testing at altitude next summer, with hopes of installing the full hybrid system by the end of 2019.



©Zunum#

Elbit Systems Ltd. Has been awarded a framework contract to provide maritime Unmanned Aircraft System (UAS) patrol services to be provided by the European Maritime Safety Agency (EMSA) to countries in the European Union. The contract that will be executed in cooperation with CEiiA is for a two-year base

period and two single year option periods. If fully ordered, the total contract value is €59M (approximately \$68M).

Under the contract Elbit Systems will lease and operate its Hermes™ 900 Maritime Patrol and its Ground Control Station. Hermes is a persistent long-range unmanned maritime surveillance system featuring maritime radar, an EO payload, Satellite Communication and an Automatic Identification System (AIS) receiver. Thus configured, the Hermes 900 Maritime Patrol will enable persistent monitoring of vast swathes of sea and long coastlines and effective identification of suspicious activities and potential hazards.

Airborne Public Safety Association (ASPA) member, **Blue Sky Network** based in San Diego, California CA 92108, works with local, state and federal law enforcement operators on equipping their assets with satellite-based tracking, two-way messaging, and voice communication capabilities.

Their systems drastically improve the safety, communication, and operational efficiency of daily operations whether they are installed in the craft or portable solutions for maritime, aviation, and land-based operations. Blue Sky offer a web-based command and control portal, SkyRouter providing operators an ability to view, manage, and communicate with the assets in real-time regardless of their global location.

Blue Sky are currently offering special pricing just for law enforcement customers.

For instance the HawkEye 7200 portable satellite tracking device is usually offered at \$1,495 MSRP but the law enforcement price is now \$995. The HawkEye HEPT+ Portable Tracker Plus GPS Tracking device usually \$1,695 MSRP is cut to \$1,295 for law enforcement customers.

Blue Sky are also extending law enforcement pricing for data plans as well.

Contact Nick Tucky at NTucky@blueskynetwork.com +1 858 551 3894 www.blueskynetwork.com

There is also a European region contact on +353 86-780-6445



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Last month the Weston-super-Mare UK based **Helicopter Museum** received recognition as a Vertical Flight Heritage Site. On November 15 a plaque presented to the Museum was unveiled in a formal ceremony that brought together The Aeronautical Society and the US Vertical Flight Society. Between 1955 and 1959, the site of the Museum was host to the Bristol Aeroplane Company's Helicopter Division. It was here that the first flight of the Belvedere tandem-rotor helicopter took place. By 1960 the factory became the Weston division of Westland Helicopters assembling more than 400 rotorcraft on the site. These included Sycamores, Belvederes, Whirlwinds, Wasps and Scouts – examples are in the collection alongside a broad range of world rotorcraft. With over 80 displayed Helicopters, the Museum is not only the world's largest dedicated collection of rotorcraft – but an important historic site in the history of vertical flight aviation.

Canada's **Viking Air**, best known for bringing the Twin Otter back into production, has further expanded its legacy aircraft production after a purchase agreement with Bombardier. Bombardier is selling its Q400 regional turboprop programme to Longview Aviation Capital for \$800M. The airliner is the basis for a surveillance machine used in small numbers across the world. Longview is the parent company of Canada's Viking Air, which previously acquired the rights to out-of-production de Havilland Canada aircraft. Bombardier said the de Havilland trademark was also being sold to CAE for a reported \$300M.



On the move ©Bombardier#

The company, which has a large presence in Belfast, Northern Ireland, said it was also undertaking what it called a “right-sizing” exercise, involving shedding 5,000 jobs worldwide over the next 12-18 months, though it did not say where the cuts would fall.

Bombardier CEO Alain Bellemare said the company “will continue to actively participate in the regional aircraft market with the scope-compliant CRJ while we explore strategic options for the programme”. A supporting company statement said the actions were part of a strategy designed to focus on growth opportunities in the transportation, business aircraft and aerostructures segments. The statement added: “Bombardier has launched a company-wide restructuring initiative focused on optimising production and management processes, flattening management structures and further reducing indirect costs.”

Thommen Aircraft Equipment Ltd based in Switzerland has announced that its new AVLight X Multipurpose Aviation Flashlight is now available for sales from DAC International, one of THOMMEN's official premium resellers.

DAC International will support THOMMEN's marketing activities by presenting AVLight X, a premium grade flashlight solution for cabin, cockpit, emergency, preflight and mission applications, to business aviation, special mission and commercial air transport customers. The AVLight X is the world's first aviation qualified flashlight being DO-160G compliant, featuring 4 high-intensity light beam colors and providing 3 output levels. A strobe function is also available.

www.dacint.com



Surplus aircraft from the **Canadian Coast Guard** are to be donated to educational institutions across Canada, in a plan backed by the Canadian Government.

Ten training facilities across the country had been given a Coast Guard MBB/Bolkow Bo.105 helicopter. The aircraft type has been in service for the Canadian Coast Guard for over 30 years, with the first being purchased in 1985. The Coast Guard have purchased and deployed 22 new Bell helicopters as part of its fleet renewal plan, including 15 Bell 429s and seven Bell 412EPis.

