

LAW ENFORCEMENT GERMANY

FEDERAL: Last month PAN mentioned that there was a project out to refurbish the EC135s of the Bundespolizei fleet.

Since then the matter has been clarified somewhat.

There are two projects, an ongoing upgrade of the communications suite which is undertaken by Airbus Helicopters as an extension of the original purchase deal and the second is very much a project to make changes to the role suite.

It is the latter that will eventually appear as a [European] tender. At present the Bundespolizei have a project to clarify their needs before putting out any tender document that is expected to change the role fit – potentially the EO/IR, work station, searchlight, mounts and other components – to lighten the fit as a reflection of more modern technology and capabilities. It seems that the original information although accurate in a sense was very premature in timing.

JAPAN

NPA: The National Police Agency [NPA] of Japan has placed an order for two H135 light-twin helicopters, making it the first in Japan to operate the Helionix-equipped helicopters, when these are delivered in 2019. The H135 will be deployed by the Wakayama Prefectural Police and the Kumamoto Prefectural Police for law enforcement missions.



At the same time, the AS365 N3+ and H155 earlier ordered in 2015 have now been delivered to the NPA for deployment to the Fukuoka Prefectural Police and the Kagawa Prefectural Police respectively.

There are 86 H135s currently operating in Japan, of which ten are deployed by the Japanese police agencies. Globally, close to 1,200 H135 helicopters are in service, clocking in over three million flight hours. Helionix is an innovative avionics system which offers operators exceptional mission flexibility and safety. Designed based on a family concept with standardised features, it may be installed on nearly all new Airbus Helicopters' commercial rotorcraft. Helionix is fully modular and may be installed with one to four large electronic displays, allowing the flexible adaptation to any light helicopter. [Vertical]

FRONT COVER: The Bell 206L-1 LongRanger helicopter N22PP 45287 used in the dramatic rescue of a few survivors from the crash of an Air Florida Boeing 737 in January 1982 has been restored in preparation for it being installed into the new National Law Enforcement Museum. After three decades of use the helicopter will finish its days as part of a yet to be completed museum.

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UNITED KINGDOM

NPAS: Gama Aviation PLC has achieved strong revenue growth of more than 10% in 2016, and has been awarded two long-term special mission contracts.

The aviation services provider that includes business in the Middle East, UK and USA has plans to expand maintenance in Asia in the coming year.

Gama Aviation has won two contracts, the first of which is a new three-year contract with the UK's National Police Air Service, with the option to extend for a further two years. The contract is for the provision of fixed-wing aircraft maintenance, continuing airworthiness and spare parts for its new Vulcanair P68R fleet. The second contract is with an existing unnamed client for an aerial survey contract for an initial term of five years. The contract involved the operational management and piloting of the client's aircraft.

The intention to cease flying the MD902 Explorer in NPAS service at the end of last year has slipped a little but the Hurn Airport base in Hampshire has already taken delivery of an EC135 and commenced new type training alongside the operational Explorer.

The replacement aircraft in primary use is G-NEAU a 2004 EC135T2 with high skids formerly based with the unit in Newcastle. As such it will eventually go to Babcock for the rebuild to low-skid standard.

Meanwhile a small number of MD helicopters continue in service to maintain just the Hurn and Carr Gate [West Yorkshire] bases until the expected final operational flights are undertaken later this month. The venerable MD902 G-YPOL, the world high hour airframe, transited from Hurn to the PAS facility in Staverton on 15 January.

Last year the NPAS police helicopter crew based at St Athan South Wales filmed an unidentified object and posted the footage on Twitter as a "UFO" flying over the Bristol Channel and pretty much forgot about the incident.

NPAS are now being accused of trying to cover it up, and at the head of the accusations is a former British Transport Police detective, Gary Heseltine, now the editor of 'UFO Truth' magazine is now calling for a scientific inquiry into what footage caught by the police helicopter last September shows.

The infra-red camera footage showed a mysterious black object filmed for seven minutes



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but only a short clip made its way onto the Twitter account showing round object moving across the sky at a height of around 1,000ft.

Heseltine believes NPAS are hiding something from the public about what he sees as a major UFO event that should be the subject of a scientific enquiry.

He submitted Freedom of Information (FOI) requests to find out more, but says responses so far have not been forthcoming.

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Ed: Far from hiding the matter the officers at St. Athan released the footage voluntarily on Twitter and have again stepped into another Michael McIntire moment where they might be shutting down the account to save themselves from bothersome complaints. There are always dangers in being too open but it is doubtful police are responsible for analysing and investigating the footage if no crime is evident.

UNITED STATES

ALEA: The Frederick, Maryland based organisation is conducting its annual safety survey this month and is asking for member input to help the Association understand safety practices and needs. The information will be used to direct safety programmes in 2017 and beyond.

All responses are anonymous and will be retained only by ALEA. If you have any questions, please contact Safety Programme Manager <u>Bryan Smith</u>. The survey is on the website at <u>www.alea.org</u> and is members only.



ALEA holds meetings through online conference call facilities which facilitate use of a computer, device or phone. Online meetings are open to any ALEA member. To receive meeting information and be added to the mailing list, send an email to <u>safety@alea.org</u>.

Details of the meetings are announced in advance and attract an International audience. In January, there was an online meeting for Safety Officers on the 17th another for UAS operators on the 25th one for maintenance technicians on the 31st. The meetings tend to be set around 1300-1400hrs EST (1800 UTC) which allow Europe to take part as well as the USA membership.



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DISTRICT OF COLUMBIA: The Bell 206L-1 LongRanger helicopter N22PP 45287 used in the dramatic rescue of a few survivors from the crash of an Air Florida Boeing 737 in January 1982 has been restored in preparation for it being installed into the new National Law Enforcement Museum.

In an Internationally recognised incident the Bell, "Eagle One" of the U.S. Park Police was involved in the rescue of a handful of people from the waters of the Potomac River using the most rudimentary aids – a length of strap trailed in the water, several 'throwballs' that inflated into small circular life rings and a borrowed ring buoy and line obtained from a fire unit at the scene.

Arrow Aviation completed the restoration for the museum and it will be an important artefact when it opens its doors in mid-2018; guests will be greeted by a monument to one of the most intense and public rescue missions. Fixed above the visitor's heads as they walk to the lower level will be the LongRanger that played a very public and pivotal role in rescuing airline passengers from the icy river shortly before 4pm on January 13, 1982. On that cold afternoon, Air Florida flight 90 failed to remain airborne as it took off from the snowbound airport and it crashed into the busy bridge close to Washington National Airport before plunging beneath the waters of the Potomac.

The Florida-bound airliner carrying 74 passengers and five crew members hit the 14th Street Bridge killing four motorists but a few passengers and a single crew member managed to make it to the ice strewn surface and were dragged at the end of a rope to the water's edge where rescuers took them to safety. When that tactic failed the pilot, Don Usher, a United States Park Police (USPP) pilot, took the Bell even lower and in dipping the skids into the water to allow his temporary crew member, Jim Boyd, an officer with the District Heights Police Department in Prince George's County, Maryland, to grab a survivor and pull her across the skid tube and out of the water.

The tactics were ad-hoc and not blessed with the wisdom imbued by training but, as has been shown time and again, a great example of what can be done when an emergency presents itself.



More than 35 years later, the National Law Enforcement Museum could secure the much-changed airframe, now registered N613, and finance a major restoration at Arrow Aviation's facility in Broussard, Louisiana back to its original colours and marks. Although now again wearing N22PP the flying helicopter wearing those marks is a Bell 412 still serving the U.S. Park Police as an operational rescue and patrol tool with significantly better rescue aids. Today the U.S. Park Police train for the mission.

When it opens, the Museum will tell the story of American law enforcement through in-

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teractive exhibits and stories from officers who've put their lives on the line in their dedication to serve their communities. Visitors will get the opportunity to put themselves in shoes of those sworn to protect them.

Construction of the museum is well underway, as museum staff continue to prepare many of the artefacts that will be on display when the building opens to the public. Meanwhile "Eagle One" has returned to its original home at the Eagle's Nest, the U.S. Park Police Hangar, where it will remain until being installed in the museum.

The Museum hosted a special lecture on the daring rescue of the passengers of Air Florida flight 90 by Eagle One in Washington, DC, on Tuesday, January 31, 2017.

NEW YORK STATE: Gov. Andrew Cuomo will soon have a new helicopter.

The State Police plans to buy a \$12.5M Sikorsky S-76D to transport the Democratic governor and perform other public safety missions as needed thanks to the move by the Office of the State Comptroller in approving the buy after initially rejecting it last year.

The Sikorsky will be used for a variety of missions, including search and rescue, helping police on the ground and for transporting Cuomo.

The state intends to purchase a 2015 model, which is some \$4M cheaper than a new one.

OHIO: The Ohio State Highway Patrol hosted a free seminar from January 9 - 12 for any public safety agency in Ohio considering using unmanned aircraft systems. The four-day UAS seminar, held in the Leadership Hall of the OSHP Training Academy was set to provide all the information needed for any agency to be able to start up a UAS operation.

