

Police Aviation News

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PAR



RACQ 7,000 up

Plague of prison UAS

US troubled by 'Ethics' and 'Spying'

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LAW ENFORCEMENT

CAYMAN ISLANDS

POLICE AIR OPERATIONS UNIT: The police have recruited a second pilot for the RCIPS Air Operations Unit (AOU). Richard Morcombe, who is currently flying with the UK National Police Air Service, is a former pilot with the British army and formerly flew the high skid EC135T1 helicopter VP-CPS now operated by the RCIPS for four years when he was stationed at the East Midlands Air Support Unit base before it was purchased by the Cayman government. Morcombe will join the team in mid-September. He has been flying police helicopters for the last 13 years and has 7,000 hours of operational flight experience, including numerous day and night overwater operations around the world. This will not be his first time in Cayman as he has previously flown two relief duty periods in the Cayman Islands in 2010 and 2011.

The RCIPS currently has only one pilot, which limits the use of the machine and led to a UK Coastguard researched report on a fatal SAR incident in March this year which took the lives of five people. The report highlighted the lack of pilots with the unit a factor that led to the decision not to launch on a search mission but did not criticise the unit. [UKCG Report](#) Controversy continues over the refusal of the police air unit to use local maintenance suppliers [2011] and to accept locally trained pilots to fly the high-tech machine on the police mission. A member of parliament complained a relative who had basic flight training in the USA was refused a place in the RCIPS unit. [Cayman Compass]

EUROPE

With a recent upsurge in security questions being asked by politicians there are signs that the security budget may get enhanced to improve border controls despite the 'borderless' nature of the EU.

With a number of high profile attacks by terror groups and other security scares currently the talk is about banning Burkhas and other head coverings in public buildings and buildings with a security profile. This general distrust is expected to lead to increased calls for new and better equipment and that is liable to read across to the air support sector.

KENYA

POLICE: In a report that was primarily an addition to a report on yet another accidental aircraft loss it was stated that the police recently purchased a new helicopter and two other MI-17 helicopters are being refurbished to improve police ability to quickly move troops to any trouble spot and generally improve their mobility. The National Police- both regular and

FRONT COVER: In Queensland Australia the airlift of a critically ill patient from one of the Whitsunday Islands early in August marked the 7,000th mission for RACQ CQ Rescue. The milestone mission, the 314th task this year for the Mackay-based rescue helicopter marked two decades of service. The milestone mission was yet another impressive achievement for the charitable organisation which started in 1996 in a small temporary building and access to part of a hangar. In the first year the service's single engine Bell LongRanger helicopter undertook 58 tasks and operational costs were \$1M. In 2016, operational costs are \$8.3M and tasks numbers are expected to again exceed 500. Today the operation flies a Bell 412. [Photo RACQ]

Administration Police air wing currently has 14 aircrafts- six fixed wing and eight helicopters. It mentions the Agusta Westland an Italian Company was paid Sh683M in the 2014/2015 financial year for the helicopter that can cruise up to 300kph. [Standard]

Ed: If accurate this is a significant improvement on news reports of early 2015 and this January which reported that the air unit was struggling with low aircraft availability. The new helicopter is an AW139 but it is unclear what the other handful are as they do not appear to be new deliveries. It is possible they are airframes held but still grounded for a range of technical reasons.



UNITED KINGDOM

LONDON: In what may well be the first police linked UAV death a young woman died in a car crash after her vehicle was followed by police investigating reports of a drone being flown near Wandsworth Prison in London.

Scotland Yard said police were called to a road near the prison just after 3am in the morning, to investigate reports of a drone being flown near the prison grounds. Officers arrived and a car was seen to leave the scene and it was followed. Ten minutes later the car crashed in Ashcombe Street at the junction of Wandsworth Bridge Road.

One occupant of the car, a woman in her 20s, was pronounced dead at the scene. The driver a man in his 20s, was taken in a critical condition to hospital. The woman was later identified as being Acacia Smith, 25, known to friends as "Caysha", and was said to have worked as a nanny. The accident comes a day after *The Independent* reported that police are having to investigate a fourfold rise in the number of reports of suspicious activity involving shop-bought drones.



A few days after the fatal crash police seized two drones loaded with drugs and mobile phones being flown towards Pentonville Prison in north London.

Over the weekend of August 12-14, officers from the Metropolitan police carried out patrols around the male prison as part of Operation Airborne.

In the early hours of 13 August, they saw a man near the jail acting suspiciously, he fled the scene, dropping two bags containing Class B drugs and mobile phones.

The following day, police recovered a drone they had tracked flying over Pentonville prison before it crashed. They were later alerted to another drone being flown towards the jail. It was stopped mid-flight and found to be carrying a package containing a large quantity of drugs and two mobile phones. [media]



Police images of the one-night drug and telephone haul [far left] a figure tying contraband to a small quad-rotor and [above] a prisoner hauling in the nights delivery [MP]

NPAS: The delayed decision of the new base for the emergency services helicopters currently based at the Filton Aerodrome in Bristol took another twist last month. The site adjacent to the A38/M5 junction, which has been put forward by BAE Systems as a new base for the National Police Air Service and the Great Western Air Ambulance Charity (GWAAC), had been opposed by a large number of residents over concerns of noise pollution, night flights and the green belt.

Permission for the development was granted in October last year, but was quashed in a judicial review earlier this year, after residents argued the council had failed to impose a noise monitoring condition and properly investigate the environmental impact of the development. Last month South Gloucestershire Council's development control committee granted permission for the proposals, offering the compromise that professional noise monitoring equipment be installed at the facility, and that a liaison group begins meeting once development begins, as opposed to when the base becomes active.

Residents from Almondsbury have said they may consider legal action after the plans were again granted planning permission. [media]

Humberside, the only outstanding police body to join NPAS, will join later this month on the basis of no aircraft and no base. Not all unit closures have yet taken place but it is only those in Lancashire, Suffolk and Teesside delayed until fixed wing is in place. [NPAS Minutes]

The new NPAS fixed wing P-68R aircraft now at Airborne Technologies in Austria has been issued with full EASA Form 52 which demonstrates the aircraft meets its certificated performance and is in a condition for safe operation. The 'flight into known icing' programme remains on target for certification but further structural modifications may be required. [NPAS Minutes]

The contract for the construction of the base for the new fixed wing fleet at Doncaster [Robin Hood Airport/the former RAF Finningley] is now let to the Kier Group at a cost of £2.8M. There have been some small changes including that heavy maintenance will now be possible on site.