The UK government is contemplating "a complete or a partial shutdown" of its ambitious programme to shift blue-light services from bog-standard radio to 4G. The Home Office's Emergency Services Mobile Communication Programme (ESMCP) was supposed to replace today's Motorola-owned Airwave radio service with a £1.2bn 4G **Emergency Services Network** run by EE. It also intended to kit out emergency services with 4G-enabled devices ahead of Airwave being switched off by 31 December 2019.

The cost of extending Airwave is expected to total between £360M and £475M per year.

Sources have said that Airwave may need to run for another five to 10 years until it is ready. Of two options believed available one suggests an incremental rollout of ESN, including a data-only option – where emergency services retain Airwave for voice and use 4G devices for data only, as well as a contractual commitment to continue to run Airwave until all shutdown criteria are met and customers no longer wish to pay for the service.

The second suggests an effective shutdown of ESMCP for the emergency services until an unspecified future date. [Register]

Ed: It is very like shifting sands and signs that there is no leadership in this communications programme. Only this week another company was claiming it had won a contract to test the ESS systems. Very odd if there is yet no tangible equipment to test.

At a ceremony held at the Royal Aeronautical Society's headquarters, London last month, representatives from **Smith Myers**, Biggleswade and Leonardo Helicopter, Yeovil, were presented with the RAeS Team Silver Medal award for their teamwork developing the Redstreak Mobile Phone Detection and Location System. Previous Silver Team Medallist include The Beagle 2 Mars Mission Engineering Team.

A joint Smith Myers and Leonardo Helicopter team brought diverse skills from different domains to engineer an innovative and effective SAR capability.



The team's vision was to enable a SAR helicopter to have the capability to locate and communicate with a person in distress possessing a standard mobile phone. This system had to work in areas of no cellular network coverage and effectively configure the mobile phone as a rescue beacon.

Leonardo Helicopters experience in airborne system design, development and evaluation together with Smith Myers' expertise of advanced telecommunications design, produced the system that demonstrated detection ranges of 32km with accuracies of better than 100m. Whilst locating the individual, it provides both voice and text communications.

Redstreak can locate individuals not detectable by other sensors and large search areas can be covered rapidly. The search is quicker, safer and more effective and currently used on the Norwegian AW101 SAR helicopter.

The systems avionics certification covers both rotary and fixed wing aircraft.

Peter Myers managing director of Smith Myers said "Despite the distance between the two sites, the team quickly gelled and rapidly produced flying prototypes. The professionalism and expertise of both companies ensured a well-designed and thoroughly tested system. Redstreak/Artemis gives SAR crews an effective alternative where previously looking out the window was the only option".

There is talk of the helicopter industry – and in particular the **oil and gas** industry – starting to recover from hard times, meanwhile the books need to be balanced to ensure that the companies ultimately survive.

Among those most severely affected Babcock International Group, the engineering giant which maintains Britain's nuclear submarine fleet, are due to try to draw a line under its recent difficulties by taking a £100M hit on the value of its helicopter business. This is an impairment charge relating to the Avincis operations it bought in 2014 for £1.6bn. They are the providers of police and HEMS helicopters on the UK mainland. In addition in Germany Babcock MCS is just about to close down training operations.

Elsewhere in industry Waypoint Leasing Holdings Ltd., the largest independent global helicopter leasing company, announced that it and certain of its subsidiaries have filed voluntary petitions for relief under Chapter 11 of the Bankruptcy Code in the U.S. Bankruptcy Court for the Southern District of New York (the "Court"). Even Bristow are said to be having their troubles.



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23 October 2018 Bell UH-1H ZS-HLP Firefighting helicopter owned by Kishugu Aviation and operated by Working on Fire was making water drops on a fire at Vermaaklikheid, Southern Cape, South Africa. While undertaking water drops on the bush fire about 40km west of Still Bay in 30°C temperatures with strong winds it crashed in unknown circumstances. The pilot, Nico Heyns aged 65, did not survive the crash. [ASN]

16 November 2018 Bell OH-58 N510MN. Metro Narcotics Task force helicopter struck wires and crashed into the waters of Lake Mitchell in Verbena, located in Chilton County, Alabama - about 50 miles north of Montgomery and 50 miles south of Birmingham near the geographical centre of the state. Two died. The helicopter was heading from Columbus, Georgia to Clanton, Alabama for maintenance when the crash occurred. The helicopter belongs to a multi-jurisdictional drug task force that includes Muscogee, Harris and Russell counties, as well as Columbus and Phenix City police. The two aboard were retired Columbus officer David Hall [53] and Austin Griswold [22].

18 November 2018 Cessna 441 Conquest II N441CX The 36-years old Bismarck Air Medical Metro Area Ambulance airplane crashed about 15-20 miles northwest of Mandan, North Dakota killing the three crew, the pilot, paramedic and a nurse. It was on its way to assist in a patient transport. The plane was flying to Williston but went down prior to arrival. The Bismarck Airport tower reported the aircraft was missing about a half-hour after taking off from there. Search efforts by the Morton County Sheriff's Office, Mandan Rural Fire Department, Civil Air Patrol and an Air Force Rescue Team located the crash site in darkness thanks in part to cellphone forensics and radar analysis. The fuselage and other debris are spread over "a large area" in a "remote pasture" about 3 miles west of North Dakota Highway 25 and is consistent with a mid-air break up. The weather at the time was reported as low hanging clouds and light snow showers with visibility had dropping to 5 miles. The crew were given as pilot Todd Lasky, nurse Bonnie Cook, and paramedic Chris Iverson. (Bismarck Tribune)

The cockpit and fuselage are seen in this aerial view after a Metro Area Ambulance aircraft crashed Sunday night, Nov. 18, in a remote pasture northwest of Mandan, N.D. Photo from Morton County Sheriff's Office but may have been taken from the State Police Cessna 206 which is based in Bismarck.