The seminar sponsored by ALEA and conducted by ALEA UAS Fellow Alan Frazier, a UAS expert and head of the Grand Forks County (ND) Sheriff's Department's Northeast Region UAS Unit.



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AIR AMBULANCE AUSTRALIA

NEW SOUTH WALES: Toll Group has officially launched the Toll Rescue Helicopter Service in partnership with NSW Ambulance to provide greater aeromedical services to communities of NSW in the Southern Zone.

Patient rescue, retrieval and treatment services are now operating from the new Toll & NSW Ambulance Rescue Helicopter Base in Sydney. The new Southern Zone contract operated by Toll Helicopters will include rescue helicopter bases at Bankstown, Wollongong and Orange and Canberra.

The Toll & NSW Ambulance Rescue Helicopter fleet is made up of eight new white AgustaWestland AW139 helicopters with the NSW Ambulance roundel and Toll logo, not red and white as NSW Ambulance helicopters had been previously. They deliver NSW Ambulance helicopter doctors and paramedics to patients in remote areas faster than ever before.

This contact forms part of the NSW Government's new \$151.2M state-wide Helicopter Retrieval Network. Under



the NSW Government's Reform Plan for Aeromedical (Rotary Wing) Retrieval Services in NSW, the state has been divided into two distinct aeromedical retrieval zones – the Northern Zone and Southern Zone. The Southern Zone is one of the state's two aeromedical retrieval zones across Wollongong, Sydney-

Bankstown, and Orange. The regional bases in Orange and Wollongong will operate 24/7 to provide faster emergency care.

The Northern Zone contract, encompassing the Tamworth, Newcastle and Lismore bases is set to commence later in 2017.

The Aeromedical Crewing Excellence (ACE) Training Centre commenced operations in October 2016 and is one of the most advanced aeromedical training centres in the world. All Toll and NSW Ambulance staff will be trained to international best practise by utilising the most modern training programs, techniques and the latest simulation technology. Web: <u>www.tollairambulance.com.au</u>

EUROPE

DRF: The German rescue organisation has issued its annual return of activity at the thirty-one HEMS bases it operates in Germany and Austria.

DRF Luftrettung operates helicopters for emergency rescue and the transport of intensive care patients between clinics, at eight 24/7 HEMS bases. In addition to that, DRF Luftrettung operates ambulance aircraft for worldwide repatriation of patients. In 2016 DRF Luftrettung was called 38,023 times to rescue missions while the crew of the ambulance aircraft took care of 198 patients in 46 countries.



At its two HEMS bases in Austria mountain rescue missions were frequent. The helicopters based in Tyrol and Carinthia are equipped with a cable winch, which is essential for rescue operations in alpine terrain. A specially equipped offshore-helicopter based at Güttin (isle of Rügen) provides emergency service for off-shore-operations in the Baltic Sea.

The Operation-Centre of DRF Luftrettung at the airport Karlsruhe/Baden-Baden ensure the airworthiness of their own ambulance aircraft and helicopter fleet around the clock, utilising about 100 engineers. The department IASS (International Aviation Sales & Service) offers the whole range of services of DRF Luftrettung to private, commercial and official aviation operators. National and international clients benefit not only from the extensive expertise in air rescue and from the performance of the technical Service Centre of DRF Luftrettung with their own Design Organization but also from flight operation trainings.

The air-rescue organisation uses night vision googles and modern helicopter including the new H145. This helicopter is excellently suited for 24-hour air rescue missions thanks to its performance capability and the Fenestron. Currently DRF Luftrettung operates seven H 145, more will be acquired.

INDIA

MAHARASHTRA: The "BMC" [assumed to be the Brihanmumbai Municipal Corporation, the Municipal Corporation of Greater Mumbai, the civic body that governs the capital city of Mumbai in Maharashtra] is planning am EMS helicopter service.

If this plan comes to fruition it will be a first for the country. The service plans for airlifting accident victims to select hospitals and for organ transport.

The BMC has started identifying possible landing points and says it will soon invite an expression of interest (IOE) from helicopter operators. The service will be free, though experts have raised doubts on the project's feasibility in a country where many similar high minded projects have withered and died.

Recently, three firefighters suffered severe burns near Mahalaxmi railway station. Their journey to the National Burns Centre, Airoli, was hindered by heavy traffic, which delayed treatment and potentially resulted in the eventual death of one. This prompted the civic administration to set about planning for HEMS like service.

Ed: This looks to be exhibiting all the problems earlier projects faced. As with many countries in the region landing anywhere is not an option in India and landing and designated landing grounds are being identified. Hospital rooftops are also being looked at.

Experts call the plan ambiguous, and say it can materialise only if the BMC examines "all factors", especially costs.

IRELAND

LIMERICK: Not to be mixed up with the new air ambulance in Northern Ireland, plans are still in place to achieve a charity air ambulance for the south of Ireland [Eire].

One million euro in funding is being sought for a new Air Ambulance Service for Munster which will be officially launched later this year.

Irish Community Air Ambulance (ICAA) launched its Helicopter Emergency Medical Service (HEMS) at an event at the University of Limerick last month. It is intended that it would operate out of Cork Airport in the south of Ireland.

ICAA says the service will complement the existing emergency services including the Emergency Aeromedical Service which is operated by the National Ambulance Service in partnership with the Irish Air Corps. And uses military AW139s

The €1M needed will launch the service but it will require a further €2M annually to provide a mobile intensive care unit by air which will allow the safe transport of patients. This is a service for the Munster and south Leinster, and will require the support of the people to donate, fundraise and volunteer. <u>www.communityairambulance.ie/</u> [Limerick Leader]

Ed: Another news report put an EC135T2 G-SASA, a Babcock International airframe, being displayed to the ICAA last month. That report stated that the HEMS would be operational this year. None of the reports seen so far state where the money is being sourced; compared to the UK, where Charity air ambulances thrive, the population in the country is a low 4.7 million.

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NORWAY

NORWEGIAN AIR AMBULANCE: The Norwegian Air Ambulance Foundation, a membership organisation with nearly 700,000 members, has a goal to save lives by strengthening air ambulance services throughout Norway through thorough research, development and cooperation with other emergency services.

In the past air ambulance crews had to rely upon the Norwegian meteorological service and often had to turn back when the weather suddenly changed or had to fly around mountains, losing precious, lifesaving time.

A project to place more weather stations in remote areas was formulated and a climate-controlled small weather locker was developed, with two to three high-end cameras, computers, various measurement tools / sensors and electronics. All data could now be sent over the mobile network via a robust mobile broadband router.

The weather stations are spread around in the mountains and rural areas of Norway with demanding coverage situations, there was need for robust and reliable antennas that withstand the rough climate. Now there is access to 100 unique localised weather readings complete with live pictures that is available to the airborne emergency services. The users include the Norwegian Air Ambulance, police helicopters, 330 Squadron and other operators.

Each station transmits images of very good quality (even at night) and provides also information about pressure and temperature. The information gives pilots a much better basis for choosing the best route and saving often time when seconds count.

PUERTO RICO

The Department of Health of this unincorporated territory of the USA is to buy Bell 429 helicopters configured for Helicopter Emergency Medical Services (HEMS) and equipped to conduct medical rescue missions throughout the region. Bell Helicopter continues to strengthen their brand in Puerto Rico, with nearly 20 aircraft operating in the region. The region is also home to four state-of-the-art Bell 429s performing several mission sets to include EMS, search and rescue and parapublic operations.



UNITED KINGDOM

EAST ANGLIA: Prince William, Duke of Cambridge, will end his career as a Norfolk-based helicopter pilot this year and move to London with his family.

He will leave the East Anglian Air Ambulance [EAAA] this summer to undertake full-time royal duties, a decision reached after months of discussion. While the royal family was said to be very supportive of William's choice of occupation his place as the second in line to succeed Queen Elizabeth II, his grandmother exerts a stronger pressure.

Beyond that there are reports that the presence of William had skewed the fundraising figures. Figures show that the main fundraising efforts via public collections had fallen significantly since he arrived although the fall in receipts had been offset by an increase in corporate fundraising.

Despite the negative statements EAAA is to examine the prospect of a new operating base and administrative hub in the county.

Currently the charity's Norfolk base is in the former Sterling Helicopters hangar at Norwich International airport, but it is hoped a new facility would improve both response times and cost efficiency. The project was at a very early stage and no decision will be taken in the next 12 months.

The charity's new Cambridge base, the Egerton-Smith Centre, which opened last year has been a big success in reducing the time needed to get a helicopter airborne.

The charity operates two helicopters using five teams of a specialist, highly trained doctor, and a critical care paramedic and pilot. They can attend critically ill or injured patients within 25 minutes of being called out, no matter how remote or inaccessible an incident may be.

Crews aim to be airborne from the charity's Norwich and Cambridge bases within three minutes of receiving a call.