The new build hangar will be located among existing hangars not far from the terminal building and will provide sufficient space for each of the six P68 as well as dedicated ramp parking for the unit. Access to the single runway at the airport is a short taxi that will aid rapid despatch.

According to the most recent plan the North Midlands unit was to be at East Midlands Airport near fixed wing but that fell through so I assume that Doncaster will have a helicopter co-located. There will be one at Doncaster during the 2017 PAVCon prior to the completion of the fixed wing facility so it looks that way. [NPAS Minutes/PAR]



EC135T2 G-POLD formerly G-NMID is reaching completion at the Babcock facility in Staverton, Gloucestershire. This image is © supplied by James Lloyds

NPAS continues to work with the Fire & Rescue Service [FRS] across the UK on their needs and how NPAS can meet them. Currently there is no provision for the FRS to have its own aircraft but there are several 'projects' to get them – as there have been for decades. Meanwhile NPAS are studying their capabilities to meet several FRS requirements including transport the potential for lifting heavy or specialist equipment to fire sites. There is a draft MOU between NPAS and FRS and London Fire Brigade is to operate as the lead brigade in terms of charging nationally for any fire and rescue service. They already have a representation on the Board. Meanwhile NPAS is ensuring that they have the capacity to meet the specification of any agreement within their resources without impacting on the primary police tasking. [NPAS Minutes]

SCOTLAND: About a year ago PAN carried a story about how Police Scotland were investigating the acquisition of a fixed wing aircraft to their fleet of a single helicopter based in Glasgow. The tender process was officially announced last March. In an overlooked article in a single newspaper dated last December it seems that this quest is no longer live and that a fixed wing asset is off the current plans. [Herald]

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UNITED STATES

NATIONAL: The US Dept of Homeland Security has sold their two Agusta-Westland AW139s, as confirmed in recent days by an updated entry on the FAA register.

The purchaser is listed as Guardian Helicopters of Calgary in the Canadian province of Alberta. The pair were originally acquired in August 2007 by the U.S. Customs and Border Protection Office of Air and Marine, and operated from Homestead Air Reserve Base. They were role equipped with a EO/IR system, weather radar and specialist communication systems. [Helihub]



Image © DoHS

CALIFORNIA: Modesto police have three small camera-equipped, remote-controlled UAVs. Like most police operations with these craft the start up requires selling the concept to the local population and trying to overcome their suspicions about the craft being spies in the sky.

The drones will not be used for random surveillance, said Lt. Ivan Valencia and Sgt. David Mullins. "If we're in open public space where we have the right to be anyway, there's no search warrant required ever," Valencia said. "But if we want to fly over somebody's house, yes," a search warrant would be needed, in keeping with people's right to privacy.



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The craft are flown under strict Modesto Police Department policy written in conjunction with Federal Aviation Administration rules on deployment. Prescribed uses include executing search warrants; assisting other agencies; responding to biological, chemical, radiological or nuclear crises; civil disturbances; dignitary protection; disaster management; situational awareness; crime-scene documentation; gang and homicide investigations; and search and rescue.

In documenting criminal and fatal collision cases, prosecutors typically want to re-create the scenes in court for jurors, Valencia said. The UAVs capture an aerial view that complements ground-level photographs.

The pilot UAV program launched in late April for about \$5,000 – the cost of three aircraft and the iPads to control them. The drones are manufactured by DJI. Two are Phantom 4 models, the third is the bigger Inspire 1, which can carry a heavier payload of different types of cameras. The Inspire also is much more stable in windy conditions.

The program is in its training stage. The department cannot fly the aircraft after dark, and is keeping them under 400 feet in altitude so as not to interfere with any full-size aircraft.

The department already had in its ranks three licensed pilots: Officer Jessica Smith, Investigator John Moss and Lt. Jason Grogan. The long-term goal is to expand to eight to 10 aircraft and have 10 to 12 trained pilots. [Modesto Bee]

COLORADO: It seems that the old idea that a local law enforcer could raise his hand and demand 'Follow that car' is really dead and buried in Colorado. Something called Ethics seems to have been driving the Politically Correct Brigade in Boulder after they questioned whether the police should have been allowed on board a local TV helicopter to look out for a suspect.

On the morning of August 24, more than 7 hours after a manhunt for a shooting suspect began, Boulder Police asked [not demanded] whether an officer could be taken up above the search area in the helicopter shared by Denver TV stations.

Boulder already had asked the Denver Police Department for use of its helicopter, but hadn't heard back. The FBI had offered technical assistance, possibly including aircraft, but not until later in the day and that TV camera ship was due up at 6am.

It was all agreed amicably and an officer flew in the AS350 after being picked up from Manhattan Middle School in south Boulder. An hour later it was all over and the suspect gave himself up, thanks it is said to coordination between SWAT personnel on the ground and the officer in the helicopter. The police got their man and the media were effectively there on scene.

Everyone it seems was happy and Boulder Police dutifully thanked the media for their help via a Tweet <http://ow.ly/xUE0303yre3>

Then along came the PC voice from the University of Colorado and their spokesman Paul Vokes declared that the arrangement falls into a "grey area" of media ethics.

"Often when we do ethical analyses, we have to pay attention to the slippery slope, where one seemingly harmless lapse is deemed to be acceptable," Voakes said. "Except that there's an opportunity for greater and greater degrees of ethical lapses to occur because a precedent has been set.

"The really important principle, in my mind, is whether the news media can be regarded as a branch of law enforcement."

Clayton Sandell, a Denver-based correspondent for ABC News, doesn't think it's a close call.

"News organizations should decline this request," he tweeted early Wednesday. "Journalists are not agents of law enforcement."

The helicopter used in the hunt is shared by KOA News Radio and four Denver TV stations affiliated, respectively, with ABC, CBS, FOX and NBC.

Later that day 9News issued a statement saying it was the Helicopters Inc. pilot — and not the news desk or any station employees that granted the police request.

Part of the more level headed complaints on this matter are that the media helicopter's participation in the manhunt erased at least one notable storyline: Boulder sought, but could not secure in any timely fashion, the aid of law enforcement partners from Denver and the FBI in getting airborne during the search. So perhaps the story that there's a real resource

issue might get lost?

Journalists, not exactly a group with a fine record of being people to look up to, appear worried that in this instance an instinct to help somebody out might give an appearance that journalism is in agency with police and therefore damages the ability of journalism to be an independent monitor of those institutions of power. [Daily Camera]

Ed: So I guess the newspapers and magazines of the world will soon be halting all advertising in case it adversely affects their journalistic freedom!