18 November 2018 Leonardo AW139 VH-*.** Ambulance Victoria, Australia. While operating without a patient aboard a window popped out while flying near Rokewood, a small rural township 133km west of Melbourne. The helicopter landed without further incident and the fault was repaired.



20 November 2018 Leonardo AW139 VH-*.** Ambulance Victoria while operating without a patient onboard a window popped out of the same helicopter while flying over Elwood, an inner suburb of Melbourne, and just 8 km south of Melbourne's Central Business District. No reports of damage or injury on the ground. This led to a temporary grounding of two helicopters. Ambulance Victoria sought immediate fleet safety assurances from the helicopter manufacturer, Leonardo, and the operator, Babcock. The latter identified the two grounded helicopters may have been fitted with potentially faulty window seals during recent routine maintenance. Babcock has since sourced and fitted new window seals. [SAW]

seals during recent routine maintenance. Babcock has since sourced and fitted new window seals. [SAW]

FLIGHT SAFETY

In October 2016 a Swearingen SA227-AT Expediter, registered N577MX, was destroyed after impacting terrain during take-off from Malta-Luqa Airport. All five crew members sustained fatal injuries. The heavily surveillance role modified Expediter owned by CAE in Luxembourg was to undertake a surveillance mission for the French Ministry of Defence.

On take-off the engines were throttled to full power and the brakes released, on lift-off, the retraction of the landing gear was initiated, and the aircraft continued to increase its pitch attitude. When the pitch angle

reached 34°, the aircraft entered a power-on stall and banked suddenly to the right until it was three-quarters inverted. The aircraft hit the ground with a 38° nose-down attitude. It had flown for just ten seconds. It burst into flames.

The damage to the former CIA owned wreck was such that the French BEA were unable to come to a certain conclusion for the cause.

After being acquired by CAE Aviation, the many sensors were altered or replaced in 2011 along with TCAS, TAWS, extra fuel tanks and HF/UHF antennas. In 2016 old sensors were removed and new sensors and antennas were installed.

It was concluded that a technical malfunction that caused of the accident. The investigators believe that this malfunction probably originated in the specific modifications of the aircraft and in the application of an inappropriate maintenance to these modifications. Even so three options are envisaged:

- rupture of the HF antenna, which then wrapped around the elevator control surface;
- inadvertent activation of the SAS, countered by the pilot;
- jamming of the elevator due to a technical failure in the flight control line.

The hypothesis of damage to a component of the elevator control line remains the most plausible explanation.

In mid-November the Regional Airspace User Group (RAUG) meeting hosted by RAF Linton on Ouse in North Yorkshire saw a good turnout from the local GA, ATC and NPAS. One of the attendees was Steve Forward, Director of the UK Airprox Board and it would appear that drones continue to cause concern for them. [TC]

A high-profile fatal accident occurred on an AW169 helicopter in Leicester, the root cause of which is still under investigation. While the helicopter was on a take-off phase at low forward speed, a loss of yaw control has been observed. As a precautionary measure, both EASA and Leonardo issued service bulletins and Airworthiness Directives for the inspection of components relating to the tail-rotor drive and control for the AW169 and similar AW189.

It was feared that possible incorrect installation may have occurred and these if not corrected might lead to loss of control. It is early days in the investigation and the inspections are an interim measure as the accident investigation proceeds.

UNMANNED

The UK CAA has issued a Safety Notice aimed at operators of multi-rotor small unmanned aircraft utilising DJI battery model TB50 or TB55, including all DJI Matrice 200 series (which includes the 200, 210 and 210 RTK platforms) and the DJI Inspire 2 (the "Affected SUA").

A small number of incidents have been recently reported where the aircraft has suffered a complete loss of power during flight, despite indications that there was sufficient battery time still remaining. In each case, this resulted in the aircraft falling directly to the ground due to the immediate loss of lift with the remote pilot unable to control its subsequent flight path. The small unmanned aircraft were damaged upon impact, but the CAA has not received any reports of injuries to people or other property. Investigation by the manufacturer has confirmed that this issue is not confined to any specific firmware version and is thought to be related to the batteries TB50 and TB55. The full details of the occurrences are still being investigated.

While the enquiries continue there is a requirement for the SUA operator and/or remote pilot to be reasonably satisfied that the flight can be safely made (Air Navigation Order 2016 (ANO) article 94(2)), restrict overflight of persons at any height and to temporarily limit the scope of any operational authorisations issued to operators of the Affected SUA.

As a result of the Safety Notice operators have suspended flights by affected drones although the notice only requires that operators not to permit any flight that involves overflight of any persons, whether or not they are under the control of the operator or remote-pilot, at any height until further notice.

