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November 2017

H175 IN POLICE SERVICE PILATUS PC-12, LEONARDO ASCENDANT AIR PILOTS AWARDS,

NPAS Doncaster - the short tour Communications woes Babcock in Norway

Pilatus image

EDITORIAL

The aviation industry never fails to stimulate as was proven last month when apparently out of nowhere there was a linkup between Airbus and Bombardier that in one fell swoop left Boeing standing aghast and open mouthed.

Nothing to do with helicopters or emergency services types at all but it was a representative move that took the industry by surprise in a massive way. Airbus and Bombardier announced they are to become partners on the C-Series aircraft programme, bringing together Airbus' global reach and scale with Bombardier's newest aircraft family.

The news will not please Boeing, which is locked in a dispute with Bombardier over alleged subsidy irregularities surrounding the sale of the C-Series to Delta Air Lines and successfully petitioned US authorities to impose high tariffs on the aircraft. Now aircraft for the US market will be assembled at the Airbus factory in Alabama - potentially circumventing the tariff problem.

Meanwhile here in the UK we await with some impatience the report of Her Majesty's Inspector of Constabulary (HMIC) into NPAS. Whether this report will provide quite the threat, risk or harm that C Series story did remains to be seen but recent reports issued by HMIC have been hard hitting and critical of the leadership of UK police in general. The UK police chiefs' organisation, ACPO, may have changed its name to protect who knows what but the new name of NPCC is staffed by the same people as be-

fore. When it comes time for the report to be read let us not forget that

Last month the police chiefs in general were castigated by HMIC for a lack of leadership, for letting their staff wander around wearing animal heads, nail varnish and high heel shoes at a time when they were blatantly not dealing with crime and the public in the friendly and outwardly efficient manner they had not so long ago.

NPCC claim all sorts of reasons for failing to police and yet they have more officers per capita than in the 1960s. In my time London had 28,000 officers but they now have 35,000, it is fair to say we flooded the streets of the Metropolis with officers but now no-one sees a policeman from one week to the next. Home Office data shows that in 1961 there were 807 people for every police officer in England and Wales, whereas the most recent figures, released last month, show that there are now 462 people for every officer. These are stark and damning figures which offer no easy answer, but no-one has yet offered a contrast in numbers between the office bound 'leaders' and the street duty officers.

This unexplained drain on operational manpower reads straight across to police air support where it has been evident that many resources are being withheld in favour of social policing projects, information technology, squad policing and party hat training. When it appears in the public domain the HMIC report on NPAS will, I am led to believe, exhibit great displeasure that is rightly at least partly owned by the NPCC.

Bryn Elliott

things in our time but I believe there were limits to the amount that got into the public domain. Then again [fortunately] we did not have either Facebook or Twitter to make fools of ourselves on.

Yes we did some pretty crass

the architects of NPAS were the members of ACPO.





FRONT COVER: N243TX was the first Pilatus PC-12 Spectre taken by the Texas Department of Public Service in 2014. It has proven an excellent covert surveillance tool for the operator. ©Pilatus

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LAW ENFORCEMENT GERMANY

SAXONY ANHALT: The Saxony-Anhalt police helicopter squadron has flown helicopters from Airbus and its predecessors for 25 years. Until recently it owned a 1992 Bolkow/MBB BO105 and two MBB BK117 of a similar vintage. In August of this year a new H145 replaced the BO105, and the two BK117 are planned to be replaced by an additional H145 in the future.



The H145 was handed over as part of the 25-year anniversary celebrations of the helicopter squadron and the Bolkow, which entered service in July 1992, was retired. The Bolkow, serial S-873 D-HSAB delivered as a BO105S, then subsequently modified to CBS5 standard was offered for sale by sealed bid tender with 8,400 hours total time and 21,322 landings by VBEG GmbH. The bidding closes on November 1. [VBEG]

INDIA

GUJARAT: The State Government has postponed plans to purchase a police surveillance helicopter. Gujarat had initiated plans to make the purchase two years ago despite several delays. A tender for a single-engine helicopter was issued but it only attracted a bid from Bell Helicopter – presumably for a 407. The tender required a five-seat machine with two pilots that was role equipped with EO/IR camera and searchlight at a guide price of \$3M. It appears that a bid by Agusta was in the offing, but various versions of its fate vary between it being cancelled or disallowed or never having materialised. The bidding process will be again reissued after upcoming elections. [Times]

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MALAYSIA

POLICE: The U.S. Air Force (USAF) 6th Special Operations Squadron helped pilots for the Royal Malaysian Police Air Operations Force (RMPAOF) complete two weeks of tactical emergency and rescue training from August 24 to September 16. During the training, the unit's officers were guided and exposed to paramedic roles, casualty evacuation, cargo drops, and search and rescue operations.

Police Air Operational Force Commander Deputy S. Sathiya Seelan said the training was a first in Malaysia. "We have regular training provided by other agencies ... but this is the first time we have trained with USAF," he said. "The training



helped police officers learn about dealing with different emergency situations. Our officers were taught how to drop a dinghy into the sea for rescue, conduct evacuations in remote areas and also drop cargo for jungle missions." [The Star MY]

On current plans the RMPAOF is to procure six Leonardo AW139 helicopters to expand their existing fleet of 29 aircraft to undertake larger scale operational missions. Two of the AW139 helicopters have already been taken into service and the remaining four will be delivered in stages through to 2020.

Currently the RMPAOF has eleven helicopters, the two AW139, nine AS355F2 and AS355N, and twenty fixed wing aircraft including five King Air Beechcraft 350, six Cessna 208 Caravan, five Pilatus PC6 Porter and four Cessna 172.

The RMPAOF has started investing in drones and currently has eight in its inventory. The fleet comprises four DJI Phantom 3, two DJI Inspire 1 and two DJI Matrice 600.

The initial AW139s were delivered in the early summer of 2016, the full batch of six having been decided earlier in the year under the ninth and tenth Malaysia Plan. The procurement contract for the first two helicopters was signed on March 9, 2016, between the government and Galaxy Helicopters (M) Sdn Bhd. [SS]



NEW ZEALAND

POLICE: The small air support operation, currently using the AS355F helicopter around Auckland, successfully transitioned to a full 24 hours a day, 7 days a week operation at the start of October.

These extra hours have become possible through the Safer Communities package announced earlier this year, which will see an extra \$388 million dollars of funding for police during the next four years.

Police Commissioner Mike Bush says the investment enables police to allocate new staff, equipment, training and other re-

sources to districts and service centres and included amongst this is the ability for Eagle to go 24/7. [NZP]

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NORWAY

POLIS: As expected the police in Norway formally signed for its initial fleet of three Leonardo AW169 in early August.

At the recent Helitech in London Trakka Systems announced that they had reached an agreement with Leonardo Helicopters to fit the new TrakkaBeam TLX high-intensity, high power searchlight for the AW169 helicopters chosen by the Norwegians. The contract includes an option for a further three units, and a 10-year maintenance package.

The TLX high-intensity, high power searchlight is the latest model in the Trakka Systems range. Complementing

the proven work-horse A800, the TLX is a product offering more performance, features and functionality in the same form-factor. The TLX provides a massive 25% increase in light intensity across the beam, while requiring an 11% lower power draw. With the characteristic TrakkaBeam full and uniform edge-to-edge light-spread across the beam diameter, the TLX leads the industry for total beam brightness, clarity and control. It also offers an industry-first optional dual sensor TI/ TV co-located camera payload for enhanced day/night situational awareness, together with Trakka's unique internal multispectral filter wheel. Coupled with the new LOS Inertial Hold function, TLX greatly enhances day/night situational awareness and mission capabilities, and is particularly useful for helicopters deploying armed counter-terrorist response teams. [Trakka]





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THAILAND

ROYAL THAI POLICE: The police have received two H175 helicopters from Airbus Helicopters, making it the first operator in Asia Pacific to operate the newest rotorcraft and the first police operator worldwide.

The Royal Thai Police will be using this super medium aircraft, equipped with the latest aircraft technology and capabilities, for VVIP transportation and various police missions. The pair will be supported by the Airbus Helicopters Bangkok support centre.

The Royal Thai Police currently operates nine Airbus helicopters, comprising five H155, two AS365 N3+ and the two H175. Historically the large helicopter fleet has been supplied by Bell and the major part of the operational fleet remains Bell.

The small fleet of H175 helicopters in service has flown in excess of 12,000 hours and offers a maximum take-off weight of nearly eight tonnes and is designed to provide unmatched efficiency across a variety of missions, including utility, law enforcement, VIP transport, oil and gas, as well as search and rescue. Equipped with Helionix, Airbus Helicopters' integrated suite of advanced avionics and 4-axis autopilot, the H175 offers enhanced situational awareness and improved operational safety by helping to reduce pilot workload and increasing mission flexibility. [Airbus Helicopters]

UNITED KINGDOM

NATIONAL: Although it has been mentioned several times in PAN in the past it seems that the negative story surrounding the new the Emergency Services Network (ESN) radio system has now seeped through into the national press at last.