FLORIDA: The Orlando based Orange County Sheriff air unit has taken delivery of a new role equipped Bell 2016L4 LongRanger N481RC c/n 52481 to renew its fleet.

The \$4.2M helicopter was registered in May of this year and after a period of training took its first official flight with the agency in the middle of last month with the unit call-sign "Chase 3."

The new LongRanger replaces a 1970s OH-58 helicopter bought two decades ago through the military surplus scheme and until recently one of two OH-58s in the Sheriff's Office fleet recently deemed unflyable by the agency's aircraft maintenance manager. Deputies are still using a third OH-58, but it isn't expected to last much longer.

Disposing of that last OH-58 will leave the Sheriff's Office with three flyable helicopters: the new one and two Bell 407 models, both acquired almost ten years old.

Ed: Orange County has remained a loyal Bell helicopter operator for the best part of forty years and has operated the Bell LongRanger before, they traded in two 206L3 models for their 407s in 1997. The last two OH-58s were the former army 70-15432 operated as N82844 and 71-20813 N813CS [cancelled in July] both acquired along with a number of spares ships in the late 1990s. The unit also has a Cessna single fixed wing.

A few days before the Bell was officially launched an Orange County Sheriff's Office helicopter helped the pilot of a small plane make an emergency landing at the Orlando Executive Airport. The 1975 Rockwell 112A N1362J was owned and flown by a local man of 75 years.

The OCSO Chase helicopter and air traffic controllers worked with the pilot, Robert Pender, for over an hour to help him make a safe landing. During a routine flight the pilot noticed something was wrong when a light in his cockpit didn't go off. He eventually traced the fault to the landing gear in his small plane and found that the right wheel would not come down and making the aircraft unstable.

He contacted Air Traffic Control and they in turn contacted the duty Orange County Sheriff's Chase patrol who flew alongside the pilot to investigate the problem and fixed the camera on to the aircraft to keep an eye on the problem as the pilot tried various manoeuvres in the air to shake the wheel out, but even after an hour those didn't work.

Pender brought the Rockwell in for a normal, fairly soft, landing on the runway and as it settled on to the hard surface the wheel-less right wing dug in and slewed the plane off the runway onto the grass. The propeller did not contact the ground and was shut down normally so the only apparent damage was the abrasions to the wing underside. [you-tube]



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Persistent Surveillance Systems exhibiting their colour system at the 2010 ALEA Show in Tucson ©PAR

MARYLAND: Anyone that has visited the ALEA or HAI Heli-Exo Shows will have seen the Persistent Surveillance System [PSS] being marketed and several times PAN has run copy on it. It is no more than a 'smart' CCTV set up using an aircraft but you might think it had just been invented and kept super secret.

The paranoia of some sections of US busy-bodies surfaced once again when it was disclosed that PSS equipment was being trialled in secret over Baltimore for the Police Department.

The taking and storage of aerial surveillance images allegedly caused confusion, concern and outrage among elected officials and civil liberties advocates late in August. Some demanded an immediate stop to the activity pending a full, public accounting of its capabilities and its use in the city to date, including in the prosecution of criminal defendants. Some called it "astounding" in its ability to intrude on individual privacy rights, and legally questionable in terms of constitutional law.

Ohio-based Persistent Surveillance Systems has for months been testing the multiple surveillance cameras aboard a small Cessna airplane flying high above the city to record 3D footage of 32 square miles of the city at any given moment but only came to light in an article in the Bloomberg Business Week. It never was a secret so the appearance of a story was always inevitable.

The arrangement was kept out of the public eye in part because it never appeared before the city's spending board, paid for instead through private donations handled by the non-profit Baltimore Community Foundation. The few hundred hours of trials will be used to decide whether the police wish to purchase the system as an addition to the city's existing CitiWatch system of street-level CCTV cameras.



The Sneaky Program to Spy on Baltimore From Above

On one hand councillors are asking for increased CCTV coverage on behalf of their voters and on another the American Civil Liberties Union of Maryland are saying that this PSS version is too much too far. They say that the connecting the air images to the ground camera images is detrimental to the poorest and mostly African-American neighbourhoods in the city. [Baltimore Sun/Atlantic/Guardian]

Ed: A real media frenzy that even involved an article in the [suspiciously left wing] Guardian newspaper in the UK.

The system created by Ross McNutt is a basic use of multiple camera technology and has been in development since 2007. Two different companies were exhibiting similar monochrome camera products at the summer 2008 ALEA in Houston, TX the technology soon moved to colour cameras.

The PSS need for an endlessly orbiting aircraft suggests that it might get a bit boring up there and therefore perhaps once the technical side of Sense and Avoid is sorted it's something a UAS could eventually do.

PSS has been on offer for a long time now and new technology is appearing that might well just brush it under the table in the same way as those tape recorders were banished from airborne surveillance just when they got them right because someone 'invented' the solid state recorder.

Harris now have a system, CorvusEye 1500, [pictured right] that does much the same thing without the requirement for the endless circling carrier aircraft.

It is still in development but it is a turret [about 15inch] that can be fitted to anything and as far as I can make out it changes the endless circling into an electronic scan to detect the changes.

It will probably cost more but may be better.... especially if all it needs is to replace the EO/IR turret on your standard air-frame.



Image © Harris



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AIR AMBULANCE CANADA

BRITISH COLOMBIA: Air ambulance services to seven hospitals on the South Coast and Vancouver Island were suspended after Transport Canada revoked an exemption for the fleet of early model Sikorsky S-76C helicopters operated by Helijet for the BC Air Ambulance. They are operating outside their flight manual limits.

Transport Canada informed the carrier contracted to provide air ambulance services to several B.C. hospitals, that it's still not complying with federal landing regulations at some hospital landing pads. Helijet believed that they had another year to resolve the known flight safety issue but was obliged to withdraw its services from sites including Vancouver General Hospital, Royal Columbian Hospital, Surrey Memorial Hospital, Nanaimo General and B.C. Children's Hospital until the matter is resolved.

Helijet has applied to Transport Canada for a temporary exemption that will allow it to continue to land at so-called H-1 helipads, which have the most restrictive rules. It will not solve the problem but will allow the operator time to resolve the issue with the regulator and the manufacturer.