This year the Commercial UAV Show at ExCel in London's Docklands was massively improved. The content was sharper and more interesting and the number of people attending on the first day appeared higher than last.

At around 100 exhibitors the show was not physically larger than in previous years, a similar number of stand spaces and the inevitable 'no-show' gaps, but the overall content appeared more interesting. It may not last into next year's show of course but that is the nature of the beast. A significant number of the ex-



hibitors were University's with a diverse range of 'projects' to make the world better. And projects there were as well – this year's theme was clearly along the lines of save the world... whether it is simple surveying of arid and agricultural areas or dropping seeds and all manner of other compounds from the air. Dropping stuff from the air has become a cause for drone people but it does regularly raise odd questions.

Using drones to deliver parachutable boxes of aid/ medications/supplies in a precise targeted manner appears very niche and will probably be as rare as hens teeth when compared to mass dropping of aid packages from conventional aircraft. The drone operator is going to be fairly close to the target for such a precise delivery of supplies to a person in need. But some areas in Africa are talking about direct deliveries of blood to medical teams in remote areas with poor road connections so there is a niche demand that raises the same sort of delivery question mark that hovers over proposed Amazon deliveries.

A potential leap in technology was the use of hydrogen power. The craft at the show carried a tank of the fuel. This promises extended range for a given weight but, for the present at least, batteries remain more plentiful, easier to access and recharge than a hydrogen generator.

Overall some of the presentations in the open theatres were plentiful and interesting but even so the titles of several projects and presentations were a little difficult understand to say the least.

One exhibitor was displaying a drone equipped with a self-inflating drop load. The 'serving suggestion' for this kit assumes that a drowning but conscious person can have the 'Restube' inflatable bar flown to them and have their life saved by its support. All this sales talk naturally ignores the difficult bits like the weather, the cold, unconscious people and the actual presence of a suitably equipped drone being in the right place at the right time. A case of not letting real life get in the way of a good sales pitch.

There were gaps in the exhibitors, large companies are still rare attendees except perhaps by having their equipment on an exhibit. Boeing Insitu, a past attendee had not returned but Lockheed Martin were there.

At the front door greeting both the UAV attendees and even passers-by hurrying on to the other co-located events including The Business Show, were 'elistair' the tethered drone specialists.

Designed to be easily transportable and deployable on any type of terrain, Ligh-T V. 3 is compact, compatible with a wide range of drones, and can be operational in seconds. It provides the drone with unlimited power and allows secure, fast and unjammable communication.

A 'new to PAN' drone event is scheduled for late January in Madrid, Spain. It is the 7th edition but I seem

THE COMMERCIAL UAV SHOW



Para-dropping from a drone may have drawbacks as might delivering inflatable devices— but it does show that the industry is asking questions about what to do with drones ©PAR#

Next presentation:
12:30pm
Dronecoria, open source project for ecological restoration with drones
Andreu Ibanez, President and Founder, LleidaDrone Association

It was probably an Interesting , deep presentation but coffee called! ©PAR#



Converting the standard DJI into a craft that can operate searches indoors requires protection for the rotors.

Left: The base unit used by French company Elistair ©PAR#

THE FUTURE IS UNMANNED

UNMANNED SYSTEMS ASIA 2019

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to have missed the others, the last edition was in France and before that they were in Belgium. Spain has never been at the front of the queue as country that wants to interact with other nations too much but this event might yet be a sign for change.

On 23-24 January 2019 the event RPAS CivOps 2019, the 7th Annual European Civil RPAS Operators & Operations Forum, is taking place in Madrid. This event is coordinated with & hosted by AESA (The Spanish Aviation Safety & Security Agency). Forty-five speakers from across Europe will address regulation, operational and training issues. These will be drawn from civil drone councils of France, Germany, The Netherlands & Spain, from national aviation authorities + air navigation service providers of France (DGAC DTA + DGAC DSAC), Germany (Federal Ministry of Transport & Digital Infrastructure + DFS), The Netherlands (Ministry of Infrastructure & Water Management + Human Environment & Transport Directorate + LVNL) & Spain (AESA (6x) + ENAIRE + CRIDA). In addition representatives from the European Commission, EASA, SESAR JU, Eurocontrol, OECD, EMSA, EUROCAE, ASD-STAN, Spanish Ministry of Public Works & Transport, Spanish Ministry of Economy, as well as the European U-Space Demonstrator Network, the Interreg-ICAREs consortium, and the Rescue Drones Network will be on site.

Worryingly it is a crowded programme with no less than 45 presentations spread over 2 days so it appears that many will be trying to squeeze in their important words into a tiny 10-minute slot, each speaker will therefore have to be very focussed in their delivery. There are no speaking slots that appear to relate to the emergency services although the training and certification issues are the same across the spectrum.

<https://rpas-civops.com>



PEOPLE

A founding member of the East Anglian Air Ambulance has been awarded the sword of honour for his contribution to air aviation. Gerry Hermer, 73, was presented the award by The Honourable Company of Air Pilots at a ceremony at the Guildhall, London.