It has been stated that police chiefs fear they will be hit with a £400M bill for the disastrous project to replace the new radio system designed to supersede the digital Airwave.

The Mail on Sunday claims to have seen 'secret documents' that show the high cost of the delays to the scheme that might cost the equivalent of the annual pay and training costs for 8,000 constables. As has been discussed in PAN [and the NPAS minutes] on previous occasions the expensive upgrade to emergency services communications is already years behind schedule, and there are growing concerns that critical elements of it cannot work. The Mail adds that "Incredibly, the technology does not even exist to operate the new generation of radios in police helicopters, while hundreds of extra phone masts must be built before the network can be used in rural are-as."



Police leaders fear a huge bill for keeping the existing Airwave radio system switched on as they also pay

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for the development of its replacement. Chiefs in the East Midlands, West Midlands, Yorkshire and the North West have written to the Home Office expressing their concerns.

The ESN is to give all the emergency services police and firefighters the ability to share photos and videos of incidents on new digital handsets. But the scale of the plan, and the fact it has never been tried anywhere in the world, means its introduction has already been pushed back repeatedly. In its original proposals Airwave made similar claims but failed to achieve the promise at an affordable cost. Most users did not select the additional options.

Officially the Home Office has admitted the transition period would have to continue until September 2020, nine months after the expected 'national shutdown date' for Airwave but a key part of the Airwave infrastructure is due to stop working six months earlier in March 2020 and there are other much later dates being mooted from other sources.

Police stations are being closed wholesale. Recently the Waltham Abbey police station was sold complete with its significant Airwave system intact. Part of the £1.4M deal saw the past owners – the police – paying £20,000pa rent to the new owner to keep the equipment on site. Multiply that deal across the police estate and it gives an idea of the costs involved. The given figure in the Mail report is £403M for an extra year of running Airwave.

The Mail quotes the national police lead for the project, Deputy Chief Constable Richard Morris, as saying 'The Government has a contingency plan in place and has extended all Airwave contracts to December 31, 2019.' The Home Office said: 'Emergency services will only transition when they are satisfied with the new network.'

NPAS: Late last month came news that NPAS had been awarded a prestigious national award in recognition of their outstanding contribution to aviation. Good news at last.

The 'Sword of Honour' was presented by the Honorary Company of Air Pilots (HCAP) at the London Guildhall on October 26. It was awarded to the police aviation operation for their part in the emergency response to two of the UK's terror attacks earlier this year. This is just one of over 20 awards made by the HCAP this year to a range of individuals and groups.

The crews were recognised for their provision of sustained cover throughout the protracted duration of this year's incidents at Westminster Bridge in London during March and in Manchester in June. [NPAS]

The complementary HCAP citation outlined the detail behind the creation of NPAS, and the part played by AC-PO and mention of the growing pains of the organisation. HCAP highlight that the terrorist attacks in Westminster and Manchester on 22 March and 22 May 2017, respectively, mark the coming of age of NPAS as a critical national asset. In the case of the Westminster attack, the first aircraft was tasked from NPAS Redhill and was overhead within 6 minutes of the request with subsequent aircraft, from multiple bases, relieving on scene until the situation stabilised.



Likewise, for the most recent attack in Manchester, NPAS aircraft maintained a constant presence for the first 9 hours of the operations with aircraft and crews being deployed from NPAS Barton, Hawarden and Carr Gate.

The lengthy citation ended 'For its outstanding contribution within the sphere of General Aviation, the National Police Air Service and its 350 staff is awarded the Sword of Honour.'

Doncaster revisited

The NPAS contract for four Vulcanair P.68R airframes with a 24/7 all-weather flight capability was issued two years ago and the first fixed wing line-pilots were sought in September 2015. The contract for a building at Doncaster Sheffield [Robin Hood] Airport was let to Keir a year ago and ground works for the Rubb building commenced last November.

After several months viewing from afar the editor set foot inside the new structure in September and this report is carried over from last month as there really was 'too much information' on the operator in the October edition. The Editor was there in Doncaster for the briefing that led to the storylines last month.

NPAS Doncaster is located 'Airside' on the airport at the end of Second Avenue, the 1.368-acre site protected by a substantial array of fences and cameras that assume the worst of anyone attending and provides for self-sufficiency in fuel and power needs. Access through the gate leads to a 19-bay car park that pushes the structure further back from the public road.

The 'temporary' but very substantial building with the odd address of 'Hangar 0' has been externally complete since June but by September the building contractors, Keir, were still moving out and the final acceptance signature was still to be transacted. The large structure remains empty of aircraft for the next few weeks.

The Rubb buildings are relocatable but permanent fabric tensioned buildings utilising a high-strength heavy weight coated architectural membrane that should last well over 30 years. It is sealed and provides a heated and insulated weather tight shell that has served well across the world.

The hangar is a 40 x 46 metres clear space with a floor that naturally still sparkles with newness. It is surrounded on two sides by some 20 rooms in office and utility structures that, although part of the whole are effectively portable buildings tucked under the massive tent like roof. All the rooms are assigned to a use and, at the time of the visit, all were at least sparsely furnished. Details such as notice boards were yet to appear, so the place does not yet have the lived-in look about it. As Keir move out the maintenance organisation, Gama Aviation, are starting to move in equipment but not yet personnel or aircraft specific stores.

In the first quarter of this year it was announced that Gama Aviation had been awarded the NPAS fixed wing contract. The new three-year contract with NPAS comes with an 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 the new Vulcanair P68R fleet. As this activity was supposed to have started in June and there is currently nothing to maintain it is probably best to clarify when it is deemed to have commenced after there are aircraft on site to service.

The Rubb structure is similar to the 26m x 17m hangar erected for NPAS at Hurn but nearer in proportions and general door layout to the design 35m x 40m facility designed for Bristow Helicopter Group at Norwich Airport. The bare building offers substantial storage rooms, but the vertical lattice frame affords the option of storage shelving along the edges of the hangar space should that be needed. Hurn has a vertical lift heli-door but Doncaster has bottom-rolling sliding doors.

On the airside flank is a protected 40,000 litre fuel tank – the contents presumably AvGas exclusively for the piston P68.

The large hangar door opens onto an airside apron hardstanding of 2,500sqm able to take two parked P68s clear of the runway clearance line and a helipad that will facilitate use by visiting helicopters. There are currently no plans to base a helicopter but TFO training will use a helicopter, so the H spot will get use. The P68 is too small to facilitate back seat training so a helicopter, usually that at Carr Gate, will undertake the training and periodic check test task from time to time.

The yet to be agreed base at North Weald is likely to have a near identical building to house a mixed fleet of helicopters and fixed wing. At the time of my visit members of NPAS London were being briefed on the Doncaster base.



UNITED STATES

OHIO: The Hamilton County Sheriff's Office in Cincinnati and taken delivery of their rebuilt aircraft. Three months ago, the helicopter was sent to the MD Helicopters plant in Mesa as an aged MD500E and has now returned as a fully FAA-certified MD 530F (369FF type certification). Operated since 1989 by HCSO as an MD 500E, this aircraft now is enhanced and has a zero-time engine.



The MD Helicopters' conversion offers increased hot-and-high performance as well as improved operational range and flight time. The enhancements to the HCSO aircraft include:

□ an engine upgrade from the Rolls Royce 250-C20B to the more powerful RR250-C30,

□ replacement of the blades and stabilisers,

□ installation of the Garmin G500H dual-screen electronic flight display, and

 \Box the addition of a Fargo Auxiliary Fuel Tank.

MDHI installed an all-new interior and updated the HCSO paint scheme to align with the appearance of other HCSO vehicles. [MD]

SOUTH CAROLINA: With its three OH-58s now difficult to maintain Charleston County Sheriff's Office presented a proposal to members of Charleston County Government Public Safety Committee on October 19 for the purchase of a new law enforcement helicopter. CCSO says their current air support capability is outdated and needs to be replaced with a helicopter that has better mobility, enhanced safety features, and advanced technology. Maintenance is becoming increasing difficult and costly. Only one of the Bell helicopters held [N6179N 70-15606] is now operational and one now consigned to spares retrieval only. It is the intention to seek a pre-used role-equipped law enforcement machine.



AIR AMBULANCE

QUEENSLAND: The Government of Queensland has placed an order for two additional AgustaWestland AW139 intermediate twin engine helicopters. The aircraft are expected to enter service by December 2018 performing emergency medical services and search and rescue missions over land and sea. The AW139s will replace two older helicopter models as part of a fleet modernisation programme and reduce maintenance costs.

These helicopters will add to three AW139s already in service with Queensland, further strengthening the State's air rescue capabilities and leveraging efficiencies in support, maintenance and training. The new aircraft will be

operated by Queensland Government Air (QGAir), a division of the Queensland Government's Public Safety Business Agency and will be based in Townsville.