Ed: The landing issue was first noted last spring by a routine Transport Canada inspection and stems from an interpretation of the performance standards in the manufacturers manual. The type of early model Sikorsky helicopters Helijet are using on the contract cannot meet the full performance criteria of Cat A elevated helipad and require vision mods to the pilot's lower door. It would appear that the financial margins in the contract will not allow Helijet to substitute a more performance capable type of helicopter and that the company was therefore probably hoping to see out the remaining year of the contract under exemption. Transport Canada initially agreed to this but stalled the implementation. A number of services have since been restored under exemption system until early next year.

WINNIPEG: First responders in Winnipeg and the surrounding area are asking the public to join them in donating blood as part of their Sirens for Life campaign with Canadian Blood Services. The call for more blood comes less than two months after STARS air ambulance [a BK117 C-GDGP] announced it would carry blood on board to all calls to stabilize trauma victims upon arrival.

Members of Winnipeg Police Service, Manitoba RCMP, Health Sciences Centre, Winnipeg Fire Paramedic Service and STARS air ambulance asked the public in a news conference last month to donate more blood to save lives. The emergency workers are having a little fun with the donation — each service competing to see who can recruit more donors within their organization. [Freepress]

INDIA

NEW DELHI: Regular reports on the setting up of air ambulance services in India may be regular but it is clear they are not getting into operation fast enough.



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Even for the lucky few medical evacuations remain in short supply and the few that offer services cannot move patients at night because most airports in the region do not have the facilities to land at night. India's most advanced medevac system is run by Medanta's Flying Doctors India out of Delhi, they undertake three out of four flights daily but even they cannot overcome the problems of operating at night from smaller cities.

Delhi has six private operators that provide chartered flights for medical emergencies, and each operator gets between 10-15 enquiries a day. Not all queries get converted as there are several factors involved, such as the availability of an airstrip for landing near the place from where the call is made, availability of aircraft and the cost.

Even the Congress President Sonia Gandhi had to resort to a chartered flight from Varanasi when her fever took a turn for the worse because she couldn't get an air ambulance on call. The poor night infrastructure also feeds across to the aircraft employed. In the major cities the aircraft can be dedicated to the role but away from such as Delhi there are fewer dedicated airframes and often no bases so that medevacs are booked through local hospitals and brought in – this can lead to it taking six hours after the call is placed before an aircraft appears.

MALTA

GOZO: Vitalis Global Healthcare - the new owners of the Gozo Hospital – have launched an air ambulance service between Malta and Gozo.

When role equipped in about two months the Bell 412EP A7-HBW the air ambulance will be permanently based in Gozo at Xewkija Heliport and will be free of charge for patients who require treatment in Malta.

Health Minister Chris Fearne said this was part of the concession agreement gained by the government. All contract details will be published when Parliament reconvenes in October.

The Bell arrived in Malta from Corfu on August 4.



NORWAY

Early in August Reiser Simulation and Training (RST) announced that Norwegian Air Ambulance (NLA) has selected Norwegian Competence Centre Helicopter (NCCH) to deliver an EC135 and EC145 helicopter simulator and support services at Stavanger Airport, Norway. RST will build the roll-on/roll-off full-flight Level D simulator for the NLA, to train its helicopter emergency medical service crew and pilots. The simulators will comply with Norwegian airborne emergency medicine training system requirements for simulators to have embedded training scenarios for the entire helicopter crew.

The Stavanger Airport simulator is expected to be ready for operations in April 2018. [Shephard]

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GREAT NORTH: Several sites are being considered for a new £1.9M centre of medical excellence for the Great North Air Ambulance Service (GNAAS).

Several sites in the Darlington and Tees Valley area are under consideration for the new base, which would bring the charity's facilities in the North East under one roof. This would co-locate the operational crew, the fundraising and administrative staff but would not affect the charity's facilities in the North West [Cumbria].

Grahame Pickering MBE, a former ambulance service paramedic who launched the charity from a back room in his house fifteen years ago, said the main benefit of the move was the boost it would provide to the charity's research and training functions through the centre of excellence.

The funding is being sought from the Libor funds – the banking fines that have recently been handed out to air ambulance charities. Last year, GNAAS was successful in accessing £250,000 of the Libor money in order to develop a feasibility study and expand its plans. Under the proposal the charity should make savings in rent on three different sites and reduce the need for hiring in meeting and training space. [GNAAS]

MIDLAND: Midlands Air Ambulance Charity hosted its AIR25 Celebration Party, Recognition Awards and Charity Ball in early July at Edgbaston Stadium, and raised a staggering £158,000 which will fund 63 lifesaving air ambulance missions.

In association with corporate partner, Concept Resourcing, the evening which was attended by supporters from across the Midlands, acknowledged and celebrated the people that have played a vital part in the charity's 25 years of operation.

The evening commenced with a three course meal and award ceremony followed by a Celebration Party room to be entertained by a live band, stilt walkers, jugglers, an acrobatic display, a fire eater and an LED hula girl. www.midlandsairambulance.com

NORTHERN IRELAND: Air Ambulance NI (AANI) has been confirmed as the charity partner for the North's first Helicopter Emergency Medical Service (HEMS).

It is proposed that this charity will work with the Ambulance Service to provide the aviation side of the service and fund the non-medical costs of HEMS. The medical staff and equipment will be provided and funded by Health and Social Care services.

Ultimately there will be a doctor and paramedic on board the aircraft to administer emergency medical services but it will be some weeks before further decisions are made about the initial operating model, and a timeframe for implementing it. [Media]

YORKSHIRE: The final countdown has begun at the Yorkshire Air Ambulance as they look forward to welcoming their new Airbus H145 helicopter in to operations this month.

The rapid response emergency service Charity unveiled the new helicopter back in June, and now after having its medical fit completed, the team have entered into the final stages of training before operations can commence at the beginning of September.

The new H145 helicopter G-YAAC is expected to commence operations from the Charity's flagship base on the Nostell Estate near Wakefield over the first weekend in September. It



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will then be joined by a second H145, G-YOAA, which is now expected before Christmas and will be based at the YAA's other Airbase at RAF Topcliffe near Thirsk.

The two new state of the art helicopters will replace the YAA's current aging fleet of MD902 Explorers. These are expected to be sold to defray part of the £12M cost of purchasing the new H145's.

Captain Andy Lister, YAA's Director of Flight Operations added "The H145 is a larger aircraft with better endurance and a longer range than we're used to, which helps us cover Yorkshire's 5 million acres, but the overall footprint is small enough for reaching patients in tight areas.