Mr Hermer's career spans more than five decades. He began as an Engineering Officer in the Royal Air Force before training as a Search and Rescue pilot. He flew the Wessex and the Sea King and also qualified as an instructor on Gazelles. Always at the front, he was awarded the Air Force Cross in 1977 for rescuing the crew of a sinking German ship over 70 miles off Flamborough Head. In treacherous weather conditions with gale force winds, snow and hail, he had to refuel twice offshore; on an oil platform and on the deck of a rolling tanker.

After moving to Norfolk in 1979, Mr Hermer was the owner of Sterling Aviation at Norwich Airport when the first Norfolk Police helicopter unit was set up using his Bolkow helicopter in 1990. The East Anglian Air Ambulance (EAAA) was also set up based on Sterling, initially using the same Bolkow, Hermer worked with a small group including the current chief executive Patrick Peal in 1996. From 2001 they built up a robust two aircraft HEMS operation based on Norwich and Oxford using the first BK117C1 air ambulances in the UK. Gerry continued to supply aircraft and pilots for over 10 years, often flying the Air Ambulance himself. Working as both a pilot and a supplier, Gerry was acutely aware of the requirements and demands placed on the aircraft and its crew.

This allowed him to develop HEMS focussed procedures and techniques as well as address safety issues at a national level. Much of his early work set the foundations for the success of the UK's HEMS sector today.

He retired from Sterling and continued his relationship with EAAA as the Aviation Consultant only to find himself thrust back into the limelight when eight years ago his old company folded under its new owners. It was Bond Helicopters that rescued the EAAA operation with alternative aircraft, but it was Gerry Hermer's guidance that led the charity through the complex maze of aviation regulations towards recovery. He continues to do that today and has been a major player in moving the charity forward with new aircraft types and ultimately into night time operations.

Gerry's passion, knowledge and experience enabled him to pursue continuous improvements to the safety and efficiency of the service. Innovations included the introduction of new in-flight communications and new helipad lighting, exemplifying Gerry's innovation and professional acumen. At a national level, Gerry's commitment to the UK air ambulance community has been extraordinary and unequalled. It was Gerry's expertise, energy, and tenacity which was pivotal in coordinating the inputs of the aircraft contractor



and UK Civil Aviation Authority in order to introduce safely, night HEMS missions in May 2013, a new operational capability to the UK.

EAAA now operates two high-tech Airbus H145 helicopters from its Norwich and Cambridge bases every day of the year. Until last year the operation also had Prince William, as one of its pilots.

Patrick Peal said: "Having known and worked with Gerry for around forty years I can say he is modest and unassuming yet meticulous, forward-thinking and passionate about helicopter operations.

"This prestigious award is richly deserved and we at East Anglian Air Ambulance are delighted for him."

Recently retired he is well known throughout the industry, earning respect and admiration for his remarkable achievements. His tireless work ethic, utter professionalism, selfless commitment and boundless energy, throughout a lifetime of service to aviation, makes him a role model in UK aviation and an example to all who know him. For his outstanding contribution to General Aviation, Gerry Hermer is awarded the Sword of Honour.

Ed: Unlike many modern awards the Sword of Honour is not always awarded on an annual basis, sometimes there is a 2-3-year gap in recipients which tends to suggest great thought has gone into the process. In 2017 the Sword of Honour was awarded to the National Police Air Service.

New Maritime & Coastguard Agency chief executive **Brian Johnson** says he is committed to supporting the Agency's ongoing work to drive up standards of maritime safety. Brian took over the MCA from Sir Alan Massey in October.

The MCA has a worldwide reputation in the maritime world, whether it's in the regulatory survey and inspection or enforcement work or in the search and rescue work of HM Coastguard.'

The creator of some of the iconic UK airborne emergency services images of the 1990s and early 2000s has died, aged 90.

Marcus Taylor worked for McAlpine Helicopters at a time when the company was successfully promoting helicopter use by the emergency services via the early Aero-spatiale designs and his craft was regularly to be encountered by both the customers and media alike. His production expertise and artistic eye also embraced the offshore oil industry.

Marcus produced the classic images including the three Met AS355N over the Thames and the police ambulance and fire AS355N/BK117/AS365N by Canary Wharf. He photographed almost every AS355 and EC135 entry into service in the 1990s and a number of international deliveries.

He was a commercial photographer with a background photographing the war trials in the late 1940s before moving on to taking photographs for the oil industry and opening a shop at Byron Parade, Hillingdon. The shop was handy for McAlpine in the days they were located at Hayes in west London. He stayed with them and their flying services offshoot O.S.S./MASL, even after they moved to Oxford and evolved into Eurocopter, now Airbus Helicopters.

He gave up the shop around 2005 when he recognised the threat of digital photography was resulting in the public need for photographic printing reduced; he successfully embraced the challenge of digital photography and continued to meet the changing needs.

Marcus Wynn Taylor born 1928 died 5.11.2018. His funeral was held on November 20 at Chiltern Crematorium.



Marcus Taylor ©PAR#



Safran Helicopter Engines has appointed **Eric Dalbiès**, 51, as Senior Executive Vice-President and Safran Power Units CEO. At Safran Power Units, Eric succeeds François Tarel, who has been appointed to another position within the Group.