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AUSTRIA

OEAMTC: In anticipation of future flight operation challenges of the Austrian Air Rescue System, Capt. Reinhard Kraxner and Marco Trefanitz, Managing Directors at OEAMTC signed a LOI for the provision of an avionic desktop trainer from Berg-Hoehenrain, Germany based REISER. The desktop trainer is for simulating Helionix® software suite. <u>http://reiser-st.com</u>

FALKLAND ISLANDS

STANLEY AIRPORT: The Falkland Islands' Executive Council has considered a proposal to investigate the



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The World's Sixth Sense"

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future development options for Stanley Airport. A paper put to ExCo by the General Manager Aviation Services and Director of Civil Aviation was described as not a comprehensive review of all the options, but gives approval for the Chief Executive to develop clear terms of reference for a study which can define the realistic potential usage options for Stanley Airport.

The ExCo paper recommends that the focus for future development options be based on attracting the regular South America based air ambulance providers, such as Aerocardal (Gulfstream G150) and small regional airlines such as the 80 passenger Aerovias DAP (BAE 146-200) whilst ensuring the airport remains sufficiently able to cater for the FIGAS BN-2 aircraft and possible future heavy helicopter operations in support of hydrocarbons exploration.

This type of development would make the airport more appealing to the British Antarctic Survey (BAS). Increasing the current runway size would be required for the air ambulance aircraft operators and small regional airlines.

The report notes that the required runway size for the air ambulance service providers is similar to that required for small regional passenger aircraft, but the passenger aircraft would require additional passenger and ground handling facilities such as higher rescue and firefighting capabilities, aviation security and a larger passenger terminal, which would represent a significant investment but could be completed in stages over a period.

It is not recommended that time and money is invested in exploring an upgrade of the airport to accommodate large passenger aircraft such as the weekly LATAM service because this would mean duplicating the larger and newer airport that already exists at Mount Pleasant.

NAMIBIA

PUBLIC SERVICES: The Ministry of Health and Social Services [MOHSS] runs the public ambulance service which provides pre-hospital care, inter-hospital and antra-hospital care from basic to advanced level. The Head Office at National level provides technical and supervisory support and facilitates trainings of staff members.

EMS in Namibia is run by both public, private and state sectors. Each sector has its own call centre which dispatch their own resources. There is no set standard for crew composition so there is a mix of recovery techniques ranging from 'scoop and run' minimum care at the roadside to undertaking patient stabilisation on scene prior to transfer to hospital.

Currently the public sector has no air ambulance services, private companies offer the services which the Ministry make use of when the need arises. [Emergency Live]

NORWAY

Babcock Scandinavian Air Ambulance operates air ambulance contracts across Sweden and Finland, and is Scandinavia's largest air ambulance company. The name Babcock Scandinavian AA is new from 2016, it was previously known as Lufttransport AB an organisation dating back to operations in Stockholm in 2001. That company drew on experience from a sister company in Norway founded in 1955. Now Babcock is to run all air bases in Norway from July 1919.

To meet the new contract Babcock is searching for over 100 pilots to fly a new fleet of fixed wing aircraft and helicopters to service the contract.

Last month Textron Aviation secured a fleet order from Babcock for eleven aircraft, including the first medevacconfigured Cessna Citation Latitude midsize jet and 10 Beechcraft King Air 250 turboprops. These will support the contract with Air Ambulance Services of Norway to provide communities across Norway with vital air ambulance support.

Babcock's fleet of King Air 250 turboprops will feature CAT II capability, enabling operations in reduced visibility. In addition, the aircraft will feature steep approach landing capability and are equipped to operate in polar regions. Completing the fleet, the Latitude will also include a modified door to accommodate the loading and unloading of wide medical stretchers.

Deliveries for the eleven aircraft are scheduled throughout the next 18 months and are expected to conclude in 2019. [Textron]



SOUTH AFRICA

NETCARE: A leading pre-hospital risk management and emergency medical assistance provider in South Africa is Netcare 911 a national EMS provider operating 200 vehicles of all kinds directed by a 24-hour central-ised emergency operations centre (EOC).

A trained call taker triages the calls and captures the relevant information, among which details of the emergency, address of the incident or accident, GPS location, etc. The most appropriate vehicle and emergency medical personnel are then despatched. Should ground crews require aeromedical support each individual case is submitted to a critical care team to ensure the case complies with international flight criteria and guidelines. The EOC receives an average of 55 000 calls per month ranging from the advice to full emergency.

There are four helicopters, two Bell 222 [ZS-HDI and ZS-HDK] are permanently EMS configured and ready to mobilise within five minutes of activation. This is the only helicopter emergency medical service in South Africa operating 24 hours a day, there is also access to one ready-to-covert helicopter and one AW139 is available at 90 minutes notice for multiple casualty transfer. The operation has access to five fixed wing jets which can be airborne within 90 minutes of activation. Two of the five, a Hawker HS125-800 ZS-AOA and LearJet 55, ZS-ELJ, are in-house and can be supplemented by LearJet 35, ZS-IGP, Hawker HS125 -400, ZS-OIF and a Cessna Citation SII, ZS-EDA. [Emergency Live/Netcare 911]



UNITED KINGDOM

CORNWALL: Specialist Aviation Services has been selected as the preferred bidder by Cornwall Air Ambulance to provide an AW169 EMS under a ten-year contract starting in 2019.

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The decision follows a competitive tendering process carried out by Cornwall Air Ambulance Trust ahead of the end of the existing contract with SAS and which will replace the MD902 Explorer operation based at the Charity's Newquay Airport HQ.

Chosen by the Charity as its "Next Generation Helicopter", the AW169 will deliver greater overall safety, performance & range and will be customised with a fully adaptable SAS medical interior, providing a spacious, bright cabin, easy loading and all-round patient access.

Not all UK AA operations offer 24/7 service and until now Cornwall only operated for 12 hours, that is to be extended under a 12-month trial involving the charity's critical care cars. Each day the helicopter crew works a 12-hour shift from 7.30am to 7.30pm, responding to emergencies in the charity's critical care cars when the weather is too bad to fly. Under the new trial the helicopter crew continues to operate under the same hours, with an additional shift now worked by two critical care paramedics responding to emergencies by road from 6pm to 2am every Wednesday to Saturday.

UNITED STATES

MEDAIRE: Established in 1987 MedAire's MedLink instantly provides the highest levels of medical expertise to remote emergencies anywhere in the world. Since inception, MedAire has taken over 1 million calls to help clients, passengers and guests with health or security issues in the air and when travelling away from home.

Located in a Level one trauma hospital in Phoenix, Arizona, it is a unique facility taking calls 24/7 from aircraft around the world. The unit is housed in the newly constructed and state-of-the-art emergency department at Banner University Medical Center where it has been for more than 32 years taking upwards of 300 calls per day from aircraft around the world. The three most common issues in flight for business aviation are travel diarrhoea, fainting, seizures and sprains and strains.

Utilisation of MedAire services continue to grow as air travel increases. In addition to the MedLink Phoenix expansion, MedAire now has Mandarin language service out of Beijing for clients that prefer assistance in their native language and German language service from Frankfurt. <u>www.medaire.com</u>

MIDLAND: As reported in the Helitech Special Edition—still available on-line at the website or direct from the publisher—Airbus Helicopters formally handed over the first H145 for Midlands Air Ambulance Charity (MAAC) operated by Babcock Mission Critical Services (MCS) at an official ceremony at Helitech. The event, attended by senior representatives of Airbus Helicopters, MAAC and Babcock MCS, marked the latest milestone in Airbus Helicopters' support for UK Helicopter Emergency Medical Services (HEMS) operations.

The aircraft, which has been acquired by MAAC to further extend their HEMS operations, will see Babcock MCS install the Bucher medical interior as well as operate the aircraft on behalf of the charity. The new addition is equipped with the Helionix advanced avionics and autopilot suite, has a range of more than 403 nautical miles and a Maximum Take-Off Weight (MTOW) of 3700kg. Until now, MAAC's fleet has been made up of three EC135 helicopters and the increase in range, payload and space that the H145 brings will help the charity increase and extend HEMS operations across a larger region.

The H145 is now at Staverton undergoing completion. When it enters service a few months from now it will be the tenth H145 to operate in UK HEMS, representing a 25% market share. That makes it the second most popular aircraft for these missions after the EC135.

UNITED STATES

AMTC: In the middle of October the annual Air Medical Transport Conference (AMTC), included the AAMS Community Awards to recognise excellence and leadership in the emergency medical services (EMS) transport community.

As with several other awards in the industry the sponsor often finds that they are congratulating and presenting awards to winners that do not operate their equipment and may never have ever done so.