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Last year (2015/16) the charity's income was around £10.7M while expenditure totalled £9M, it spent around £4.3M on its helicopters and aviation service, and around £820,000 on medical staff. Most the income (£4.6M) came from the National Lottery, with around £4.8M raised through legacies and the community.



The planned £3.9M base for the Great North Air Ambulance is set to be built on Teesside - if its proposals get the go ahead.

The charity has submitted plans for its new operational base and Medical Centre of Excellence based on it being built at Urlay Nook, near Stockton-on-Tees on the former Elementis plc chromium works site. Urlay Nook is a village within the borough of Stockton in the south of County Durham and was formerly dominated by the site of the former chemical plant. Urlay Nook also contains the Tactical Training Centre for Durham Constabulary and Cleveland Police and a number of new house building projects.

The plans incorporate an existing office building, which would house the Medical Centre of Excellence alongside the charity's operational and support staff including fundraising, lottery and admin teams. The 1,500sqm hangar also featured in the plans includes space for three aircraft as well as dormitories and parking for the charity's 24-7 trauma car service.

GNAAS has agreed a deal in principle for the site but the sale is dependent on several factors including the success of the planning application, which will be decided by Stockton Council's planning committee. Wherever the new facility is built it seems that the charity will be leaving its base at Durham Tees Valley Airport – only a short while after NPAS will also have departed. Bases at Newcastle International Airport and Langwathby, near Penrith, continue to be integral to its future.

BEST OF ROTORCRAFT IN ONE GREAT LIFT OFF



FIND OUT MORE

LANCASHIRE: Aintree University Hospital has received approval for the construction of a helipad. The helipad, costing £1M, has been funded by the charity HELP Appeal.

The helipad will save valuable time for trauma patients, as now they don't have to be transported to Lower Lane playing fields, then transported by ground ambulance to the Urgent Care and Trauma Centre. This trip can take up to 30 minutes. [Echo]

MAGPAS: It was only a few years ago, that the Magpas Air Ambulance was reporting its own impending demise due to a lack of funding but now it is stating that 2016 was its busiest year with almost 1,500 callouts across 12 different counties. The increasing demand for the service led to its expert medical team being called out to emergencies on average of 4 times a day.

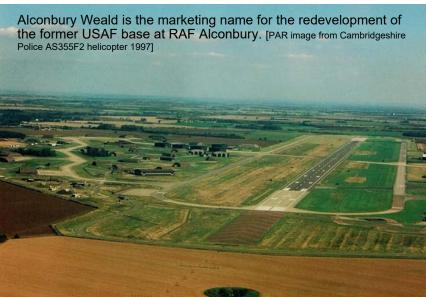
After becoming a 24/7 service in October 2015, the charity now sees almost 50% of callouts taking place overnight.

The Magpas MD902 is based at RAF Wyton and uses the facilities set up for the former Cambridgeshire Police air support unit in the mid-1990s and is now considering a move.

The potential move was revealed by chief executive Daryl Brown in the wake of an award of £1M in Libor money in January.

The favourite new base location is at Alconbury Weald as it fits well with past patient data and has good road links. More than 50% of the incidents that Magpas attend are by rapid response vehicle using the nearby A14 and A1. Alconbury Weald enhances that access. Alconbury Weald is the marketing name for the redevelopment of the former USAF base at RAF Alconbury.

The charity lease at RAF Wyton expires in June 2018, and the lease at its St Mary's Street offices and headquarters ends in 2020. Moving towards putting all the bases under one roof makes sense but it may be a phased build as discussions would need to be held with the landlords of the headquarters.



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MIDLANDS: The charity will be upgrading of one of its helicopter air ambulances to an Airbus Helicopters H145 using Libor funds.

Hanna Sebright, chief executive for Midlands Air Ambulance Charity, states: "The allocation has enabled us to place an order for an upgraded H145 helicopter, which will cost in total approximately £7M." The charity currently owns one EC135 helicopter, based at RAF Cosford in Shropshire and leases two further EC135 models from Babcock Mission Critical Services, based at Tatenhill airfield in Staffordshire and Strensham Services on the M5 in Worcestershire.

The organisation has made the strategic decision to purchase a larger helicopter and lease just one further aircraft to further develop its clinical and operational service in advanced pre-hospital patient care. This will improve the charity's long term resilience and sustainability by further reducing overall operating costs.

The new H145 helicopter provides a great number of benefits including a larger interior so young patients can be flown accompanied by a parent or the elderly with a carer or spouse, and will enable improved medical equipment to be carried on board to treat more complex emergencies. [Staffordshire newsletter]

Ed: Although not confirmed it is believed that the role fit for this aircraft and those in Wales will be similar to those chosen by Yorkshire AA - Bucher.

NORTHERN IRELAND: The health service and the charity are to split the £2M running costs of the forthcoming air ambulance service between them.

A statement to that effect was made by Health Minister Michelle O'Neill but she added that no infrastructure costs had yet been identified. The two partners in the project are the Health and Social Care services and the official charity partner Air Ambulance NI.

Mrs O'Neill said that pending the completion of a business case, she will announce the location of a base for the air ambulance service "in the near future".

In the UK budget in March 2016 it was announced that the Treasury were to supply $\pounds4.5M$ from the Libor fines monies to help establish the service. It was not stated how this was to be administered – whether it was money to go to Air Ambulance NI exclusively or split with the government health service. It is lodged with government who have since made $\pounds1.25M$ available to cover start-up costs, including recruitment and training and for the purchase of medical equipment.

Concern has been expressed that the service will not have doctors on-board from launch which led to Mrs O'Neill disclosing that the ongoing cost of having a doctor on board would be around £435,000pa. Other infrastructure costs include the provision of a helipad at the Royal Victoria Hospital. It is estimated that with take nine months to put in place at a cost of £750,000. [Irish News]

WILTSHIRE: The charity was granted full planning permission for its new Operations Centre on land at Outmarsh Farm, Semington, near Melksham, on 12 January and on 19 January launched its Airbase Appeal to raise the remaining £1.25M needed.

The custom-built airbase will bring together the helicopter, aircrew and charity team onto one site in a central location in Wiltshire. Construction work is anticipated to start this Spring.

Launching Wiltshire Air Ambulance's Airbase Appeal are (I-r) Richard Miller, WAA Critical Care Paramedic, David Philpott, WAA Chief Executive, Cheryl Johnson, Head of WAA Airbase Appeal, Kevin Reed, WAA Head of Operations. Photo – Kevin Sparrow.



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SINGAPORE AIRSHOW Asia's Biggest For Aviation's Finest 6 - 11 February 2018 • Changi Exhibition Centre

YORKSHIRE: The second of Yorkshire Air Ambulance's brand new H145 helicopters is now operational from the northern base at RAF Topcliffe, near Thirsk and covering North Yorkshire.

Last September the first H145 went into service, flying from the charity's air support unit at Nostell, near Wakefield.

YAA Chairman Peter Sunderland said: "To see the second helicopter in operation is hugely exciting and a very proud day for us as a charity and for the people of Yorkshire. "These helicopters belong to the people of Yorkshire and will do so for the next 10 to 20 years. I am very proud to say we now have a level of service which is probably the best of any air ambulance charity in the UK."



Editorial: In the last issue, PAN carried a story touching on the delay into service of the AW169 and in seeking to balance that story by mentioning other difficulties in the industry unfortunately disturbed a hornet's nest in Oxford - and Airbus hornets may be real big!

It seems that my words were taken as stating that the Yorkshire H145s were delayed (which they certainly were not – indeed they were if anything early).

What was stated was that "Even Yorkshire faced problems in importing their EASA certified Bucher gas system on their H145 helicopters"

According to Airbus in Oxford Yorkshire "did not face any issues importing the Bucher gas system. Working together with Bucher, bottle charging facilities (originally available only on the continent) were put in place and are on the market in the UK. The H145 + Bucher system fully EASA certified and in service July 2014 The YAA H145 + Bucher system delivered to customer early and in service 3 Sept 16 (as reported in PAN Oct 16)."

I was trying to reduce complications and avoid mentioning a certain British air products company that has a virtual monopoly and is making gas bottle filling difficult across the board. I was also skirting around the detail that the unique gas filling system for the YAA H145s could not be sourced with that company and in the end it was Birkenhead based Openhouse Products that set up a system of supply and delivery to solve the problem for YAA and ultimately for other UK air ambulances using the Bucher system [Wales AA] and, dare I say it, saved Airbus UK from embarrassment consequent upon late delivery.

Medical gas bottles across the UK are traditionally the heavy cast iron cylinders that are filled by British Oxygen Company under a rental scheme that ties the user into what is usually a rigid ten-year contract that does not fit too well with either an independent air ambulance operation or weight saving. As a result, most of the heavy 200 litre manually operated cylinders are provided through the NHS and in the main all UK air ambulances use them but they are heavy and the removal of unnecessary weight is important in aviation. They traditionally have been a carry-on item rather than a fully aerospace certified piece of kit but EASA is changing that and certification is the way for the future.