Eric Dalbiès joined Snecma1 in 1992, within space propulsion division in Vernon. Within Snecma, he fulfilled various positions in engineering and programmes until 2005. In 2005, he was appointed Turbomeca2 Head of information systems, before being named deputy to the President and Head of the improvement initiatives in 2008.

Since 2013, Eric served as Safran Executive Vice-President, Strategy, Mergers & Acquisitions.



HELICOPTER LINKS
The online yellow pages of the helicopter industrySM



MOVE ALONG THERE

The growth of focussed industry specific awards for doing the job we are supposed to be doing continues apace. There are those that apparently see a framed certificate of thanks or a strangely shaped collection of engraved glass as far more cosy than financial gain and clearly there are many that agree with that position. Historically perhaps they are no more than a “thank you” and a slap on the back – or even a bottle of whisky in recognition. But now, in these enlightened times, that slap would be seen as an assault on the person and the whisky as an unsolicited gift if not an outright bribe. Far better to hand out a citation or a shard of glass.

In that not too positive vein I have to report that the support the UK Met Office provided Heathrow Airport during the 2017/18 winter has been recognised with a prestigious award.

At the Airport Operations Association Awards in late October, the Met Office won the ‘Best Business Partner’ award (a category open to Non-Airport Members).

This “prestigious accolade” recognised the support the onsite Met Office team provided Heathrow during the challenging 2017/2018 winter, particularly during the cold snaps in February and March. The Met Office team provided Heathrow operations staff with the latest weather information, playing a key role in keeping one of the world’s busiest airports running smoothly.

In a country that rarely suffers severe weather in the terms other nations have to endure the winter of 2017/2018 inflicted significant impacts on UK national infrastructure and transport due to snow and ice. It was the first time there had ever been a Met Office red national severe weather warning due to snow.

The Heathrow Met Office team provides onsite, tailored meteorological advice into the heart of the Heathrow Airport Operations Centre. A team of six embedded meteorologists provide advice 24 hours a day, 7 days a week, 365 days a year to the key operations managers for Heathrow Airport, including airside, landside, air traffic and airlines.



Cool but rare ©PAR#

My local police in Essex are struggling financially and are trying to persuade their financiers – the people who live in the county – that they need to charge them yet more money for a police service they never see.



Closed for business.
©PARJ

They have closed all the police stations they can but, years later, seem remarkably unable to sell most of them to improve their finances. All this is made worse it seems by the current system of communications. They see costs rising as a result of extending the police’s Airwave radio system due to delays in the roll out of the National Emergency Services Communication Programme [ESS]. Airwave equipment lingers on in apparently unsaleable cop shops and no doubt complicates the sale of the buildings. Meanwhile the empty buildings need to be looked after and powered up to support the needs of the Airwave equipment.

Contrast that with last month’s story of how the police in the Netherlands operate their force wide communications via a simple handheld and the police in Belgium are going the same way.

Last year, Essex Police carried out a similar “pay more for nothing” survey which received more than 5,000 responses. Approximately two thirds of the people who answered (65%) said they would be prepared to see the police element of local Council Tax increased, so more money could be made available for local policing. With 1.3 million people living in the county and perhaps 500,000 households that 1% response can perhaps be classified as little more than a smear test.

Nonetheless it was taken as a green light and the taxes went up and allowed Essex Police to recruit 150 more frontline officers. As the numbers remain inadequate to sustain meaningful policing they are back with, yet another survey led begging bowl.

Vertical take-off aviation startup JETcopter announced that it has finished the primary air turbine tests, which confirmed the concept feasibility. The team also released the latest design drawings.

The illustrations for the strange new six-passenger project have regularly changed and the latest design has become more compact and better able to drive on roads as well as to fly. The interior looks similar to existing medium-sized helicopters, with the pilots’ seat in front and seats for passengers behind. In the rear of the cabin, there is space for luggage accessed via a rear ramp. The wheels look like something more fitted to a tea trolley than something likely to be seen cruising a highway.

**BEST OF ROTORCRAFT
IN ONE GREAT LIFT OFF**

**ROTORCRAFT
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The engine compartment, with two 400 hp automotive motors powering two counter-rotating fans, will be situated on top of the fuselage. Air-flow from these two fans will be diverted to four vectoring nozzles. Like other VTOLs, the amount of power given to each output point can be manipulated to control vertical hovering and manoeuvring. Once in the air, the nozzles tilt for horizontal flight, and from there it operates much like a jet. Aircraft—although there is precious little sign of substantial flight supporting wings.

The team plans to build a cargo version of the craft first, this will be followed by a passenger version at an undefined later stage.

A full-scale mock-up of the JETcopter will be presented at the AERO 2019 aviation exhibition, the largest general aviation trade show in Europe, in Friedrichshafen, Germany, in April 2019.

That should give readers time to dream up some pertinent questions like how the pretty structure is going to both support two overhead automotive engines in an air crash and yet still meet the needs of the standard automotive crash test. A knowledge of the Reliant Robin 'car' may be useful.



NEWLY ANNOUNCED EVENTS

Now for something a little different perhaps, but equally something with good timing. With NPAS set to leave Lippitts Hill to the spiders and mice and depart to North Weald in the summer of 2019 there is a timely well illustrated talk on Lippitts Hill Camp in war and peace to be given to a local society on **February 14** (Valentines Night).