This year Airbus faced a similar situation with its support of the supports the Program of the Year, the Jim Charlson Safety Award and the Airbus Helicopters' Vision Zero Aviation Safety Award. The 2017 winners of the Program of the Year and the Safety Award was Life Link III.

The award recognizes an EMS operator that has demonstrated a superior level of patient care, high-quality leadership with a commitment to innovation, and commitment to the medical transport community.

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The winner was formed in 1985 as one of the first non-profit consortiums in the country to transport critically ill patients by helicopter. The company has always focused on clinical excellence and is an early adopter in bringing new technology to critical care.

Three decades of experience has transformed this unique collaboration into a membership of nine leading healthcare organizations that includes: Allina Health, CentraCare Health, Children's Minnesota, Essentia Health, Fairview Health Services, Regions Hospital/HealthPartners®, Hennepin County Medical Center, St. Luke's, and Sacred Heart Hospital.

Life Link III operates seven helicopter bases located throughout Minnesota and western Wisconsin the aircraft of choice being the Leonardo AW119.

The Jim Charlson Safety Award went to Krista Haugen, RN, MN, CEN (Med-Trans Corporation) in recognition of an individual who has made a significant contribution to the overall enhancement, development or promotion of safety within the air transport community. The Airbus Helicopters' Vision Zero Aviation Safety Award went to Life Link III's Hospital Helipad Safety Video. website: www.aams.org/member-services/awards/.

SOUTH CAROLINA: The C.A.R.E. (Colleton Air Rescue Evac) Flight Medical Helicopter Program, a partnership between Med-Trans and Colleton County Fire-Rescue, took delivery on the new Bell 407 GXP helicopter on September 22.

The partnership involves shared staffing. Med-Trans provides the helicopter, pilot, mechanic and flight nurse. Fire -Rescue provides paramedics that have made it through the Med-Trans application process and complete their training. Three of the Colleton County paramedics assigned to the program are already flight paramedic certified. Three others are working their way through the certification process.

TEXAS: Leonardo has made a major breakthrough into the lucrative US air medical market and that should make Airbus Helicopters sit up and pay attention.

Travis Co STAR Flight–the Texas 24/7 aerial emergency medical service with medical transport, swift-water rescue, search and rescue, high-angle rescue, fire suppression/aerial reconnaissance and law safety assistance is to give up its H145 helicopters for a fleet of new AW169 from next year, with deliveries expected to begin in October 2018.



In addition to EMS operations, the AW169 will support Travis County's search and rescue, law enforcement support and fire suppression efforts in the area surrounding Austin, Texas. The three AW169s will allow *STAR* Flight to grow its operational capabilities, including the ability to transport patients longer distances and increased capabilities for search and rescue, as well as responsiveness to wildfires.

FIRE AUSTRALIA

MELBOURNE: Viking Air Limited of Victoria, BC, Canada has signed an agreement with Ansett Aviation Training of Melbourne, Australia for them to be a Factory Endorsed Training Centre ("FETC") for the Viking CL-415 aerial firefighting aircraft.

The FETC agreement will create a strategic partnership between Viking and Ansett that will benefit CL-415 operators by ensuring they receive Viking OEM technical support coordinated with the highest level of CL-415 training possible.

As part of the agreement, Ansett will invest in the development of the first-ever Level "D" Full Flight Simulator for the CL-415, to be supplied by TRU Simulation + Training and installed at their new state-of-the-art training centre at Milan-Malpensa Airport, Italy in 2018. Development of the CL-415 flight simulator will enable the experience gained from TRU Simulation's manufacture of the Level "D" Full Flight Simulator for the Viking Series 400 Twin Otter, including unique seaplane capability to be in place late next year.

JAPAN

Leonardo has significantly grown its market share in the Japanese helicopter market by securing orders for AW169, AW139 and AW189 helicopters in firefighting configuration following highly competitive tenders.

Leonardo and Mitsui Bussan Aerospace, the Japanese distributor for the AW169 and AW139 types, have signed contracts with the Yamaguchi Prefecture Fire Fighting and Disaster Relief Agency for one AW169



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and with the Shizuoka Prefecture and Fukushima Prefecture Fire Fighting & Disaster Relief Agencies for one AW139 each. The AW139s add to an established fleet of more than 50 units in all market segments and reinforce the presence of this model in the firefighting market. The Yamaguchi Prefecture AW169 is the third AW169 to be sold in Japan, the first for firefighting roles, opening up this market for the most modern helicopter in its weight class. The contract with the Tokyo Fire Department for the AW189 marks the debut of Leonardo's new generation helicopter in Japan. All aircraft are expected to enter service between spring 2019 and spring 2020 replacing older helicopter types.

The new helicopters will feature standard equipment that includes a Bambi bucket, rescue hoist and searchlight as well as customer specific equipment. The Tokyo Fire Department AW189 features 19 seats, dual hoist and extended range auxiliary fuel tank for long range missions to remote islands. The AW139 for the Shizuoka Prefecture Fire Fighting & Disaster Relief Agency will carry out rescue operations around Mount Fuji and will also be equipped with a belly tank and a gyro-stabilised camera system with micro-wave downlink (Heli-TV). The AW139 for Fukushima Prefecture is also equipped with snow skis. [L]

SPAIN

Milestone Aviation Group is to lease two B412SP helicopters to FAASA Aviacion S.A. of Spain to support their expanded firefighting services. The two helicopters owned by Milestone were previously on lease to a Brazilian operator and utilised in oil and gas support missions. The helicopters are currently in Spain, where FAASA is carrying out reconfiguration work to facilitate the new firefighting mission.

Trakka Systems has received an order for and has delivered five additional SWE -300 HDIR TrakkaCams to Heligràfics for Fire Mapping. Heligràfics Photogrammetry is a Spanish company founded in 2005 and specializing in executing projects for collecting and recording data from airborne sensors, as well as in the development of software and applications for the management and exploitation of the recorded information.

The TrakkaCam SWE series systems offer up to four, multi-spectral cameras; the highest resolution radiometric thermal imager available on the market today for precise temperature measurements of hotspots; a solar-blind UV camera for the detection of the Corona phenomenon in daylight; a high definition video camera and a 36 Mega Pixel photo camera, for documentation of faults, bird nests, woodpecker holes, loose or missing hardware, broken insulators, missing signs, vegetation management, corridor design and infringement.



UNITED STATES

CALIFORNIA: This year has seen a particularly devastating wildfire season in northern California. Numerous people have been killed and many properties razed by fires in the wine growing regions of the Napa Valley north of San Francisco.

In the early part of the month the speed of the fires caught many unawares and many deaths were recorded. By mid-month the wildfires were thought to have killed at least 40 people and destroyed at least 5,700 homes but many more people were missing, and the numbers suggested the potential of nearly double the known dead and many more injured. Around 100,000 people were under evacuation orders as more than 160,000 acres burned. Governor Jerry Brown declared a state of emergency for Napa, Sonoma and Yuba counties.

By the last week in October the fires were still burning, and the number of structures listed as burned had leaped to 8,400, but many of the latest blazes were listed as at least 90% contained. Some 27 wineries were reported either lost or seriously damaged.

In contrast the further south in California other fires in Anaheim Hills [where the Heli-Expo is often held, and Disney has a resort] the damage was more modest in scorching over 9,000 acres, destroying or damaging about 60 structures and injured one person.

The response to these widely separated wildfires has involved at least 73 helicopters, 30 air tankers and 550 locally sourced fire engines. The state also requested 154 additional engines from the federal government and 170 from nearby states.

Throughout the region, major highways and country lanes were packed with Pacific Gas & Electric Co. trucks as the company aggressively worked to restore communications by repairing downed power lines and replacing destroyed telephone poles.

16

SEARCH & RESCUE

To ensure that emergency measures and plans work optimally in an emergency situation, voluntary fire brigades and rescue organisations conduct exercises almost daily, in addition as part of organisational exercises, large disaster scenarios are also regularly practiced. *Ian Frain reports....*

On September 22, 2017 this year's Landeskatastrophenschutzübung [Country Emergency Exercise] took place in the district of Scheibbs in Lower Austria from 8:00 am until dusk. Various training scenarios were undertaken by some 800 participants under the direction of the Scheibbs district management team.

The fire brigade cooperated with aircraft of the Austrian Armed Forces and the police in dealing with a supposed forest fire in the area of the Schwarzenberg (Gmd Gresten-Land). Other scenarios included dealing with pollutants, accidents and large numbers of injured people. The completion of the exercise was a chair lift rescue exercise at Gr. Ötscher in Lackenhof, where helicopters of the police, the army and the ÖAMTC were deployed.

In the shadow of the Ötscher mountain, in the region of Scheibbs and Lackenhof in Lower Austria, the large-scale disaster relief exercise called NOEKAT2017 involved the Bundesministerium für Inneres (BMI) – Ministry of Interior, the Bundesheer - Austrian military (including the air force, infantry, Pioneer Battalion, Chemical Biological Response, Lower Austria Military Command), Bergrettung – Mountain Rescue and Fire department, and the ÖAMTC Flugrettung – Air Ambulance services run by the Austrian Automobile Club. The ORD Rescue and Therapy dogs team also took part.