When the fully certified digitally controlled lightweight Bucher medical gas system became available offering 300 litre bottles YAA went for them only to be later faced by an unexpected refusal by BOC to fill them and for others to put up their hands in horror that YAA would even go for something so modern!

It may have been certified but with no-one in the UK to undertake the fill and the option of transporting bottles to and from Europe clearly out of the question there was a problem looming. So, as correctly stated in PAN January, "Yorkshire faced problems."

These were overcome in a timely manner thanks only to the Birkenhead company before the situation impinged on the delivery of the H145 to them and despite some initial capacity filling issues raised locally by MHRI.

The potential downside of the new system now in place is that the UK operator of the H145 with the Bucher interior must buy the larger capacity specialised tanks and pay about double the price to have them filled, but has them delivered free.

No-one saw the problem looming until it was late in the day but, like many problems, it was resolved in a timely manner before it became a wider embarrassment.

UNITED STATES

ARIZONA: AeroCare Air Ambulance recently held their annual "Safety Days" training in all three base locations: Scottsdale, Chicago, and Ft. Lauderdale. Medical and flight crews, as well as members of the sales team and communication centre, participated in the training which simulated an aircraft ditching in water.

The simulation was accomplished by using a specially built-training prop (simulator) made to resemble the interior of a LearJet.

Entering its 23rd year of operations, AeroCare Air Ambulance is a CAMTS accredited fixed-wing air ambulance provider that provides air medical flights for patients throughout the world utilising a fleet of medically-configured aircraft including: LearJet 31ER, LearJet 35A, LearJet 55. http://www.aerocare.com



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FLORIDA: The Monroe County Commission could decide Wednesday whether to buy a third air ambulance helicopter to service the Lower Keys.

The commission will discuss ongoing issues with the private air ambulance service LifeNet and could decide whether to purchase a third roughly \$2.5M Trauma Star helicopter. [Keys News]

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SEARCH AND RESCUE GERMANY

SIMULATION: Technical University of Munich (TUM) are now working to improve flight simulators so that they can help pilots prepare for the more challenging flight environments faced by SAR crews.

Simulators are good for presenting crews with the more common dangerous scenarios but not all the missions faced by SAR crews are depicted. Rescue at sea, in the mountains and close up in cities represent the most difficult places to fly but they are not often part of a simulation simply because no self-respecting aviator should normally place themselves in such a place. The landscape, tall buildings and offshore installations like oil rigs add to unpredictable and severe changes in wind speed and direction, and such turbulence can throw helicopters off balance and lead to incidents.

Current helicopter simulators do not present the unusual and that means that local variations and changing conditions are not considered and it is these variables in conditions that cause problems; for example, a moving ship will create turbulence in its wake, with the unpredictability increased by wave conditions and the way the downdraught from helicopter rotors interacts with the deck and superstructure. Similar interactions, for example with mountain slopes and the walls of skyscrapers, cause problems in cities and mountain regions.

The only way the pilots to train for these conditions is to experience them for themselves – a hazardous and stressful option.

The Munich team has developed a simulator that combines flow mechanics and flight dynamics in realtime and this now lets the pilot feel the impact of local airflows on the aircraft, and can now experience these in a stress-free environment.

The simulator has now been verified with established reference models, and is now working with the US Naval Academy, George Washington University and University of Maryland to verify the simulation against reality, using in-flight data collected by the German Aerospace Centre and measurements of airflow on and around ships, collected by the experts in Washington DC. [The Engineer]



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MALTA

AFM: The Armed Forces of Malta officially took delivery of their third new AgustaWestland AW139 helicopter AS1630 early in January. It is their thirtieth aircraft.

The new €13M helicopter was partly financed by the European Union and delivered into service late last year.

The first AW139 was delivered to the AFM in June 2014 and the twin-engine type equipped for a range of operations including maritime patrol, rescue and air ambulance now forms the backbone of the Air Wing's helicopter squadron.

The AW has a high-definition thermal imaging system, search/weather radar, cabin mission console, naval transponder, Trakka searchlight, satellite communication system, a four-axis autopilot with search and rescue modes, external rescue hoist and four bag floatation system. [AFM]

UNITED KINGDOM

EAST COAST: Faced with a North Sea tidal surge, last month the whole of the east coast of England was the subject of Environment Agency (EA) flood warnings in a 48-hour period covering Friday and Saturday 13-14 January. At one point, there were seventeen Severe Flood Warnings (danger to life), ninety-one Flood Warnings (immediate action required) and nearly five-dozen Flood Alerts! The threatened floods did not occur and no-one was killed.

In addition to the paid and unpaid emergency services the Civil Air Patrol had aircraft on standby in both the Northern and Eastern Regions and, according to a press report the RAF completed a radar survey of the east coast on Saturday, to check coastal defences, using a Sentinel R1 radar reconnaissance aircraft of No. 5 Squadron based at RAF Waddington in Lincolnshire.

The attached photo shows the lighthouse at the entrance to Seaham harbour, in County Durham, being battered by enormous waves, the result of the tidal surge, the result of a northerly gale and an exceptionally high, Spring tide. Historically these occasional tidal surges are the clear threat although it has been sixty years since a serious inundation took place.



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SOUTH COAST: People along the English Channel coast are now seeing a brand-new Maritime and Coastguard Agency (MCA) helicopter flying in the region.

The new £20M Bristow Helicopters Leonardo AW189, painted in traditional red and white HM Coastguard colours, is the first of 2 AW189s that will operate from Lee-on-Solent, replacing the smaller AW139 helicopters that are currently used as a stop gap measure. Over the coming months, they will be training in the usual fare of cliff rescues, hospital-to-hospital transfers and SAR before entering full service from April. Search and rescue work will, in the meantime, continue to be fulfilled from Lee-on-Solent by the Coastguard AW139 helicopters.



The new helicopters – which are longer and wider than the AW139s – will be registered as G-MCGS and G-MCGO, losing the well-known call sign 'India Juliet' associated with the former Sikorsky S61N helicopter and the present AW139 helicopter, G-CGIJ.

Bristow Helicopters Ltd will operate the helicopters on behalf of the Maritime and Coastguard Agency having secured a 10-year £1.9 billion deal with the UK Government to deliver aeronautical search and rescue helicopter operations from 10 bases. 7 of those bases are already operational, with HM Coastguard having taken responsibility for the provision of search and rescue helicopters from the Ministry of Defence. The remaining 3 bases which include Lee-on-Solent, are set to become part of the new contract in 2017. [Island Echo]

NEWQUAY: Bristow Helicopters Limited has reached the first anniversary of delivering search-andrescue (SAR) helicopter operations on behalf of the Maritime and Coastguard Agency from the base at Cornwall Airport Newquay and the base at Prestwick Airport.

The HM Coastguard service became operational at Newquay on January 1, 2016, and since then the crews have responded to more than 300 tasking's from the Aeronautical Rescue Coordination Centre (ARCC).

Bristow crews are delivering the U.K. SAR helicopter service on behalf of HM Coastguard with state-of-the -art helicopters, equipped with the latest search-and-rescue technology including night vision, mission management and increased on board medical capabilities.

In 2013, Bristow won the U.K. Government national contract to deliver SAR operations on behalf of the Maritime and Coastguard Agency (MCA). Seven of 10 strategically located bases have taken over the helicopter SAR responsibility from the military in a phased approach throughout 2015 and 2016. The remaining three, two of which are already operated by Bristow, are set to become part of the new contract in 2017.

SAR: Late last month the UK Minister for Defence Procurement Harriett Baldwin signed a P-8A Maritime Patrol Aircraft (MPA) declaration with her United States counterpart, Deputy Secretary of Defense Bob Work to further strengthen the uniquely close defence relationship between the United Kingdom and the United States.

In 2019 the UK will receive delivery of its first Poseidon P-8A aircraft and both nations have committed to deepen their defence cooperation when operating in the North Atlantic region. Through seeking opportunities to share logistics and support bases and optimise the use of P-8A aircraft, particularly in Europe, the declaration should ensure increased value for money and operational effectiveness.

The declaration provides a new opportunity to maximise value for money for the taxpayer and continue to strengthen UK-US interoperability and to pursue efficiencies in operations and support, including at RAF Lossiemouth in Scotland, where the P-8A will bring some 400+ jobs. The Department of Defense and Ministry of Defence plan to cooperate closely on operation of their P-8A aircraft in the North Atlantic to ensure a coherent approach to MPA activity.

Delivering on the commitment of the 2015 Strategic Defence and Security Review, the UK is purchasing nine Boeing P-8A Poseidon MPAs to be based in RAF Lossiemouth, Scotland. The aircraft will add to the UK's surveillance capabilities, including conducting anti-submarine and anti-surface warfare, search and rescue and intelligence gathering. [MoD]

#

INDUSTRY

TRAKKA

L3 Wescam has recently won defence contracts valued at more than \$90M. The orders will provide a range of MX[™]-Series electro-optical/infrared (EO/IR) imaging systems to global customers operating in the airborne and maritime domains. Key contracts include systems for the Royal Thai Navy, the United States Navy and the Royal Australian Air Force, the United States Air Force Special Operations Command (AFSOC), and the United States Department of Homeland Security.