"Myself and my team of Pilots cannot wait to take to the controls of the H145 and see them become icons in the skies across Yorkshire."

The helicopters come with a Bucher medical interior which was designed with the full cooperation of the YAA crew to ensure that the medical fit and equipment was practical and easy for the crew to use.

Some background comment has been taking place about the perceived suitability of the planned hoist operations by the YAA. Lots of tut tutting going on it seems in the ranks of the supposedly knowledgeable.

The hoist will remain on the aircraft and it will be assessed and trained for in due course as a rescue tool when the crews are happy with operating the airframe in its accepted HEMS role – then the matter of hoist operations will be addressed and trained for.

It appears that the wisdom of the naysayers is that operating the YAA fleet as a full-on SAR helicopter is time consuming and training intensive, and therefore should not be approached by the charity. In the majority of cases the critics have not asked the right questions are not therefore aware of the intentions towards hoist use. Subject to the further assessment and training it is intended that the hoist facility will be used in the manner of a retractable long line to remove injured parties from difficult locations [including gulleys etc] to a safer location where the aircraft can more easily access the patient. There is no intention to hoist with it.

Currently one of the few UK air ambulance operations able to fly TV crews, Yorkshire Air Ambulance is to feature in a new prime time television series.

Helicopter ER will hit UK TV screens later this year on the Really channel. The new series is being made by many of the team who created Helicopter Heroes, the popular BBC programme which also showcased the work of Yorkshire Air Ambulance and ran for seven se-

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TECHNOLOGIES

ries between 2007 and 2014.

York-based Air Television have been commissioned to make 30 episodes of Helicopter ER, flying with the rapid response emergency service to capture the dramatic, life-saving work of the pilots, paramedics and doctors.

Ian Cundall, Executive Producer, said: "We are proud to have worked with the fantastic Yorkshire Air Ambulance crews for many years. We are British television's only full-time, qualified medical helicopter aircrew so are able to shadow the medical team on the most complex rescues and to the most exposed locations.

"The access is extraordinary, the stories heart-warming and sometimes heart-breaking. We are moving from a day time to an evening prime time slot and the show will have a grittier editorial edge to reflect its new home."

Stories featured in the first series include the dramatic rescue of a tractor driver trapped under his sinking vehicle in an East Yorkshire lake, the fight to save a mountain biker who broke his back in a bad fall in the Peak District and the life or death struggle by a flying doctor, four paramedics and two helicopters to save a teenage worker who plunged through a North Yorkshire barn roof.

The original Helicopter Heroes is a hugely popular show. We are building on the brand to bring a compelling combination of human stories and real-life heroism, set against the arresting Yorkshire landscape.

The new series will cover both aircraft types and the handover from the old to the new in the coming weeks.

Ed: Since the Nostell Priory facility opened there has been a 'studio' room set aside for the embedded TV crew for enhancing their capability in meeting the trained crew requirements. Details of the possible syndication of the series may come later. The recently enforced requirement for TV crews to be trained as crews will potentially enhance the worth of this series to the production team.

Hull and East Yorkshire Hospitals NHS Trust has submitted proposals to Hull City Council's Planning Committee to create a new helipad at the back of Hull Royal Infirmary.

The hospital serves the region as a Major Trauma Centre, regularly receiving emergency patients via helicopter and organising patient transfers via air ambulance. A number of providers currently fly in to Hull Royal Infirmary, including Yorkshire Air Ambulance and Embrace, the children's air ambulance based in Barnsley, South Yorkshire.

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Helicopters bring patients to the hospital on a daily basis, but currently land on a helipad situated in a field just over the road from the hospital. An ambulance is then required to transfer each patient from the helicopter, negotiate the busy junction onto Anlaby Road, and then transport the patient to the Emergency Department.

Demolition of the three buildings at the back of the HRI site would need to take place to allow the 100ft by 100ft helipad to be constructed. In turn, this would then ensure patients arriving by air ambulance could be taken into hospital more quickly, and would free up traditional road ambulances for duties elsewhere.

Subject to planning approvals, demolition will begin in early 2017 and the helipad would be expected to be ready and operational by the Spring.

UNITED STATES

TENNESSEE: Hospital Wing, a Memphis based non-profit air medical transport service, has taken delivery of its second Airbus Helicopters H130, which will augment the service's fleet of seven other Airbus Helicopters aircraft. The H130 acquisition is part of Hospital Wing's strategy to transition its entire fleet to that model helicopter. Hospital Wing also operates three earlier model H130-series helicopters and three AS350 B3 AStars.

"We're transitioning to the H130 because of the large cabin size and the service record," said John Butora, CEO of Hospital Wing. "The H130 is an excellent aircraft. It has fewer maintenance requirements and has an added safety margin, which is important. This helicopter just works for us."

Hospital Wing serves a consortium of Memphis-area hospitals. It operates from five bases in the mid-south, serving 27 hospitals and provides service to residents in a 200 nautical mile circle, including West Tennessee, and parts of Arkansas, Mississippi, Missouri, Alabama, and Kentucky. Six of the eight helicopters are staffed 24 hours a day, seven days a week. "The Wing" transports an average of 250 patients per month, 35% of them trauma related cases.

[A4]

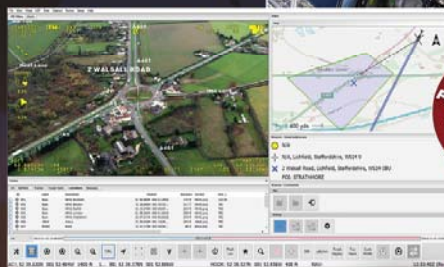


Hospital Wing H130 Delivery - John Butora, CEO, Nick King, Director of Maintenance © HW

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FIRE

AUSTRALIA

ADELAIDE: Air Affairs Australia has been providing Airborne Bushfire Reconnaissance services in Australia since 1994 starting out with a hired Learjet 35A aircraft configured with a Daedalus 1268 Line Scanner. The system was utilised by the NSW Rural Fire Services [RFS] to provide fire monitoring intelligence gathering. The new service became an integral tool for the RFS over the years providing state-wide coverage in uncontained fire monitoring and during extreme fire periods.



Image © AirAffairs

The Line Scanner systems have been extensively upgraded since 1994, providing high quality, accurate imagery over active bushfires at high availability.

Imagery is produced through thick smoke when visibility is totally compromised during both day and night flight operations. The image data is transmitted directly from the aircraft via high speed Satellite Communication Systems in a format compatible with Geographic Information Sys-

tems (GIS) used by the state fire authorities. The image data requires no further processing by the fire authorities and is available for immediate use.