The Czech Republic disaster management authority, Slovakia, Switzerland and the US State Department sent senior representatives to observe the exercise.

The different scenarios included aerial firefighting, rapid response following a breakdown in communications, earthquake disaster relief, HAZMAT (Hazardous Materials) / ABC (Chemical Biological Response Nuclear) teams dealing with a chemical spillage into the water system, a NBRC scenario traffic accident and the coordinated rescue of a hundred and ten people trapped in ski/chairlifts at high altitude. Scheibbs was chosen as the exercise site as it is situated in an earthquake zone. Other simulations included a serious traffic accident in Mühling, the evacuation of a sports centre and school, and a heavy slope slip on the Asangkogel skis runs.

The aerial assets included the Bundesheer Lockheed Martin owned Sikorsky S-70 Blackhawk and Aerospatiale Alouette III, while both the BMI – Flugpolizei and ÖAMTC used variants of the Airbus H135, (EC135P2+ and EC135T2+). The ÖAMTC flew long line rescue and medical evacuation missions in conjunction with the Red Cross / Bergrettung mountain rescue while the Alouette III, celebrating fifty years of service with the Austrian Air Force, was flown around on reconnaissance / observation and winch rescue operations. The police and the air force Alouette III and S70 transported 83,000 litres of water utilising a Bambi bucket and a Semat 3,000 litre water tank unit extinguishing a 'forest fire' in Gresten near Scheibbs.









BANGLADESH

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NAVY: RUAG Aviation has signed a contract for the sale of two new production Dornier 228 aircraft to Bangladesh Navy (BN), expanding their existing fleet of two Dornier 228s. The versatile aircraft will serve to support surveillance and patrol flights for all aspects of maritime security, exclusive economic zone control, and search and rescue (SAR) operations.

This new contract reinforces BN's efforts to increase their naval and coast guard surveillance activities to further ensure their nation's safety and economic strength. The new Dornier 228s will build on BN's existing capabilities in the patrolling of the sea routes, territorial waters, coastal areas, and wetlands, essential to secure fishery operations, and critical vessel tracking. The two additional Dornier 228 will also extend BN's reach and endurance options for SAR and natural disaster missions.

UNITED KINGDOM: Cobham Aviation Services have announced their intention to set up a training organisation in Cornwall to use equipment and facilities made redundant by the end of their 20-year Defence Helicopter Flying School (DHFS) contract with the UK forces.

Cobham are to launch their Helicopter Academy later in the year, at Newquay International Airport utilising the skills employed by the DHFS.

With the DHFS contract ending on March 31 next year, Cobham will transfer up to six helicopters to its new Academy. The Newquay location will offer aircrew training (pilot, technical crewman including winch operator and winchman) and offer it to governments all around the world.

The majority of the equipment – including Cabri-G2, Eurocopter AS350, Bell 412 and AW139 helicopters – was fully amortised over the DHFS contract and that will allow Cobham to offer foreign governments a service without a major capital outlay. This will provide a value for money service that meet customer needs and budgets. The AS350s are already fitted with FLIR and NVIS, systems not always available from competitors. [Alan Warnes via Cobham]

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Awards

The Honourable Company of Air Pilots awarded six citations to people it considered displayed outstanding courage or devotion to duty in the air. This year two Bristow H M Coastguard helicopter units, R 951 Inverness and R 912 Humberside, were among those in being awarded The Prince Philip Helicopter Rescue Award.

'RESCUE 951'



In February 2016, the Inverness Coastguard Search and Rescue (SAR) helicopter, Rescue 951 (R951), was involved in a very challenging rescue of two avalanched climbers in Northern Scotland. The crew of R951 were on their second SAR operation of the day, conducting a search for a missing person when they were diverted to a report of 'calls for help' in the vicinity of Creag Meagaidh mountain in the

Scottish Highlands. On arrival it was clear that a large avalanche had taken place and several pieces of climbing equipment were visible on the surface of the snow; no survivors were immediately apparent. The crew winched two members of Lochaber Mountain Rescue team (LMRT, whom they had been carrying on the previous task-

ing) to commence searching for survivors and requested further MRT assistance.

The helicopter returned several times to pick up further members to assist in the search. The nature of the terrain meant that the MRT personnel had to be carefully winched onto snow slopes whilst applying consideration to the members already deployed on the steep ground. Whilst returning to the scene for the third time, the LMRT leader reported calls for help were being heard in the gulley high above the avalanche.

Approximately 1000 feet above the avalanche, a climber was spotted hanging on two ropes with another climber sitting on a small ledge approximately 150 feet higher up. On this occasion, it was impossible to ascertain how the climbers were secured with the possibility the suspended climber acting as a counterweight to the higher one. The lower, suspended climber was not moving and appeared to be badly injured.

The helicopter was positioned 1000 feet above the base of the gully, abeam the lower climber, and the Winchman deployed to the steep, near vertical slope. Under precise voice marshalling instructions from the Winch Operator, the Commander delicately manoeuvred the aircraft above the climber with the tips of the rotor blades approximately 10 feet from the rock face.

Once recovered to the aircraft, the Winchman and Winch Operator worked on the unresponsive casualty

for 10 minutes en-route to the MRT landing site. A further 6 MRT members were then transported to the scene and deployed before R951 positioned to rescue the second climber. Once again, the helicopter was positioned above the casualty near the rock face to cut the second climber free from ropes. This climber had fallen 90 feet, suffering from neck and chest injuries. He was recovered to safety and the process of recovering the MRT teams was commenced.

'RESCUE 912'



In October 2015, R912 was tasked by the ARCC Kinloss to proceed to the Lake District to rendezvous with Mountain Rescue Teams to deal with a female hill walker had fallen down a 40m rock face located on Langdale Fell.

Due to very low cloud and poor visibility, two unsuccessful attempts were made to enter the hills to the south of the Lake District region. A third transit attempt was made flying at less than 200ft in marginal visibility. Two hours forty minutes after departure, R912 eventually landed safely at Ambleside MRT base. The casualty had suffered a severe head and spinal injury, a fracture of her right femur and an open fracture below the left knee. The on-scene weather conditions were reported as only 50m visibility, calm winds and fading light levels. Given the life-threatening nature of the casualty's injuries and the likelihood that she would not survive a protracted stretchered walk off the mountain side, the crew courageously elected to proceed with her rescue.

R912 progressed at low speed and very low level towards Langdale Fell, where the aircraft entered cloud and proceeded to hover-taxi up the mountainside, following a small pathway, to the casualty's location, arriving on-scene at 16:30. In fading light, the crew successfully accomplished a very challenging stretcher recovery from under an overhang in a confined area with the aircraft rotor tips only metres from the surrounding crags. This demanded exacting flying skill and crew cooperation of the highest order.

The crew were compelled to hover-taxi using night vision aids in deteriorating light levels and low visibility conditions down the mountainside into Great Langdale Valley before climbing to safety altitude for the onward transit to



Preston, where the casualty was handed over to the care of Royal Preston Hospital. The mission took six and a half hours. [Both citations were significantly edited]



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



INDUSTRY

The Pilatus PC-24 was on display at this year's NBAA Business Aviation Convention & Exhibition (NBAA-BACE), the world's largest trade fair for business aircraft, held in Las Vegas, USA, in October. Pilatus expects to obtain the type certificate for its Super Versatile Jet before year end.

The PC-24 development project has now entered its final phase, the most challenging tests have all been successfully completed. The three PC-24 prototypes have made a total of 1,250 flights for 2,000 hours in the air so far.

The PC-24 is the first business jet worldwide designed to take off and land on very short runways, or unpaved runways, and to come with a cargo door as standard. It also boasts an extremely spacious cabin whose interior can easily be adapted to personal requirements. The outstanding flexibility of the PC-24 opens the door on many possibilities - whether as a business jet, ambulance aircraft or for other special missions.

After delivering 91 units of its single engine turboprop PC-12 NG in 2016, Pilatus are optimistic that there are numerous growth opportunities around the world for it to sustain its sales leadership position.

Earlier this year, in an independent survey conducted by Professional Pilot magazine, operators voted Pilatus number 1 in turboprop customer service for the 16th consecutive year.

According to the Aircraft Bluebook Digest and an analysis conducted PC-12 owners enjoy one of the highest resale value retention rates in all of business aviation. Even during the post-2008 recession, the number of pre-owned PC-12s listed for sale has hovered around an extremely low four percent of the global fleet, while five-year old aircraft retain more than 80 percent of their original retail value.



Bell has signed a purchase agreement for a Bell 429 to Air Zermatt during Helitech International. The aircraft is configured to support Helicopter Emergency Medical Services (HEMS) and Search and Rescue (SAR) for day and night missions.