The demand for L3 WESCAM's MX[™]-10 and MX[™]-15 electro-optical and infrared (EO/IR) systems within the Department of Homeland Security (DHS) and Airborne Law Enforcement (ALE) markets has continued to grow in support of time-critical law enforcement missions. L3 WESCAM has seen an increase in global ALE sales, including many within Canada and throughout the United States. These orders have resulted in over 113 different agencies utilizing L3's systems across 30 countries. Recent orders have MX-Series systems configured to tactical helicopters, including Bell's 407, Airbus Helicopters AS350 and EC120, and MD Helicopter's MD 530. Additionally, MX systems are conducting missions from leading ALE fixed-wing platforms, including Cessna's 207 and 208, Pilatus' PC-12 and the Vulcanair P68. [Wescam]



The **Emergency Services Network** [ESN] is said to be faltering. Only in three months ago, the story was that the rollout was scheduled for September 2017. Even then some were expressing doubts.

The latest on this - just nine-months before that start date - is that it has been announced that the start of ESN is now going to be '2018.' The clock has stopped momentarily in rolling out ESN. That is the start date not the completion.

In recent weeks, the UK government announced a delay in the rollout of its controversial £1.2bn investment in the ESN. When the transition from the current Tetra Airwave radio network does begin, it will switch on an unstoppable fire hose of data. Every service needs to start planning now, to ensure they are ready to take advantage of the new opportunities the ESN should bring.

ESN runs on the EE cell phone network, enabling integrated 4G voice and broadband data services for

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February 2017

police, fire and ambulance services in the UK.

When accepted for service ESN will vastly increase the amount and range of data that can be exchanged from command and control to officers and crews in the field. The familiar two-way voice communications will now include video feeds from a range of sources, still images and mug shots, mapping, witness statements and many other forms of digital data. It means mission critical information can be shared quicker and more effectively but it will require end-user officers that are trained in the new technology for it to work effectively.

In September 2016, the head of the National Audit Office warned that a need to save money and get out of a difficult commercial relationship has led the government to try and move to an approach that is not yet used nationwide anywhere in the world. The programme is therefore high risk and there is a risk that the Home Office and others may not have all the answers.

There is concern among the 105 emergency services and 307 other public sector organisations that currently rely on Airwave but they are committed.

When Airwave was brought out it made similar promises but in the end the cost of supplying the capability was beyond what most forces felt they could afford. If the 4G ESN works as promised they may now be faced with an uphill struggle to absorb the many digital data sources they will now have to manage.

There are ready made solutions out there to help them but they are commercial and will require further cost and attract a significant training burden. [extracted from Police Product Insight/PAR]

Ed: And if that was not bad enough a report by the Public Accounts Committee has stated that there is a major risk that the system roll-out will drift to 2020 and at that point no-one has set aside future funding for the existing Airwave system to continue as a gap fill. That report includes the repetition of the word 'risk' over 120 times.

Curtiss-Wright Corporation has completed the acquisition of Teletronics Technology Corporation (TTC) for \$233M in cash. TTC is a leading designer and manufacturer of high-technology data acquisition and comprehensive flight test instrumentation systems for critical aerospace applications. The acquisition provides increased breadth to Curtiss-Wright's existing data acquisition product portfolio, as well as geographic expansion and the opportunity to leverage TTC's domestic presence and Curtiss-Wright's existing international presence. Founded in 1998, TTC employs 225 people and is based in Newtown Pennsylvania.

FLIR Systems, Inc. launched five new thermal imaging cameras at the 2017 Consumer Electronics Show (CES), including two new third generation FLIR ONE thermal camera attachments for smartphones, two new dual sensor thermal cameras for drones, and a ruggedized compact thermal camera for home and building inspectors. All five products feature FLIR Lepton®, FLIR's revolutionary thermal micro camera core, and FLIR's patented multispectral dynamic imaging (MSX®) technology, which dramatically improves image quality and readability by dynamically embossing high-fidelity, visible-light details onto the thermal imagery.

Third Generation FLIR ONE Smartphone Camera Attachments The third generation FLIR ONE builds upon the FLIR ONE legacy, providing a powerful, introductory-level thermal camera that attaches to iOS or Android devices. Featuring the new OneFit[™] adjustableheight connector, including a USB-C version for Android, the third generation FLIR ONE easily attaches to more smartphones without needing to remove your phone case. As the most affordable FLIR ONE to date at \$199.99, the third generation FLIR ONE is the perfect camera to introduce people to the benefits of thermal imaging.

The all-new *FLIR ONE Pro* is the most advanced FLIR ONE ever developed. Featuring a ruggedized design, the new OneFit adjustableheight connector, and a more powerful set of imaging features for the job site, the FLIR ONE Pro (\$399.99) is ideal for professionals who



use thermal imaging for their work needs. Featuring MSX and VividIR[™] advanced image processing, the FLIR ONE Pro offers amazing image quality and detail. Professional features include multiple spot temperature meters and one-touch reporting capabilities to quickly interpret and share results. Fully integrated with the FLIR Tools app for in-depth data analysis, the FLIR ONE Pro delivers a professional-grade thermal camera for workers who require greater thermal capabilities from their mobile devices.

Both the FLIR ONE and FLIR ONE Pro will be available in the first half of 2017 at established FLIR partners and at <u>FLIR.com</u>.

February 2017

The story has been in the financial markets since late last year and this month the situation will come together as **xG Technology** takes over **Vislink**. In mid-December Vislink announced a general meeting of shareholders to

In mid-December Vislink announced a general meeting of shareholders to seek Shareholder approval to sell the assets of Vislink Communication Systems, the hardware division of the Company's business, to xG Technology, Inc. for \$16M.

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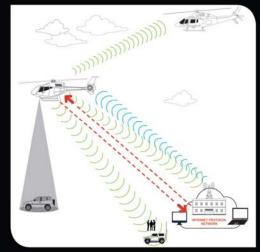


The general meeting on January 9, 2017 included resolutions to authorise completion of the Proposed Disposal and to change the Company name.

It is expected to have little immediate effect on day to day operations and is unlikely to see the demise of the Vislink brand which has over the years evolved from such as MRC and Gigawave. The links to xG Technology will ease access to Integrated Microwave Technologies ("IMT") products which xG acquired a year ago, and these will undoubtedly be offered alongside the Vislink badging. The two UK premises in Hemel Hempstead and Earls Colne, Colchester will remain.

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Scientists have developed a smartphone app that could be used to deter laser attacks. The app, developed by the U.K.'s **Defence Science and Technology Laboratory**, can be used in the cockpit to log, analyse and share data about laser incidents. The laboratory has signed a deal to commercially develop and market the Laser Event Recorder app, likely to be available by the middle of this year.

Aircrew will be able to mount a smartphone in a hands-free cradle in the cockpit, and the app will use the phone's camera and GPS to log details of the attack. Information could then be passed to police and shared with other planes to warn them of the hazard.

On January 12, a Press Briefing formally presented the renaming of Finmeccanica as Leonardo. CEO Mauro Moretti presented Norman Bone, who has been appointed Chairman and Managing Director of the UK Company, and outlined the future of the UK business.

From the turn of the year the 7,400 UK based employees of the former Finmeccanica, along with heritage brands including Selex, AgustaWestland and Marconi became Leonardo. The business has a significant industrial presence in Italy, the UK and the U.S. Notable products designed and made by the company in the UK include helicopters, radars, aircraft self-protection systems, thermal imaging systems and lasers.

Leonardo MW Ltd brings together two prestigious brands with great technological heritage: Westland in helicopters and Marconi in electronics

Leonardo offers UK-designed and built aircraft, sensors and integrated systems serving air, land and seabased customers, as well as offering expertise in cyber security. The new single entity, Leonardo MW Ltd., brings together AgustaWestland Ltd, Selex ES Ltd, Finmeccanica UK Ltd, and DRS Technologies UK Ltd., operating under the Leonardo brand. Norman Bone has been appointed as Chairman and Managing Director of the new company.



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Many UK government projects place great reliance on self-employed consultants and experts to make the system work.

New rules are being introduced to change the basis on which these contractors are being reimbursed. The changes, under reform IR35, require that significant elements of the payment package take on a form very like employed persons. A requirement to deduct such as National Insurance flies in the face of previously normal Self Employed practice. The move appears to be a move towards moving existing contractors to be directly employed and taxed under PAYE even though it newly places upon the department a need to allow for holiday pay and sickness benefits.

All public-sector departments must regularly review their need for contractors, including time in the role and progress in replacing them with employees.

By December, all public departments were to have come up with a five-year "strategic workforce plan" detailed skills-gaps and the contractors necessary to fill them.