Air Affairs has secured a continuation of its contract to the RFS and has led to the acquisition of a dedicated Beechcraft B200T aircraft VH-LAB which was purpose modified for the Line Scanner system. The aircraft was modified with a pressure dome system to facilitate line scanner operations at high altitude, providing clear-air imaging from the scanners sensor head, whilst maintaining full cabin pressurisation.

All company aircraft configured for Bushfire Reconnaissance flight operations are fitted with a Broadband Satellite Communication system (Satcom). The Satcom operates on the Inmarsat BGAN system and provides a high speed data link (via internet), both nationally and internationally if required.

Ed: Air Affairs will be exhibiting at the Tangent Link event Aerial Firefighting Asia Pacific 2016 (AFF APAC 2016) on 5 and 6 September in Adelaide, South Australia. Complimentary passes to Aerial Firefighting Asia Pacific 2016 (AFF APAC 2016) are provided to all Australian and international aerial firefighting personnel who work for government funded organisation. Contact at the event is Julia Guy at jguy@tangentlink.com

<http://tangentlink.com/event/aerial-firefighting-asia-pacific-2016/>.



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UNITED KINGDOM

DURHAM: Exercise 'Prince Bishop' was a multi-agency search and rescue exercise that took place on the River Wear, in the centre of Durham City, in early July 2016.

The River Wear has claimed several lives in the past few years when young people have got out of their depth during the summer months. For the purpose of the exercise there had been a serious accident on the large pleasure vessel, the 'Prince Bishop' with casualties on board the boat and others missing in the river.

The river exercise was led by the Durham & Darlington Fire and Rescue Service and included units from HM Coastguard, the North East Ambulance Hazardous Area Response Team (HART) and a unit from the Civil Air Patrol (CAP) operating a DJI Inspire unmanned aerial vehicle with a high definition (HD) video camera with onboard recording and a 'downlink' for sending real time images to the incident commander on the ground.

On previous occasions when using manned aircraft the CAP has found it very difficult to search the River Wear in the centre of Durham City due to the proximity of the many buildings including the Cathedral and the Castle. As an alternative the drone, when operated from one of the many bridges that cross the river in Durham City, there are a total of 8, provides excellent real time images of the river and its banks for the emergency services. Nevertheless, due regard must be given to the law, the Air Navigation Order, when operating a drone in what is defined as 'congested area'.

The CAP team positioned itself on Elvet Bridge alongside the Fire & Rescue Service major incident command vehicle. Images from the drone were then relayed directly to the incident command vehicle where they were displayed on large monitor for viewing by the incident commander.

Subsequently many of the lessons learned during Exercise Prince Bishop were put into practice at the very large fire at the Riverside Industrial Estate at Langley Park, to the west of Durham City, on August 12. A tyre depot that was on fire and at its height, flames were leaping 60 feet into the air.

The response by the Durham & Darlington Fire and Rescue Service included some 35 firefighters with six pumps, a high volume pump, a water bowser, two aerial ladder platforms (ALPS) and the incident command support unit. Also in attendance were the Durham Constabulary, the NHS Hazardous Area Response Team (HART) and the Environment Agency. The National Police Air Service helicopter from Newcastle was initially in attendance until relieved by a unit from the Civil

Air Patrol flying a small unmanned aerial vehicle. The drone was positioned above the burning building and used to direct the jets of water from the ALPS. Because of the terrain at the scene of the incident, with restricted access caused by a wooded area running alongside the building that was on fire, the 'eye in the sky' proved to be invaluable on this occasion. [CAP]



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UNITED STATES

CALIFORNIA: It is the wildfire season in the North State and local firefighters now have a helicopter as an added asset to reconnoitre wildfires.

Using Federal Funding the Bureau of Indian Affairs has stationed the helicopter and its crew at the Oroville municipal airport. The crew typically involves one pilot and up to four firefighters that can be dispatched to quickly respond to remote fires and also drop water.



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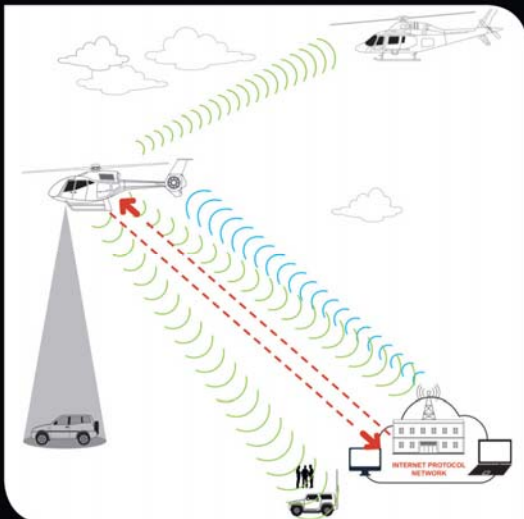


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It is uncertain how long this Federal Asset will be available to the region but there are plans to build a base at the airport so they can be permanently stationed here. Although described as a 'Federal helicopter' is not from a government fleet, it is AS350B3 N818MC a contracted in helicopter owned by Mountain Air Helicopters Inc of Delaware

San Diego Gas & Electric (SDG&E) is again using an Erickson Skycrane in its fire fighting plans for the seventh straight year. The helitanker, which holds a maximum of 2,650 gallons of water or fire suppressant and can get airborne in just 15 minutes started operations at the start of July.

Recently, SDG&E and the County renewed their joint contract that will ensure the Skycrane will be available through 2022 for regional fire suppression.

The Skycrane is stationed at SDG&E's Aviation Services facility at Gillespie Field in El Cajon and will be present for at least another month.

OREGON: The Oregon Department of Forestry says that in future fire-suppressing aircraft will not be used to fight fire if Unmanned Aircraft Systems (UAS) are detected within a five-mile radius of a wildfire.

Both drones and firefighting aircraft fly at low altitudes creating the potential for a mid-air collision which can injure or kill firefighters in the sky, crews on the ground and the neighboring public.

This dangerous situation is why the ODF grounds all aircraft until UAS are removed from a wildfire despite the detrimental effect this has on fighting the fire.