The aircraft is scheduled to be delivered next spring to celebrate Air Zermatt's 50th anniversary.

Satair Group and UTC Aerospace Systems signed a long-term distribution contract for Goodrich® helicopter rescue hoists and winch systems. The contract covers worldwide distribution with the exception of the Asia-Pacific and Chinese markets. www.satairgroup.com.

On October 4-5 the Canadian Coast Guard used a Boeing Chinook to assist with the installation of two important new pieces of communications infrastructure at Seal Cove.

The helicopter helped to deliver two radio repeater sites on Porcher Island and Maitland Island, which are 43km and 110km south of Prince Rupert respectively. The two repeater sites provide radio coverage in the areas they are installed, enabling the coast guard's marine communications traffic services officers to direct marine traffic more effectively.

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The service officers are the eyes and ears of the coast guard on the water that communicate with marine vessels traveling along the shoreline. It will provide increased coverage area, and a more robust system for monitoring marine activity.

Each site consisted of two buildings containing the power generation systems and radio equipment necessary to facilitate communications traffic in the area.

A Chinook from Columbia Helicopters was used to do the heavy lifting, as a larger helicopter is required to lift such large loads from a barge just off the coast of both islands to the location where they would be installed. The equipment will be tested throughout the winter and will likely be brought online in early 2018. [Terrace Standard]

LifePort has been granted an FAA Supplemental Type Certificate (STC) to equip the Airbus H130 aircraft with a lightweight medical interior. The system addresses current operator needs for a low-weight, functional system that can be reconfigured quickly.

System capabilities include:

☐ Modular interior that can be easily reconfigured, modified or removed in two hours after initial installation

□ MedPak Advanced Life Support (ALS) services module in baggage compartment including oxygen, vacuum, and compressed air

□ MedDeck rotating stretcher system allowing a patient to be loaded and positioned from outside the aircraft

□ Multiple electrical outlets and USB ports for carry-on equipment

The **European Aviation Safety Agency** (EASA) officially opened a regional office in Singapore last month. EASA's Singapore office will strengthen the well-established partnership between the Civil Aviation Authority of Singapore (CAAS) and EASA, and will support the aviation industry from Singapore and Europe. The regional office will also be competent for the entire South-East Asia region.

Singapore and the South-East Asia region have become key actors on the global aviation scene and key partners for Europe. The European aviation industry has significant manufacturing, training, maintenance, repair and overhaul activities and need support from the authorities to facilitate their business opportunities.

Singapore is the 4th EASA regional office after Washington (USA), Montreal (Canada) and Beijing (China). The office will be composed of 2 permanent staff members.

DART Aerospace announced that the AW139 Emergency Flotation System with integrated liferaft, designed and developed by DART, will be available as a retrofit for the existing AW139 fleets in service. This system will be the only one on the market available for this aircraft model, specifically with the integrated liferaft technology. Other systems presently on the market either have a cabin raft or a sponson-mounted raft.

DART Aerospace is nearing certification of Bearpaws for the **Bell 505.** Soft terrain landings have long created balancing problems during take-off and landings. DART Aerospace Bearpaws are constructed of a high-density polymer; this polymer resists cracking, chipping and breaking. The one-piece machined construction ensures consistent and deliberate load transfer. This flexible material deflects under high-point contact loads when landing on rocks or roots; its inherent memory ensures the Bearpaws return to their original shape upon take off.

With over 54 different Bearpaws approved on 37 separate STCs, DART's Bell 505 Bearpaw should receive a Transport Canada certification that is expected by calendar year end, with other regulatory approvals following shortly.

Vector Aerospace (<u>www.vectoraerospace.com</u>), has entered into an exclusive agreement with CareFlight to provide the Australian aeromedical operator with Pratt & Whitney Canada (P&WC) PT6A engine services. CareFlight, headquartered in Sydney, NSW, uses helicopters, turboprops and business jets to transfer patients from accident scenes and between hospitals.

Under the terms of the multi-year agreement, Vector will provide comprehensive engine MRO services from its P&WC PT6A Designated Overhaul Facility (DOF) in Brisbane, QLD, in support of CareFlight's six

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

TRAKKA

King Air B200 aircraft, which are powered by the PT6A-42. These aircraft are customised in aeromedical configuration and operated as the 'Top End Medical Retrieval Service' on behalf of the Northern Territory Government, based out of Darwin, NT.

The **Royal Flying Doctor Service** South Eastern (RFDS SE) Section is adopting Pratt & Whitney Canada (P&WC)'s FAST[®] (Full flight data Acquisition, Storage and Transmission) prognostic solution to help optimise its operations, reduce costs, increase the availability of its fleet of Beechcraft King Air aircraft and bring new efficiencies to their aeromedical organization through predictive and preventive maintenance. In April 2015 three of the RFDS SE Section's aircraft were equipped and utilised as sample aircraft to enable P&WC's FAST technology to be certified for Beechcraft King Air aircraft. Since final certification in May 2017, another three aircraft have been equipped and there are plans in place for several more installations of the FAST solution in 2018.

The **British Airline Pilots' Association** is calling for regulators to ensure the development of effective cabin air filters onboard aircraft.

It comes as several flights to UK airports are reported to have diverted after smoke smells were detected on board that are thought to be the result of unusual atmospheric conditions.

A vulnerability of the way in which cabin air is supplied in most airliners is that there is no direct filtration of the outside air before it enters the cabin, so if the outside air is contaminated, this contaminated air is drawn into the aircraft.

In principle, the air supplied to the cabin should be filtered and BALPA is writing to regulators to ask that the effective filters are developed and are then required to be fitted."

The third **Airbus Helicopters** H160 prototype has performed its maiden flight at the company's headquarters. PT3, with its cabin interior configuration like that of a serial aircraft, will contribute to certification activities and flight testing to ensure the aircraft's level of maturity ahead of entry into service in 2019. The third prototype incorporates a significant amount of modifications based on feedback resulting from the first two years of testing by development, production and support teams.

The first two prototypes have clocked more than 500 flight hours since the model's maiden flight in June 2015. In that time, the flight envelope has already been fully tested and the domain has been opened. The remaining development activity, for example complementary hot weather testing, antennas, and optional

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equipment will be done using all three aircraft.

The helicopter's final assembly line in Marignane is in the final stages of preparation and will be ready to start serial production shortly. Customer support activities are being prepared in parallel thanks to the extensive involvement of maintenance teams, through the "operator zero campaign", using the prototypes and test means to check and improve the maintenance plan, digital work cards and technical documentation, and tooling etc. ahead of actual operations.

The first version to enter service in 2019 will be the passenger transport one – commercial air transport or Oil and Gas, followed by the emergency medical services (EMS) version.

MDHI has delivered the first of its revised MD 600N helicopters to its Malaysia-based sales agent, Sapura Aero. Configured with the company's upgraded FAA type-certified all-glass cockpit, this MD 600N also features a basic single-patient EMS interior from Air Ambulance Technology (AAT).

At the 2017 HAI Heli-Expo in Dallas, Texas, MD Helicopters announced their commitment to deliver FAAcertified all-glass cockpits to the company's full range of single- and twin-engine aircraft. In June the company announced it had completed all FAA certification requirements for the MD 600N cockpit upgrade and in late the type certification was granted.

First run out for The Bloodhound Project at Cornwall Airport Newquay, with live coverage provided by Hayfisher Productions using Vislink wireless systems. Reaching over 200mph in 9 seconds during the test, the Bloodhound will attempt to take the land speed record to over 1000mph!



The runway at the airport could only be borrowed for two hours, so there was no chance to lay cables and all the footage had to be wireless to capture the test. As such, Hayfisher turned to their **Vislink** equipment and deployed Clip-On 4's for track and paddock shots, two CFU4's for the live pictures from the vehicle, and received it all via the MDR system.









AIR ACCIDENTS

20 September 2017 helicopter. Turkish Police. One police officer was killed, and another was injured in a helicopter crash in Turkey's Central Anatolian province of Niğde. The accident occurred near at the Police Vocational High School, according to local media reports. Abdullah Yıldırım, a 27-year-old Special Forces police officer, was killed after the helicopter's propeller struck him. A 25-year-old Special Forces police officer, Azim Doğan, was taken to a nearby hospital for treatment on a wound to his leg.

Ed: Conflicting reports from the media on this fatal accident. One showed video of a Blackhawk undertaking rappelling, another a wrecked airframe [possibly a MD600] and one suggested it was an instance where Yildirim walked into the tail rotor. The latter seems most likely.