And then (after April 2017), assuming the proposed IR35 changes come into force, all departments will review the calculation of tax for "a sample" of their contractors, in a bid to test, monitor and maintain compliance. [Contractor UK]

Swiss Rotor Solutions has announced that the Maximum Pilot View Kit, the next generation aerial work safety and visibility solution for the Airbus H125/AS350 helicopter family, has received supplemental type certification from the European Aviation Safety Agency.

Swiss Rotor Solutions has announced that the Maximum Pilot View Kit (MPVK), the next generation aerial work safety and visibility solution for the Airbus H125/ AS350 helicopter family, has received supplemental type certification (STC) from the European Aviation Safety Agency (EASA).

The modification adds a new single piece bubble door to the aircraft, offering a significant increase in lateral visibility, and pilot headroom when leaning to the right, even when wearing a helmet.



A large lower viewing aperture and transparent fuselage window fairing significantly increases the vertical field-of-view forward, aft and directly underneath the aircraft by a factor of 10, compared to existing solutions.

The MPVK dramatically improves the capability and safety to perform demanding operations such as sling loading, firefighting, search-and-rescue, emergency medical services, confined area operations, aerial survey, seismic, law enforcement and any other tasks performed near terrain, obstacles and ground crews or when operating at remote landing sites.

The European Aviation Safety Agency (EASA) has certified the BLR Aerospace FastFin® Tail Rotor Enhancement and Stability System for installation and flight on AB412 helicopters.

More than 1,000 FastFin systems have been installed on light and medium helicopters flying diverse missions ranging from airborne law enforcement and airborne medical to heli-skiing and offshore oil transport. The system includes two parallel stall strips, known as Dual Tail Boom Strakes, on the tail boom and a reshaped vertical fin. FastFin optimizes airflow around the tail boom, dramatically improving tail rotor efficiency and wind azimuth tolerance. FastFin also reduces operating costs and reduces cycle fatigue in structures and demands on tail rotor rotating components.

Although Bell Helicopter has seen a drop in commercial deliveries in the past year, a 35% drop in 2016 with 114 units compared to 175 in 2015., it delivered its first role conversion Bell 429 from its facility in Prague ompany, announced today the completion of the first fully customized aircraft from its new European state-of-the-art Customization and Delivery Center located in Prague. The customer, Air Transport Europe of Slovakia, recently accepted three newly customized EMS configured aircraft.

The Bell Helicopter facility in Prague is the official regional customization, delivery and aftermarket service center in Europe – complemented by Bell Helicopter's extensive support and service network located throughout the region.

ACCIDENTS & INCIDENTS

22 November 2016 Beech BE200 Air ambulance of Sanford AirMed. On a flight to pick up a patient on an interfacility transport, the pilot flying fainted [experienced a syncopal episode]. The Pilot in Command declared a medical emergency and returned the aircraft to Sioux Falls. On landing the pilot was evaluated by Sanford Health and has since been cleared to resume flying after completing the necessary tests set forth by the Aviation Medical Examiner and FAA. [Concern]

28 November Airbus Helicopters EC130T2 N107VU. Air ambulance of Vanderbilt LifeFlight, Nashville, Tennessee USA operated by Air Methods. Landing on a dolly pad in high wind conditions the aircraft was struck by a wind gust which resulted in the aircraft landing with the aft portion of the skid landing gear on the ground and the front portion of the landing gear on the 8 inch high dolly. The aft cross tube fairing and aft skid tube extensions were replaced. [Concern]

15 January 2017 Leonardo AW109E Power N901CM. Air ambulance of LifeFlight of Maine, Camden, ME USA operated by Seven Bar Aviation. In the early afternoon LifeFlight2 departed Maine Medical Center in Portland, Maine, on the 45-mile flight to Oxford County Regional Airport on a non-patient repositioning flight which was the fourth flight leg of the day. Approximately 8 minutes after departure, while in cruise flight at 2,000 feet and 130 knots, the pilot encountered severe lateral and vertical vibrations through the airframe. He lowered the collective and identified a suitable landing zone 20 degrees to the right of the flight path. An emergency was transmitted. Upon entering autorotation, the pilot noted that the vertical vibration subsided somewhat which made the aircraft easier to control. The High RPM warning sounded during the decent, however, when attempting to reduce the RPM with collective the severe vibration returned. The pilot elected to keep collective input at a minimum for as long as possible. The aircraft landed safely in an open field in a very rural area. Upon exiting the aircraft, the crew noted that the tip cap on one of the main rotor blades had departed the aircraft were current for inspections and pre-flight had not identified any abnormalities. [Concern]

23 January 2017 Leonardo AW139 EC-KJT. leased in from Inaer Aviation, operating for 118 EMS: The helicopter was taking the injured skier to hospital in L'Aquila, the capital of Abruzzo province, Italy when it crashed in a mountainous area killing all six persons aboard. The dead are Italy's Mountain Rescue Association CNSAS volunteer members Valter Bucci, 57 years old, paramedic, Davide De Carolis, 39 years old, helicopter rescue technician and Mario Matrella, 42 years old, mountain rescue technician. The other victims are the INAER helicopter pilot Gianmarco Zavoli, 46 years old, the nurse Giuseppe Serpetti, 60 years old, and the injured skier Ettore Palanca, 50 years old. The accident occurred during the Suem 118 emergency flight from Pieve di Cadore and in Val Lasties at Pordoi, Dolomites. The aircraft came down in thick fog near the Campo Felice ski station after picking up the injured skier. Witnesses saw it flying low in thick fog and CFIT is currently thought to be the cause. Campo Felice is a small skiing resort popular with day-trippers from Rome, which is 120km (75 miles) to the west. [Media/ www.cnsas.it]

24 January 2017 Law Enforcement Helicopter. African Parks, a group that runs ten national wildlife parks lost the helicopter and three people on board in a crash at Chinko, Central African Republic. It crashed just 50 metres from the landing strip, killing all three men instantly.

OHANNESBURG – A group that runs 10 national wildlife parks in Africa says a helicopter it chartered in Central African Republic has crashed, killing all three people on board. The dead were the pilot, Shaun Barendsen, David Fine (Head of Law Enforcement) and Sous-Lieutenant Mbenga-Nzongomblo Ponce Pilate (Assistant Law Enforcement Manager) [African Parks]



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FLIGHT SAFETY

In Dubai, a federal accident report into the January 2014 crash of a helicopter shortly after take-off from Atlantis The Palm heliport recommended all light commercial aircraft operating in UAE be equipped with at least one crash-protected flight recorder.

The crash involving an Airbus EC-130 B4 taking off with an intended flight to Dubai International Airport when the pilot made an "aerobatic" turn, lost control of the helicopter and crashed on the heliport, per the report.

The report stated that the pilot operated the aircraft in a negligent and reckless manner on departure by turning the aircraft rapidly, a non-compliant manoeuvre that left the pilot and the helicopter-landing officer (HLO) with serious injuries.

As a result of this accident and the assumptions made for its causal factors Helidubai now employs a new pilot selection board.

UNMANNED

A new drone training centre at **Republic Polytechnic** (RP) in Singapore will offer courses to people who want to learn how to fly unmanned aerial vehicles (UAVs). RP state that this is the first dedicated UAV centre among Singapore's institutes of higher learning that provides training and education for drone users.

The training centre will offer a range of courses – three basic and five advanced – to cater to different needs. Its basic courses, for instance, touch on how to capture aerial shots on video, while the more advanced courses are industry-based and will cover areas like recovery systems, land planning and search and rescue.

RP said it has the "latest technology in UAV training" with a fleet of more than 50 drones – the longest with a wing span of 1.2m.

At a two-day basic course, participants will learn about safety and regulatory processes for drone flying in Singapore – such as how to apply for a permit, fill in a risk assessment form and identify dangers while flying drones, followed by a full day of flying them.

Participants will be put through a simulator to gain confidence before flying their drones for the first time. They will also go through mini tests and certification will be awarded at the end of the course. All the courses are taught by RP instructors. [Channel News Asia]



February 2017

Airbus DS Electronics and Border Security (EBS), future HENSOLDT, has added a portable jamming system to its family of Counter-UAV products which detects illicit intrusions of small drones over critical areas and offers electronic countermeasures minimizing the risk of collateral damage. After several enhancements, the completed product family now will be christened "Xpeller."

The most recent addition to the "Xpeller" product line is a lightweight jamming system from South African HENSOLDT subsidiary GEW Technologies completing the capability range of the existing portfolio. Up to now, the modular "Xpeller" product family consisted of future HENSOLDT's own products – radars, infrared cameras and long-range jammers – close-in RF detectors from Danish partner company myDefence and short-range optical-acoustic-RF sensors from US partner Dedrone.

The system offers very high effectiveness by combining sensor data from different sources with latest data fusion, signal analysis and jamming technologies. It uses radars, optical and other sensors to detect and identify the drone and assess its threat potential at ranges from a few hundred metres up to several Kilometres depending on the type of drone. Based on an extensive threat library and real-time analysis of control signals a jammer then interrupts the link between drone and pilot and/or its navigation. The modular "Xpeller" system concept relies on the selection of individual devices from the product family depending on customer requirements and local conditions.