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INDUSTRY

Last month **Provincial Aerospace Ltd.** ("PAL Aerospace") and CarteNav Solutions Inc. ("CarteNav") announced that they have entered into a definitive agreement under which PAL has acquired CarteNav, which will now also be part of the Exchange Income Corporation (EIC) group of companies. CarteNav is a leading Nova Scotia based software developer that provides situational awareness and intelligence, surveillance, and reconnaissance ("ISR") solutions for maritime, land, and air environments. The company serves defence, security, and commercial clients. Its flagship product, AIMS-ISR® has become the software of choice for both government and nongovernment customers in more than 30 countries around the world.

Philippine President Rodrigo Duterte has released his presidential Fokker F-28 aircraft for conversion into an a military air ambulance to serve the **Armed Forces of the Philippines** (AFP).

The statement was part of a promise made to the armed forces by the new president to disband his Presidential Fleet of aircraft and helicopters and add them to theirs.

Duterte said he was happy to ride commercial flights when required until a newer replacement is perhaps selected by a future president. (Sunnex)

Ed: President Rodrigo Duterte has put the presidential yacht up for sale to the highest bidder, and helicopters are to be assigned to air ambulance roles potentially operated by the Philippine National Police and the Armed Forces of the Philippines.

Hitherto the air force's 250th Presidential Airlift Wing or the Bluebirds provides air mobility to the President as well as the first family, visiting dignitaries and VIPs using the air force's only Fokker F-28 aircraft, as well as an undetermined number of Fokker F-27 Friendships, S-70 Blackhawks, S-76s, SA-330 Pumas, and Bell 412s.

Aviation Specialties Unlimited, (ASU) completed its 1,000th FAA approved night vision cockpit modification. This modification was completed on a Bell 407GXP at Wysong Enterprises, Inc., (Wysong) in Blountville, Tennessee for MED TRANS Air Medical Transport (Med-Trans Corp). In 21 years ASU has modified 47 Bell 206 and 127 Bell 407s.

Bell Helicopter has committed to operating in Lafayette for the next two years. Lafayette Regional Airport Executive Director Steven Picou has told local media that the company is about to begin modifications to the 82,300-square-foot manufacturing facility.

The facility was designed to be a manufacturing centre for Bell's 505 Jet X Ranger helicopter. The state paid \$26.3M to build the airport-owned assembly buildings.

Bell has been leasing the facility and committed to making an additional \$11.5M capital investment in equipment and tooling but in May announced that it was pulling its 505 Ranger X helicopter operation from Lafayette and moving it to Canada. Company President and CEO Mitch Snyder blamed a struggling market on the decision to move the operation but said Bell remains "committed to Lafayette."

FEC Heliports Worldwide Ltd HEMS-Star® portable battery powered LED helipad lighting system and Remote Lighting Controller have achieved FCC certification for operation in the USA and CE certification for Europe.

HEMS-Star® is a rechargeable portable battery powered, microprocessor controlled LED lighting system designed for rapid deployment in temporary and emergency situations to provide safe and effective marking at designated or ad-hoc helicopter landing areas.

FEC's Remote Lighting Controller (RLC) enables an operator or pilot to remotely control helipad lighting systems. The system integrates both traditional VHF PCL and adds SMS control and monitoring with the option of automatic weather reporting (wind speed/direction, temperature, dew point and pressure) from the helipad.

The FCC Certification is a declaration of conformity that certain electronic devices sold in the USA meet stringent requirements whilst the CE certification is the manufacturer's declaration that the product meets the requirements of EC directives.

Aerospace & Defence is offering an ITAR US Defense Trade Controls e-Seminar for companies located outside the US in the form of a USB drive that can be accessed offline. A&D has adapted its 2 day comprehensive ITAR US Defense Trade Controls for Non-US Companies live seminar into an e-Seminar. The training is on a USB drive so it can be taken anywhere without the need for internet access.

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More than two million new airline-industry personnel, including 617,000 pilots and 814,000 cabin crew, will be needed to meet demand between now and 2035, according to the 2016 **Boeing Pilot and Technician Outlook**.

Boeing's report says there will be 'extraordinary' demand for pilots and cabin crew over the next 20 years

The document notes that although Asia-Pacific remains the region with the highest overall demand, there has been a significant increase in the expected number of skilled resources required in other parts of the world. www.boeing.com/commercial/market/long-term-market/pilot-and-technician-outlook

Marlink and IDG Europe have completed trials of the innovative new Smalltrack portable tracking system on a fixed wing aircraft operated by Scandinavian Air Ambulance and a helicopter operated by Scandinavian MediCopter in Sweden.

Marlink's next generation location-based Iridium tracking device features a new, compact and lightweight design, Smalltrack is a highly mobile device with user-friendly operation and installation. Operating on the Iridium satellite network, the system can be used in any location without connecting to external power or antenna sources. It can be online in minutes, conveniently providing accurate tracking to support flight safety and logistics, in addition to manual and automatic emergency alerting.

The fixed wing aircraft Smalltrack testing took place on a Beech Super King Air 200 over a period of five days. Smalltrack was placed on the glare shield of the aircraft and position reports closely monitored. The successful trial proves that convenient placement on the glare shield does not affect the ability to transmit or receive data. During the trial, tracking data was made available through the Smalltrack online interface.

The helicopter testing was aboard an AS 365 Dauphin N2, with daily flights for 3 weeks. Throughout the testing all data reports were effectively transmitted. As with the fixed wing testing, Smalltrack was set to start-up using the built in accelerometer so it does not have to be included in the pre-flight check list, which saves the pilot time before taking off.

In the wake of the recent Rio Olympics **CONTROP Precision Technologies Ltd.** a company specialising in the field of electro-optics (EO) and infrared (IR) cameras for defense and homeland security solutions announced that CONTROP's SHAPO Airborne EO/IR surveillance payload was used for the protection of the Summer Olympics in Brazil. The SHAPO was installed on board the ADB-150 Aerostat that supports the Brazilian Air Force security mission and is deployed above the Olympics area.

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The ADB-150 aerostat carrying CONTROP's SHAPO EO/IR surveillance payload was launched August 9th, 2016, by Airship do Brasil, a company of Bertolini's Holdings, in cooperation with the Brazilian Air Force, in order to provide 24/7 surveillance, monitoring and public security of the Olympics area.

Prior to the start of the Rio Olympics 2016, the system was deployed as part of a surveillance operation with Air Force University (UNIFA) security systems at Afonsos Air Force Base in Rio de Janeiro for the protection of the training center for athletes competing in the current Olympics events.

The SHAPO is used worldwide for a variety of long-range surveillance and observation applications including Law Enforcement, Search & Rescue, Homeland Security and Defence.