So, if romance is off the books for you perhaps you might want to join the members of the Chingford Historical Society at Chingford Junior School Shaftesbury Road, London E4 7BP at 7-30pm that evening. The doors will be open from 7 pm. The school is about 10 minutes walk from Chingford Railway Station with direct links to Central London. Alternatively the editor is well versed in local hotels and even international transportation options if you need them. But you will need to either join the society or stump up the £2 visitors entry fee for yourself. Tea and coffee available during the half time interval of course. They tell me there is limited parking on site, otherwise it is carriages at 10pm. www.chingfordhistory.org.uk

The Diversified Communications technology group is now undertaking the marketing of a number of new events including next year's **Commercial UAV** event in Amsterdam from **8-10 April 2019**.

After powering forward with nearly 40% growth in its second year (700+ attendees from 43 nations, 50 exhibitors, rave reviews) the show returns to Amsterdam in its preferred calendar slot. The leading pan-European conference and expo focused on commercial drones will convene top UAV experts and buyers from all key vertical markets, from across the globe. 1,500+ attendees and 75+ exhibitors.

www.expouav.com/europe

Diversified are also promoting the **Commercial UAV Expo Americas, 28-30 October 2019**, Las Vegas, Nevada, USA. The Vegas event defines and showcases the global commercial UAV industry, with a special focus on solutions in the Americas region. It has shown consistent growth for 4 straight years, with 2,400 attendees this past year and a record 175 exhibiting companies. Strictly commercial by choice, it draws the power buyers and global influencers and sets the pace for the industry, with innovative formats, cutting-edge content, and unmatched excitement on the expo floor. It is a must-attend event and will convene 3,000+ delegates and 200+ exhibitors from 6 continents. www.expouav.com

Other event in their 2019 calendar include:

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28-30 January 2019 International LiDAR Mapping Forum, Denver, Colorado, USA Diversified Communications technology group www.lidarmap.org

21-22 May 2019 GEO Business, London, UK. Diversified Communications technology group www.geobusinessshow.com

21-23 May 2019 AECNEXT, Anaheim, Florida USA Diversified Communications technology group www.aecnext.com

21-23 May 2019 SPAR 3D, Anaheim, Florida, USA Diversified Communications technology group www.spar3d.com/event

This is the time of year that I would normally be promoting the PAVCon Police Aviation Conference in Europe. There have been some unexpected changes in the management of the event and as a result the organising office has returned to the United Kingdom.

Although the event remains planned for May 2019 no venue has yet been confirmed. I will be announcing any updates as soon as possible so you can firm up your own diaries.

DUBAI HELISHOW

6-8 November 2018 - The Dubai HeliShow - the biennial International Helicopter Technology and Operations Exhibition dedicated to the helicopter industry - held at the E2 Royal Pavilion, Al Maktoum International Airport, Dubai South, has a chequered history in being a niche event.

When it first started more than a dozen years ago it attracted the great and the good of the aviation industry and the media. It was not long before both started to give up on the show. It never attracted the numbers of the Dubai Air Show [the reality is that no helicopter show fares well compared with any general air show] and it was always debatable whether the meagre audience were of such a high quality that transcended low numbers.

From personal knowledge I know that fewer and fewer members of the media make the costly journey to Dubai and it is clear that some major players in industry have decided that the massive expense of supporting the event was simply not perceived as worth it. All of us may be wrong, but with each party making an independent call on the worth of the event the effect is the same.

For this year's event – greatly over shadowed by a row with the UK over briefly locking up a student as a spy - the organisers were as ever upbeat in stating that the event was attracting strong international participation from leading global players in the field of civil and military helicopter technology and operations. Unfortunately, the quoted 'leading industry players' participating no longer include the all-important usual suspects - the manufacturers of airframes.

This is perhaps the first time I have noted a police ASU as the first in such a list of worthy exhibitors! The rundown stated that attendees were Dubai Police, Dubai Civil Aviation Authority, Dubai South, Dart Aerospace, Transmex Systems Int, Southern Cross Aviation, Flir Systems, Hartmann Specialized Vehicles Trading LLC, DeVore Aviation / FEC Worldwide, Motor Sich Middle East FZE, Vertex Aerospace (L3), Thuraya, and Fujairah Aviation Academy are all bit players, at most shows simply part of the supporting act. But, again, do not let the truth get in the way of a good bit of PR!

However, as we know full well from smaller events like PAVCon bringing together exhibitors, decision makers and government officials rarely ends up being a wholly negative experience and clearly the exhibitors taking part took on-board their own perception of rewards or they would not be there.

Showcasing their equipment and using copious amounts of social media to attract attention was UK company FEC Heliports Equipment promoting themselves and their industry-leading solar-powered lighting systems. <https://www.heliportsequipment.com/portable>

For them the event was declared a success and they were congratulating the organisers of the [#DubaiHeliShow](#) for a job well done. The truth of the matter is that for them the event had been a worthwhile and very successful event - with some high-level visitors - and reporting great interest in their products.

For others it still remains a waste of resources.