With the completion of the capability spectrum, "Xpeller" can protect sensitive areas against illicit intrusions of small drones, ranging from individual buildings through big events to airports.

Early last year one of the anti-drone solutions being tried by the Dutch police was the use of eagles to grab the smaller quad rotor type seen as a threat to the location on the grounds of security or sensitivity. Disrupting radio frequencies works well enough but on occasion there is a danger that the drone may fall and cause more damage. In Japan and Northern Ireland nets fired by other craft have been used but they too place the errant drone out of control and potentially dangerous.

The Dutch police trials were undertaken by the Netherlands Organization for Applied Research Scientist (TNO), part of it being studies on the impact of the propellers on the claws of the birds.

In November, last year a **French Air Force** trial was made public. L'armée de l'air considers rogue drones "a credible threat" After a

series of mysterious and worrying overflights of nuclear power stations and other critical infrastructure by unmanned drones, the government called on experts to swiftly come up with a way of neutralising them.

Besides developing jamming techniques, another solution dreamed up by the air force has been to train up royal eagles, whose huge wingspan and powerful talons enable it to snatch up a relatively heavy drone as it would another bird in flight.

Considered "more robust and better suited than smaller falcons and other birds of prey", according to the force, the royal eagle





can carry off and animal as heavy as a lamb. Eagles could be called upon as 'point defence' at major events such as July 14 (Bastille Day), a G20 summit in France, or an international conference such as recently the COP21 (climate summit in Paris) rather than on a day-to-day coverage. Special events place people and vulnerable structures at risk from an electronically disabled craft where a strong bird of prey can carry the target away from the immediate scene.

The air force acquired four royal eagle eggs and two from a goshawk, another powerful bird this Spring. The eagles reached adult size in the summer and went into drone training. They were taught to feed off the 'carcasses' of the drones and when they see one of these craft, they think it has food coming off it and they intercept it. They are taught not just to attack but to detect. Four eagles should be in service by this summer. [L'Express]

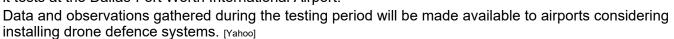
As drones become a more common sight overhead, the government has started to think more and more about how to protect the skies. At CES 2017,

the Federal Aviation Administration revealed that it is researching new ways to halt drones.

FAA Administrator Michael Huerta took to the stage in Las Vegas to discuss new technologies designed to spot unauthorized unmanned aerial vehicles (UAVs) operating near important areas, with an em-

phasis on airports.

The organisation has already tested some of its systems in busy airports in New York and Denver and smaller locales like Atlantic City and plans to extend it tests at the Dallas-Fort Worth International Airport.



February 2017

On January 28, a drone and a car collided on an Autobahn near **Munich**. The 1.2 Kilo [3 pounds] flying object and a car collided on the A99 in the region of Germering, west of Munich, the front of the car was damaged but the women driver and her female passenger were unhurt

Local police have stated that they are unsure how the drone got to the Motorway but they suspect that the drone battery power ran out.

It is also uncertain whether the women driver ran over the done as it was stationary or in flight. Enquiries are in hand in the Munich suburb of Neuaubing, some kilometres from the accident and the suspect pilot faces traffic violations.

PEOPLE

Helicopter Association International (HAI) has been announcing the various people they intend to honour at the forthcoming HAI Salute to Excellence Awards dinner at the Heli-Expo 2017 in Dallas.

This year's MD Helicopters Law Enforcement Award.is retired police officer and pilot **Jack H. Schonely**, Los Angeles Police Department (LAPD).

Jack spent more than 33 years in law enforcement where he dedicated his professional life to promoting professionalism in, and the advancement of, helicopter use in airborne law enforcement in the United States and around the world. He is an internationally recognised expert on suspect tactics and perimeter containment. He began his law enforcement career as a deputy sheriff in Berks County, PA., before moving to Los Angeles in 1983 and joining the LAPD. He witnessed the changes in daily police work first hand and did exhaustive research on suspect tactics, culminating in his book, Apprehending Fleeing Suspects: Suspect Tactics and Perimeter Containment. In addition to his book, Jack has been published in many industry magazines.

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Working as an LAPD patrol officer, Schonely was involved in perimeter containment daily. In 1992 he became a K-9 handler within the Metropolitan Division, where he spent the next five years. He worked as a tactical flight officer in



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LAPD's Air Support Division, coordinating tactical operations from a helicopter that involved foot pursuits and perimeter containments. He served as chief tactical flight officer and later command pilot, where he served until his retirement in June 2016.

Bryan Smith, pilot for the Seminole County Sheriff's Office north of Orlando, Florida and the Brobdingnagian safety programme manager for the ALEA, is the 2017 winner of HAI's Salute to Excellence BLR Aerospace Safety Award. This award honours those who have excelled in promoting safety in the helicopter industry.

Well known in Europe and across the world of law enforcement Bryan has dedicated countless hours to developing and advocating safety solutions for pilots and operators worldwide. A pilot since 1992, he flies rotary-and fixed-wing for the Seminole County Sheriff's Office, where he serves as safety officer and instructor pilot. He has flown both fixed and rotary-winged aircraft in law enforcement aviation for 11 years and has been a regular instructor at aviation events around the world for the last eight years. He is the ALEA safety manager and works on the U.S. Helicopter Safety Team (USHST), where he has chaired the Safety Management System (SMS) Working Group and served on the Flight Training Working Group. He works as an instructor in aviation safety and SMS, law enforcement tactics, flight training, accident response planning and unit management and marketing strategies.



Others being recognised include:

Dr. John Leverton is the 2017 winner of the Bell Helicopter Lifetime Achievement Award for his lifetime of service dedicated to the aviation industry. Since 1958, Dr. Leverton has worked in the helicopter industry studying and promoting helicopters. Operators, manufacturers, pilots, helicopter owners and various government and regulatory agencies have all been beneficiaries of his considerable knowledge and efforts in addressing helicopter and heliport issues.

Robert Fournier and Trent Vick are the 2017 winners of HAI's Salute to Excellence Appareo Pilot of the Year Award.

Nick Mayhew, L3 Link Simulation and Training, wins the "Dub" Blessing Flight Instructor of the Year Award (sponsored by H. Ross Perot, Jr. and the Perot family).

Carl Jones, Bell 205/Bell 412 crew chief, National Research Council (NRC) of Canada is the 2017 winner of HAI's Salute to Excellence Rolls-Royce Excellence in Helicopter Maintenance Award. NRC fly-by-wire helicopters have unique research equipment attached to the flight controls, as well as auxiliary systems such as a nonstandard 3000-psi hydraulic system. Carl could maintain and repair these systems and keep the helicopters operating. In one instance involving problems with the pedal axis of the force-feel system on a Bell 205 fly-by-wire research system, Carl devised a modification to fix the problem.



Notice of sale of Aircraft

Available for sale:

Aircraft 1: MD902 Explorer G-SASH Aircraft 2: MD902 Explorer G-CEMS

Consideration given to selling as whole units or as individual components for use as spare parts

All enquiries to be addressed to: <u>Mr Peter Sunderland, Chairman</u>. Contact via: Mrs Jill Pukacz (Executive PA): 01422 237900 or j.pukacz@yaa.org.uk

Prices and details on application



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A disgraced Surrey Police officer has been jailed for the sexual abuse of a child under the age of 13.

PC David Harriott, of Old Field Road in Horley, was sentenced at Winchester Crown Court on January 17 to sevenand-a-half years' imprisonment.

The 61-year-old was sentenced for two counts of sexual assault on a child under the age of 13, one count of assault on a child under 13 by penetration and one count of causing or inciting a child under 13 to engage in sexual activity. All the offences relate to the period from 2008 to 2015.

He was also charged with seven counts of making indecent photographs of a child.

Harriott pleaded not guilty to all counts and was found guilty by a jury following a six-day trial.

He had been in air support since 1989 when the first modern Surrey Police air support unit trial was started. Since then he had served continuously with the South East Regional ASU, Surrey and NPAS before being suspended on his arrest in July 2015.

MOVE ALONG THERE

2016 was a poor year for aviation safety in Africa and a recent newspaper story might provide a tongue in cheek clue as to why it's not so good.

Apparently, a Nigerian man in Warri, an oil hub town in southern Nigeria where helicopters are familiar, has reconstructed his tricycle into something like a helicopter. According to the newspaper his efforts look very much like a helicopter but has no spinning wings or blades to fly. [Vanguard]



Ed: "no spinning wings or blades to fly" ... that would make it a fuselage then.

HEMS gas bottles aside it seems that there is a 'Fridays Child' H145 out there in the west. Sources tell me that the EC145 G-OLWG destined for the Wales Air Ambulance has been misbehaving recently.