3 October 2017 Antonov An-28 UP-A2807. Air ambulance of East Wing flying from Almaty Airport to Shymkent, Kazakhstan impacted terrain 12 minutes after leaving Almaty near the village of Mezhdurechenskoye, approx. 28km (17.5 miles) from the airport. Images of the accident suggest the aircraft crashed at a shallow angle and relatively intact but was destroyed by fire killing all five aboard. [Media/ASN]



9 October 2017 AS350 TI-AZA. A helicopter assisting with the emergency response caused by tropical storm Nate fell on Monday morning in the banks of the Savegre river in the Central Pacific, Costa Rica. The three people aboard the helicopter survived the crash. It is believed the aircraft could have hit a cable. A Panamanian helicopter and crew aided in the rescue of the injured.



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11 October 2017 EC135 Guardia Civil, Spain. An officer was injured while rappelling at high speed from a helicopter during a display in at a bullring in Toledo, Castilla La Mancha. The officer escaped without serious injury after an unintended free fall during the demonstration from 40 metres. He can be seen hitting the ground hard and crumpling into a heap before colleague's rush to his aid. He was found to have suffered a fractured foot. Sources said the braking mechanism on his line didn't appear to function correctly. The event was being held ahead of the feast of Our Lady the Virgin of Pilar, patroness of the Guardia Civil, which was October 12. **12 October 2017 Airbus Helicopters AS350**. Police helicopter of Los Angeles Police Department. Reported to have made an emergency landing at Dodger Stadium, Vin Scully Ave, Los Angeles, California USA after experiencing an undisclosed issue while on routine patrol. Neither of the two officers aboard was injured. [LAT]

FLIGHT SAFETY

In the spring of 2012 PAN reported the crash of a Bell 427 operated by the police in Nigeria. The accident on March 14 to 5N-POL while it was on routine patrol killed the country's deputy police chief and three other police officers as well as some on the ground at Rukuba, Nigeria.

At 0930hrs on March 14th a police fuel bowser fuelled the aircraft which had been parked overnight at the Jos Prison football field. At 0958hrs, two-way communication was established between the helicopter and ATC. The pilot reported endurance of two hours, five persons on board, maintaining an altitude of 4,000ft, and that it was a patrol flight around Jos city. The pilot also reported that he would be landing at the Police Headquarters, Jos and would call the Control Tower when re-joining for another patrol. The helicopter landed at the Nigeria Prisons Service football field, Jos (customarily used as a landing site for the Police Headquarters, Jos) at 1058hrs. At about 1150hrs, the helicopter lifted with four persons on board. The Control Tower was notified at about 1155hrs of the helicopter's crash at Landir village, Kabong area near Jos metropolis and that all four persons on board were fatally injured. The investigation identified the following probable causal factors: Probable Causal Factors: The cause of the accident cannot be conclusively decided but the investigation discovered series of discrepancies and non-compliance including that the pilot's medical had expired as at the time of accident, Simulator recurrency had expired as at the time of accident. The co-pilot was not type rated on the Bell 427. The engineer that released the aircraft prior to the flight had no type training and type rating on the aircraft type.

Because of the known details of the accident it was recommended that the Air-Wing should provide the proper funding, conducive working environment, develop and implement a robust training programme for its technical/ operational personnel, with adequate supervision and approved equipment to enhance safety. In addition, the Department of Petroleum Resources should launch an independent inquiry into Aviation fuel quality in Nigeria.



In a major flight safety measure, on October 9, SpaceX's Falcon 9 rocket launched 10 more **Iridium NEXT** satellites from Vandenberg Air Force Base in California. These will track aircraft in real time for the first time. This means no more vanishing planes like MH-370, which disappeared over the Indian Ocean in 2014 and became one of the most expensive aviation searches in history.

Some 70% of the world is uncovered by radar, with pilots typically reporting their positions every 10-14 minutes. That's about to change.

Just days later Iridium Communications announced that the third set of 10 Iridium NEXT satellites were functioning and have begun the testing and validation process. The total number of Iridium NEXT satellites in space is now 30.

GASCo Safety Evenings 2017/18

Booking requests are already being made for access to this winter's series of Safety Evenings run by the GASCo Office in 2017/18. The title of this year's presentation is Aware Today, Alive Tomorrow. The production addresses maintaining situational awareness, the use of threat and error management to prevent loss of control accidents, mid-air collisions and airspace infringements. All of this will be served up by the GASCo Regional Safety Officers in a non-preaching manner accompanied by the usual thought provoking facts and figures interspersed with relevant video clips. In addition to the traditional pack of information – which will contain among other things a printed copy of The Sky Way Code.

If you would like to host an evening (or afternoon) between now and April 30th 2018, just telephone 01634 200203 or e-mail <u>penny.gould@gen-av-safety.demon.co.uk</u> and she will start the ball rolling. Meanwhile check out <u>http://www.gasco.org.uk/safety-evenings.aspx</u> for an existing event near you.

UNMANNED

Quite unexpectedly news came in that in mid-October **Schiebel** had hosted customers from all over the world, for its second international CAMCOPTER® S-100 User Conference in Vienna.

The last 3-day event was in 2012 and Schiebel again welcomed its customers to be presented with details of the latest innovations, informative and productive sessions as well as international networking opportunities and best practice exchange.

The company says that it remains committed to cutting-edge innovation and offering the best system in its class. Bringing together people operating the S-100 and deploying it for various missions, allows the collection of valuable insights.

The **Royal Australian Navy** will deploy its Schiebel S-100 Camcopters for trials and evaluations within a test unit The Royal Australian Navy (RAN) will deploy its fleet of two Schiebel S-100 Camcopter rotary-winged unmanned aircraft system (UAS) with the service's Navy UAS Unit as eval-

uation platforms. Among concepts that the S-100 units will evaluate for the RAN include different mission sets, payloads deliverable, and ship operating limits. The Navy UAS Unit, which is based within the RAN's Headquarters Fleet Air Arm at HMAS Albatross, will also make recommendations on where best to situate UAS control consoles within a platform, based on results from the evaluations, added Lt Cdr Crowther. The S-100 units will be equipped with the MX-10 multi-sensor, multi-spectral imaging system from L3 Wescam.

DroneShield Ltd announced that several Spanish military and law enforcement departments, including Guardia Civil and Policia National have scheduled an evaluation of DroneGun MKII for October. The evaluations are understood to be part of the Spanish governmental procurement process.

DroneGun MKII was released earlier this month and displayed at the recent Defence and Security Equipment International Conference military tradeshow in London as part of Team Defence Australia's delegation, a joint effort with the Australian Department of Defence, and Austrade, and attracted substantial distributor and military end customer interest. French and UK militaries and law enforcement agencies are currently trialling the product.

Consortiq has completed the delivery of a beyond visual line of sight (BVLOS) drone training course to the Police Service of Northern Ireland (PSNI), in what is believed to be the first example of routine training of this type





undertaken outside of segregated airspace for emergency services in the UK.

Following a change in regulations from the UK Civil Aviation Authority (CAA) on 31 July 2017 that relaxed rules for emergency services' use of drones, the PSNI sought the expertise that Consortiq has in delivering extended visual line of sight solutions to the UK emergency services, and the training was then rapidly initiated. A major incident is defined as "one which is beyond the scope of business-as-usual operations and is likely to involve serious harm, damage, disruption or risk to human life or welfare, essential services, the environment or national security".

They must still operate within the bounds of the published operations manual, but can now fly out to 1,000m, or even beyond 2,000m in exceptional circumstances, following a decision by the appropriate level of tactical command for the incident.

ALEA's Remote Pilot-In-Command Courses include twenty (20) hours of classroom training for UAS staff and the most recent was held at the Seminole County facility in mid-October.

Alan Frazier, Associate Professor, Aviation University of North Dakota brings 34 years of experience in local, state and federal law enforcement agencies, spending much of his career with the Glendale (CA) Police Department. He served in a wide variety of assignments including officer-in-charge of the Air Support Unit.

The Sanford, FL based course provided a review of the Federal Aviation Regulations PART 107 Remote Pilot Certification Process. The course is a must-have for agencies to train their personnel on how to operate sUAS and to obtain pilot certification via the FAA Pilot's Exam. <u>www.alea.org</u>.

PEOPLE

Sir Bernard Hogan-Howe, the former police chief and well known for being the instigator of all that is NPAS is to become a Lord.

Sir Bernard has already distressed sections of the media in presiding over a variety of scandals including Operation Midland in which senior figures were wrongly accused of historic sex abuse offences. The investigation cost some £2M and failed to achieve anything other than the ruination of the people accused.

As Met Police chief he was accused of 'hounding' of the elderly war hero Lord Bramall, former Tory MP Harvey Proctor and late home secretary Lord Brittan as part of the VIP abuse investigation based on one anonymous witness. He resigned and retired from his post as Commissioner of Police for the Metropolis



last year in the wake of the discredited investigation.

Prior to his position as most senior police officer in the UK he had been the Chief Constable of Merseyside Police and the ACPO Aviation Lead. When there he had instigated the report that led to the creation of what we now know as NPAS.

At the moment, while awaiting the HMIC (Her Majesties Inspector of Constabularies) report into the efficiency of NPAS, it is difficult to know which of these high-profile elements of his career will prove the worst 'car crash.'