The Helishow brought to Dubai two exclusive three day conferences: 'Helicopter Technology and Operations' and 'Military and Homeland Security' bringing a 'vast' range of topics, including how to empower police forces with Internet of Things (IoT) tools; the role of women in homeland security; application of robotics in policing and helicopter; tackling new patterns in narco-terrorism by integrating intelligence, forensics and response operations; best practices to boost joint inter-agency cooperation between armed forces and homeland security agencies among many others. Without having been there I cannot assess the actual content or worth of these.

www.PoliceAviationNews.com
A wealth of on-line resources



DIARY

11-13 December 2018 Countering Drones Conference. Operated by DefenceIQ and held at the Hilton London Canary Wharf, South Quay, Marsh Wall London E14 9SH. The civilian market is moving closer to implementation of technology to detect, identify and neutralise malicious drone activity, however major regulatory hurdles remain before we can see the employment of drone neutralising technology. The threat to civilian life is diverse; in the Middle East drones have become a common terrorist tool, requiring law enforcement and militaries to adopt counter measure with immediate effect. In Europe, the focus must remain on the effective identification of drone incursions and the delivery of legislation to protect sites at risk. At this platform security professions can share their challenges with governments, regulators and industry, to assist in developing a lens for threat assessment and a framework for progression.

At the event expect to find explore holographic radar solution to assist you in the detection and identification of malicious drones, assess different types of counter-drone technologies and identify which system is best for your unique circumstances, influence future policy by contributing to high-level discussions with policymakers, insurers and legal practitioners, ensure that your organisation is aware of current developments in national security strategy, regulations and aviation legislation by hearing from senior policymakers from the UK, Europe and US.

The speakers include retired **General Mahmoud Bayati**, Director General, Counter-Terrorism and National Security Advisor, Iraq, **Major General Masood Azizi**, Deputy Minister, Afghan Ministry of Interior Affairs, retired **Brigadier General Maroun Hitti**, Advisor for Security & Defense, Office of the Prime Minister, Lebanese Armed Forces, **Colonel Christophe Michel**, Secretary General for Defence & National Security, Government of France, **John Scott Mathews**, CIPP, Senior Privacy Advisor, Intelligence, Department of Homeland Security, **Major Hendrikus Bouwhuis**, Staff Officer for Countering Drones at Air Innovation Centre, Royal Netherlands Air Force, **Damon Knight**, Head of Air Traffic Services, London Southend Airport, **Captain Tim Pottage**, Chairman, RPAS Working Group, BALPA.

17-19 December 2018 APSA Tactical Flight Officer Course, Tampa, Florida, USA

www.publicsafetyaviation.org

23-24 January 2019 RPAS CivOps 2019, the 7th Annual European Civil RPAS Operators & Operations Forum, is taking place in Madrid, Spain. This event is coordinated with & hosted by AESA (The Spanish Aviation Safety & Security Agency). Forty-five speakers from across Europe will address regulation, operational and training issues. These will be drawn from civil drone councils of France, Germany, The Netherlands & Spain, from national aviation authorities + air navigation service providers of France (DGAC DTA + DGAC DSAC), Germany (Federal Ministry of Transport & Digital Infrastructure + DFS), The Netherlands (Ministry of Infrastructure & Water Management + Human Environment & Transport Directorate + LVNL) & Spain (AESA (6x) + ENAIRE + CRIDA). In addition representatives from the European Commission, EASA, SESAR JU, Eurocontrol, OECD, EMSA, EUROCAE, ASD-STAN, Spanish Ministry of Public Works & Transport, Spanish Ministry of Economy, as well as the European U-Space Demonstrator Network, the Interreg-ICARes consortium, and the Rescue Drones Network will be on site. It is a crowded programme with 45 presentations over 2 days so it appears that many will be trying to squeeze in their important words into a tiny 10-minute slot. <https://rpas-civops.com>

28-30 January 2019 International LiDAR Mapping Forum, Denver, Colorado, USA Diversified Communications technology group www.lidarmap.org

26 February – 3 March 2019 Airshow Avalon, Geelong, Australia. The major show in Australia just along the coast from Melbourne. The 2017 show attracted 664 companies from 25 countries, 33,000 trade visitors, 634 aircraft including over 60 from the Royal Australian Air Force and 367 members of the media.



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There were 158 delegations and 44 conferences and symposia associated with the event. Contacts with the Avalon Sales Team: PO Box 4095 Geelong, Victoria 3220, Australia +61 (0) 35282 0500 expo@amda.co.au www.airshow.com.au



As this edition closed, NPAS Boreham Tweeted the days work on Friday 30 November and included an image of the recently returned G-POLF [see page 4]. Task in hand is TFO Line Training to familiarise the crews with the alterations in the role fit. The location is their new base at NPAS London which is still Lippitts Hill and internationally the most visited UK police aviation venue—in use since 1967.

Which reminds me to again mention the 14 February 2019 illustrated talk to Chingford Historical Society [see page 27].

Early earthworks at the NPAS base
North Weald, Essex.

When completed in the summer of 2019
this site will replace both NPAS Boreham
and NPAS London as a multi-airframe
[helicopter and fixed wing] police aviation
base. That will then give the locals the
significant problem of what to do with the
historic site in Epping Forest.

The helicopter base is of the Essex &
Herts Air Ambulance is just 150 metres
west of this site. [©PAR]