Back in mid-December the H145 put down in a field to the north of Gloucester Airport at Coome Hill, near Tewkesbury but then had another emergency in the first week of the New Year. On 5-1-2017 the pilot put down at the airport on the northern side, the incident attracting the attention of fire engines that attended to the emergency with sirens and flashing lights.

Nothing serious it seems in either case but only time will tell whether this regular occurrence gets to be in any way a habit.

Meanwhile the EC135 G-POLF was noted in the new Babcock glass engineering hangar on 4-1-2017 -the next Police 135 conversion by Babcock.

PAvCon UPDATE

This year we have a multi-award winning line-up of International speakers at Doncaster.

The event has always attracted the best across the industry - the 2013 HAI Annual Safety Award winner has been a regular attendee – but this year we have a full house of recent award winning talent, presentations and presenters. Whether a ground guy chasing the bad boys, a unit XO, needing to re-inculcate the crews on avoiding CFIT (Controlled Flight Into Terrain) or a senior officer/decision maker/strategic planner YOU need to be at this year's PAvCon (www.pavcon.org) where the likes of Award winning Jack Schonely's (various European ASU presentations) and expert on Suspect Tactics and Perimeter Containment', Award winning Safety and safety management Guru Bryan Smith and Award Winning Dave Morton (Airborne Law Enforcement Association (ALEA) UAS Award for 2015 for Meritorious Contributions in the field of UAV certifications) will be presenting and more importantly available for networking during and after the day's activities.



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Training, discussion and more discussion. All led by the PAvCon Chairman (lots of experience in the role thanks to past experience, and currently back into the "completely independent" typecasting. His words.....

Shooting from the hip is a good way to obtain the information you 'really' need. It can, however, spectacularly backfire. Wanting to understand why there seemed to be a reluctance to purchase simulators and while presenting a simulator to some MOD camera operators, I suggested that the understanding of their EO/IR (Electrical optic/Infra-Red) capabilities and systems was running at about 50% (I was expecting a response of 75% or more thus giving me the knowledge that at the current pricing a net gain of 25% was going to make any sell difficult at best). Imagine to my obvious surprise, (these systems are costing in the region of \$700K) the response was 40%! Given that for the most part the EO/IR systems are a ground asset (much to the chagrin, no doubt, of the aircrews) and given the TFO (Tactical flight officer) is only in possession of 40% of the knowledge required to be effective, I wondered how much understanding the ground guys (whose asset it is remember) have? During my travels, I discovered that two major European SAR operations were unaware that the IR on their systems had the capability to increase the 'white hot' (or black depending) on their screen without performing another critical time consuming IR calibration. Yes, I was surprised as well. As the clamour for having some sort of UAV system as another asset in the ASU's (Air Support Units) portfolio so the requirement for understanding and identifying the various mission types will increase. The simulator provides for decision makers to ability to understand and crystalize mission types thereby increasing their ability to make the call on sending a UAV on a mission at a fraction of the cost of a full role equipped rotary asset (the issue of extremely useful second tier staff training notwithstanding).

Addendum. From my knowledge, a dearth of simulator units exists and one wonders how the decision makers will ever be able to utilise, what will become useable UAV systems, to increase their 'eyes in the sky' capacity and capability if they do not attempt to more fully understand their ASU role.



COMING UP

2-3 March 2017 U.T. SEC - Unmanned Technologies & Security Expo & Conference in Nuremberg, Germany. As the first worldwide platform to do so, U.T.SEC will be presenting in its entirety the future theme of unmanned technologies with the focus on security. The focal point is the technical and legal possibilities of increasing security. This also entails protection against unwanted entry by unmanned vehicles in civil, industrial and state areas. The monitoring and control of transport, infrastructures or industrial facilities and the energy industry along with the application of these technologies by police, fire brigade, disaster protection and other emergency services form the focal point of U.T.SEC. www.utsec.de/en

HELI-EXPO

This year the annual HAI Heli-Expo industry meet up is to be held in Dallas, Texas at the start of next month. Hopefully this year will see an improvement upon last years near disaster at Louisville, Kentucky. It was so bad that even my travel agents successfully, but accidentally, booked me into The Airport Hotel in St Louis MO and yet managed to rebook me into the correct identically named hotel of my choice in the correct town only hours before my flight left London. For HAI that illustrated an entirely unprecedented and largely unwelcome fact and such a capability is not expected to be repeated in Dallas! The stay away attendees wishing to miss the snow [which fortunately fell if not heavily], the cold and the joys of Kentucky held sway..

There are always a few events leading up to the main event of the Heli-Expo and this year includes the **UTC Aero**space Systems Rescue Hoist Operators Conference at the Omni Hotel on March 4-5 and on March 6, the 2017 HRRA Rescue Summit. The HRRA gets together at the Convention Center alongside the main event. The summit is free to members, and member agencies can send up to five people, without charge. Contact Hank Reimer at <u>hreimer@helirescuassociation.org</u>

One of the lead Press Conferences at HAI Heli-Expo each year is the presentation by Airbus Helicopters on their performance in the past year. The HAI content always adds specific US content but the core of what they will say on world markets was released a few days ago.

Airbus Helicopters delivered 418 rotorcraft in 2016, a five percent increase compared with 2015, against a challenging market backdrop. The company strengthened its lead on the civil and parapublic helicopter market while maintaining its position on the military market.

Airbus Helicopters logged gross orders for 388 helicopters in 2016, a stable performance compared to the 383 gross orders of 2015. In 2016, bookings notably included 188 orders for light-single engine helicopters, 163 orders for the H135/H145 light-twins and 23 for the Super Puma family. At the end of 2016, the overall backlog stood at 766 helicopters.

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March 6–9 • Dallas Exhibits Open March 7–9

Skye Avionics will be exhibiting in Dallas in Booth# 2023. The company is going to highlight Skye Avionics services, drop cords and a new Cobham RT-7000 portable radio interface.

Over the last year, Skye Avionics has been developing an interface that allows the quick integration and connection of any Motorola portable radio to the RT-7000 radio. This interface provides the ability for law enforcement inter-agency communication and agencies to work together to quickly mobilize and neutralize a situation.

The drop cord products are gaining popularity as they are a Next Generation product, built to last and endure tough operating conditions. There will be several models on display.

Skye Avionics, based on Vancouver Island, offers Custom Designs and Installation, Glass Cockpit Retrofits, Airframe rewiring on types as diverse as the de Havilland Beaver and models from Cessna, Bell, Eurocopter, Sikorsky and special mission aircraft. Contact Skye Avionics Ltd. Tel: +1 250-923-7599 Email: info@skyeavionics.com

7-8 March 2017 The **2nd Remote Healthcare Middle East** at the Westin Abu Dhabi Golf Resort & Spa, Abu Dhabi. Delegate Pricing: Public Sector / Government Delegates / Students: \$150 / AED 551 Private Sector / Industry Delegates: \$1499 / AED 5505. The event speaker line-up suggests that this is, as titled, a local primarily military orientated event. Being marketed by Clarion Events Dubai Office, 1906, Al Shafar Tower, Tecom, PO Box 122142 Tel: +971 4 4356101 http://www.remotehealthcareme.com Maria.Inez@clarionevents.me

7-9 March 2017 **Security & Policing** 2017 Farnborough International Exhibition and Conference Centre, Hampshire UK. <u>www.securityandpolicing.co.uk/</u>

10-11-12 March 2017 **European Drone Expo Brussels Expo** Heysel. Check out the 20% rebate on the booking of a booth for all European Drone Federations + free subscription for the B2B Area. There is a 10% rebate on the booking of a booth for affiliates of a European Drone Federation + free subscription for the B2B Area. For all European Drone Federations and their affiliates : 100€ - instead of 120 € - to subscribe for the B2B Area only. www.drone-days.be

11-13 May 2017 **The Elite. London Biggin Hill Airport**. The Elite Luxury Events Ltd. AvBuyer House, 34A High Street, Thames Ditton, Surrey KT7 0RY United <u>www.theeliteevents.com</u>

1-3 June 2017 **AeroExpo and Heli-UK**. High Wycombe Booker Airfield - Thursday to Saturday; Astrid Ayling <u>astrid@avbuyer.com</u>

4-6 April 2017 **Milipol 2017 Singapore** Global Security Asia. Established as the premier "must-attend" International Exhibition and Conference focusing exclusively on Counter Terrorism, Internal State Security, Law Enforcement and Civil Defence in the Asia Pacific Region. GSA 2015 is now organised in partnership with MILIPOL, the Largest Security Show in the World. GSA 2015, with its sister Shows MILIPOL PARIS and MILIPOL QATAR, will now deliver and showcase Homeland Security and Counter Terrorism Systems and Technologies from around the World.





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The Airbus Helicopters EC135T2 G-NEAU with high skids has now started the training process at Hurn Airport, on the south coast of the UK. It is scheduled to replace the MD Explorer as soon as the crews are trained up on the new type. [NPAS image]



FOSTERING INNOVATION FOR FUTURE SECURITY CHALLENGES



Congress: 4-6 July 2017 | Exhibition: 5-7 July 2017 Singapore 31