MD Helicopters owner **Lynn Tilton** has won her case with the Securities and Exchange Commission (SEC). The case has been hanging over her for around 8 years. In 2009 the SEC started investigating her activities and Tilton secured a law firm to lead her defence. In March 2015, the SEC charged Tilton with defrauding her collateralised loan obligation investors. She filed a lawsuit against the SEC on April 1, 2015, to stop the SEC from pursuing the charges against her. On September 27, 2017, Tilton was fully vindicated by an SEC judge. [www]

Elfan ap Rees has been awarded The Honorary Company of Air Pilots Award for Aviation Journalism. The Helicopter Museum's Founder and Chairman of Trustees, gained the annual award for the preservation of what remains of Britain's illustrious helicopter heritage, which with extraordinary energy and dedication he has built over 40 years into a unique world-class museum of whole airframes, parts and vital documentation, in the world's largest collection of its type and includes some important emergency services equipment.

MOVE ALONG THERE

There is little doubt that it has rankled those in the Wakefield office every day but finally they have rid themselves of that giant word on the side of the Lippitts Hill based EC145s. METROPOLITAN. When the trio were delivered to the Metropolitan Police each was emblazoned with the large lettering that boldly stated who they worked for. When NPAS took over each of the previous operations it was a small job to simply replace the force badge with the similarly sized NPAS crest. Not so the EC145s they were made of sterner stuff and all three continued into 2017 wearing the expensive to remove, but offending, logos. Last month the first of the trio, G-MPSB, was sent down to Thruxton Helicopters to have the work done. Now the doors are totally without the marks. The other pair are due to call in at Thruxton before the year is out.



In a week when the people of London were honouring officers involved in terrorist offences in London it emerged that in America a significant number of off duty officers who placed themselves on-duty to deal with the mass shooting in Las Vegas on October 1 are being told that they cannot even claim for time off for injuries received. The deaths at the Harvest Route 91 country music festival grounds when a lone gunman opened fire onto the festival from the 32nd floor of the Mandalay Bay Hotel, Las Vegas killed 59 and wounded 527 people.

As bullets rained down on the concert crowd many of the 200-plus Southern California police officers attending the festival shifted instantly into law-enforcement mode. They shepherded people to safety, performing CPR and helping local authorities secure the area – sometimes getting gunshot wounds or injuries in the process.



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But as those wounded officers have begun filing for public-employee benefits to cover the long-term medical care some might need to recover from the trauma, local cities and counties are baulking at looking after their officers. There are doubts with some whether they're required or even allowed to pay to treat off-duty police who chose independently to intervene in an out-of-state emergency. And it's unclear whether they will have to pay up.

Four injured Orange County sheriff's deputies have been rejected workers' compensation claims and that is heading for an expensive court battle.

In Los Angeles County, two shot deputies face an uphill battle with an organisation that has no policy to cover claims for gunshot injuries but likely in these litigious days to migrate to claims for disability and PTSD and even early retirement. In short, any non-Nevada officers involved who were injured were likely face problems if expecting support from their home organisation.

It is generally agreed that had all those officers been shot and injured while responding to an incident in California, they likely would be taken care of without dispute. But now their life-saving efforts could cost them dearly despite their actions being instinctive and driven by their training. [Orange County Register]

And of course the British are well known for playing at war in a gentlemanly fashion. Which places events in Lincolnshire last month in a class of their own. A large-scale investigation was set up after mustard gas cannisters were discovered by bottle diggers in the east of England. The diggers were treated in hospital for minor burns and respiratory problems after disturbing the lethal gas. An object was retrieved from the water at Stixwould near Woodhall Spa and taken away by police helicopter after local authorities widened their search following the discovery of the potentially deadly substance on October 1.



It has not been revealed whether the recovered item contained the deadly gas originally discovered in canisters in the nearby Roughton Moor Woods, which has been cordoned off by officials quite a time while investigations are carried out to see if more of it can be found. A Royal Navy bomb squad and experts at the Ministry of Defence's Porton Down facility in Wiltshire are involved in the inquiry.

Confusion has arisen because the woods were once used by the military and it was near a long closed RAF Woodhall Spa. The woods where canisters were originally found has been used by the military, but the lake is not connected to the Armed Forces and police say if they find any mustard gas, it might have been moved there recently. The area remains to be cordoned off while it is decontaminated after a total of 140 canisters were found in the woods.



A further potentially unpalatable aspect of this discovery is that the cache that has been found appears to be British and dating from the 1940s.

Unfortunately for the 'fair play at war' thoughts Mustard gas was declared illegal in the 1920s and should not therefore have existed at that later date. If nothing else this may turn out to be history rewritten.

The latest on this is that the search and research continues, and questions remain unanswered as to which formation might have wanted an illegal substance stashed away in this manner and whether there might be more, many more, hidden away across Britain.



EVENTS LAST MONTH

16-17 October 2017 15th Aerial Fire Fighting Europe 2017, Nimes, France. Supported by the Ministry of Interior, Securite Civile. Tangent Link brought the 15th Aerial Firefighting Conference to Europe to debate, learn and acquire the skills and lessons-learned for safe aerial firefighting. The conference programme covered Interoperability of EU aerial firefighting resources, Training & Simulation, Aerial Demonstration, Suppressant & Retardant Technology breakthroughs and Aerial Surveillance Aircraft & Systems.

Economics of scale

The Aerial Firefighting Force Europe conference and exhibition took place with a backdrop of over 30 aircraft. With over 500 attendees from 30 countries—one of Tangent Link's most successful events to date. The airport is the now home to the Base Aérienne Sécurité Civile (BASC) with a fleet of 12 Canadair CL-415s, nine S-2F Trackers, three Beech 200 King Airs and two Bombardier Dash-8 Q400s. It is all part of the civil protection force, aimed at forming a mass attack on wildfires that are now such a regular occurrence in the southern reaches of Europe.

Modernisation is a top requirement for the fleet, with the S-2F Trackers that support the GAAR (Quet Aérien Armé) patrol expecting to be retired by 2021. During the summer, these very capable turboprop aircraft usually depart Nîmes in the early afternoon, as the ground is heating up, to embark on three-hour GAARs. When required, the S-2s can drop their 3.5 tonnes of retardant almost immediately. Many of the exhibitors at the conference were showing off their capabilities to replace the S-2s, with a Last and Final Offer (LAFO) being submitted imminently.

The exhibition attracted 65 companies from all over the world, displaying the latest equipment on the market to help with the modernisation of AFF fleets. It includes a large variety of drones, tanker capabilities, helicopters, Intelligence Surveillance and Recce (ISR) assets and other equipment which could help to stop wildfires in their tracks. [Alan Warnes Freelance Journalist]

This year's featured aircraft, included Airbus C295 from Portuguese Air Force as well as several Canadair CL-215/415s from France, Spain, Italy and Croatia and much more. The second day was packed with live demonstrations, featuring unmanned flights from Azur Drones and Aerones; K-Max, Bell-212 and H125 helicopters as well as two amphibious AT802 Air Tractors planes from Fire Boss.

Two days later at the same venue Tangent Link opened the 19-20 October 2017 Search & Rescue International 2017. Website: <u>www.tangentlink.com</u>

COMING UP

PAvCon 2018. There is a long way to go yet but current plans are that the next edition of this popular annual event will be held at Warsaw in Poland. A provisional date for your diary is 21-24 May 2018. The next meeting on the subject is set to take place in Warsaw before the end of the year.

4 November 2017 American Heroes Air Show at Hansen Dam Sports Complex, Lakeview Terrace, Sylmar, California one day from 9am to 4pm. The venue is a Park featuring a playground, swimming facility & sports areas, plus a lake for fishing & boating. The event will provide the customary line-up of emergency services helicopters added to military machines. There are various promotional and recruiting sideshows designed to attract families. Entry is free. <u>www.heroes-airshow.com</u>

21-24 November 2017 Milipol Paris. The 20th edition of a well-established Interior Ministry event held at the Paris Norde Villepinte close to the Charles de Gaulle Airport. <u>vis-it@milpol.com</u> www.milpol.com



29-30 November 2017 UK Security Expo 2017, Olympia Grand Hall, London. The Tactical Demonstration Theatre will include material put together by Counter-IED UK. Live scenarios including: Marauding Terrorist Firearms Attacks, Improvised Explosive Device Disposal, CBRNE Attacks and Drone and Counter Drone Surveillance. Partnered with DIT DSO to deliver high impact live demonstrations of the UK Industry's Counter-Improvised Explosive Device Disposal, CBRNE Attacks, of the UK Industry's Counter-Improvised Explosive Device Disposal, CBRNE Attacks, Improving Terrorist, Source Device, CBRNE Attacks, and Drone and Counter Drone Surveillance.



Africa Security Symposium 27-28 November 2017 Abidjan, Cote d'Ivoire