A South African conservation fund is dedicating \$500,000 for helicopter support to fight poaching of rhinoceros, elephants, lions and other endangered animals in southern Africa. The **GES Africa Conservation Fund** said the money will pay for "a critically needed quick-reaction" helicopter to support anti-poaching operations in the Greater Kruger National Park region of northeast South Africa, on the border with Zimbabwe and Mozambique.

The move comes as public attention of poaching, or illegal hunting of endangered species, is growing.

South Africa's highest court is scheduled to rule shortly on the validity of a seven-year national ban on trade in rhinoceros horns. (Trade in rhino horns has been banned by international treaty since 1977.)

Recently major international technology firms agreed to collaborate with wildlife advocacy groups to avoid facilitating illegal trade in endangered species carcasses and parts. The firms, which include eBay, Microsoft, Pinterest and Yahoo, will work with the World Wildlife Fund, the International Fund for Animal Welfare and others to cut off what they said "has unintentionally become a thriving platform for buyers and sellers to trade illegal wildlife products" through the internet. [JTM Rotor & Wing]

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DLRG Horneburg/Altes Land e.V., the **German Lifeguard Association**, has reached out to Microdrones to explore the potential benefits UAVs could provide during water rescue. The German manufacturer gave the organisation a md4-1000 quadcopter and soon began working with them to develop a tool that combines two technologies—unmanned aerial systems and RESTUBE, an inflatable flotation device. Once the system was developed and tested, Microdrones submitted the craft to a water rescue demonstration held in the Elbe River. The drone quickly flew to the person in distress and dropped the RESTUBE it carried. The rescue device automatically inflated when it hit the water, enabling the swimmer to grab the tube and float until a human lifeguard arrived to complete the rescue.

The lightweight UAS is equipped with two RESTUBES, a vital part of the design. A small motor with two mechanisms drops the tubes, either together or one at a time. The RESTUBE is carried in a package with a CO2 capsule, and when the tablet comes in contact with the water, the bag instantly inflates. In case you miss on the first shot you have to have a backup.

The UAV retains its camera as an aid to the operator in getting the rescue device to the person in the water quickly and accurately.

The creation of the system was undertaken free by Microdrones and they are now looking for sponsors to enable the setting up of a mobile command vehicle. To that end they are talking to car manufacturers. [Microdrones]

The U.S. military plans to introduce several changes into this year's version of the annual **Black Dart** counter-drone exercise, including making the threat scenarios more complex and more challenging to defend against.

Compared to earlier Black Darts this month's event will increase the number of unmanned aircraft systems flying at one time and provide more variation in their direction and altitude, according to organizers. More than 20 different small- and medium-sized UAS will fly in the September 11-23 demonstration, and various government and industry systems will try to detect, track and negate the drones.

Another change is that this year's venue, Eglin AFB, Fla., offers a larger land range than last year's location and will provide more opportunities for experimentation on both sides of the fight.

Aegis combat system-equipped destroyers, five kinds of military surveillance aircraft and two types of military ground-based radar also will participate. One of the goals of the exercise is to improve the fusion of data collected by different UAS detection systems, including radar, acoustic sensors and electro-optical/infrared cameras. [Defense Daily]

The brand new 205 page **Counter UAV (C-UAV) Technologies Market** report indicates that the Counter UAV market is set to be worth \$2,483m in 2016 due to rising security issues surrounding the acquisition of UAVs. It includes an exclusive expert interview with Mark Radford, CEO of Blighter Surveillance Systems.

The world's largest aircraft has taken to the skies for a successful maiden voyage – not exactly a real first flight more its first since being revamped in the UK.

The 302ft-long (92-metre) **Airlander 10** - part plane, part helicopter, part airship – flew from the historical airship station at Cardington airfield in Bedfordshire., a site where many airships of varied designs have ventured from in the past but none have yet succeeded.

Ed: First developed for the US government as a long-endurance surveillance aircraft, the British firm launched a campaign to return the craft to the sky after it fell foul of US defence cutbacks. It is sadly noteworthy that the first re-flight was delayed by that regular problem

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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.

for large airships of any design – the weather. The second flight, also last month, resulted in the craft nosediving into the ground wrecking the cabin. CFIT for purpose?

The **Westland Sea King** may well be a SAR helicopter of a past era now that the UK SAR has been privatised and handed to Bristow but the component parts still have a job to do. The latest challenge was to move four 'retired' Sea King helicopters from one side of RAF Cosford to the other to put them in place for a future, non-flying, role.

These iconic aircraft, most notably utilised for both Royal Navy Search and Rescue and RAF Search and Rescue Force are used for engineering training purposes at RAF Cosford, the home of RAF engineering [and the RAF Museum outstation] near Wolverhampton.

They will be used, alongside also retired Jaguar strike aircraft, to teach avionics to trainees. With the Number 1 School of Technical Training, said: "This consolidation will enhance the number of aircraft variants that our trainees are exposed to on all courses." [expressandstar]



Disquiet has been expressed that some of the more important Hospital Heli-Pads in the UK have not been constructed with the weight of the latest rescue helicopter in mind. The new SAR fleet operated by **Bristow Helicopters** is still mainly operating the Sikorsky S-92 and that is too heavy for many sites. Its predecessor the military SAR Sea King was also similarly unable to land at such sites.

In March 2013 the Department for Transport announced that it had signed a contract with Bristow Helicopters Ltd to provide search and rescue helicopter services in the UK with operations commencing progressively from 2015 and expected to be fully operational across the UK by next summer using a mix of the AgustaWestland AW189 and Sikorsky S-92 based at ten locations around the UK.

At that time it was clear some hospitals with landing pads would not be able to accommodate the larger helicopter and that they would have to land elsewhere and send them in by land ambulance.

In order to receive a Sikorsky S92 a helipad would need to be in the order of 33 metres in diameter with a load capacity of 12 ton. Most inbound air patient traffic is in smaller air ambulance helicopters that can use the normal helipads which are smaller and offer a capacity under 10 tons.

Vislink is inviting you to join them at the IBC 2016 Exhibition held at the RAI Amsterdam later this month [9-13 September]. Hall 1, Stand A69

Vislink invites you to attend the IBC Exhibition in Amsterdam, September 9th-13th.

Vislink will be launching new products at IBC and giving updates on many other solutions. Do come and see us in Hall 1, Stand A69 for demonstrations and to meet our experts. Full event details on the IBC Exhibition are at: <http://www2.vislink.com/e/144931/2016-08-08/8pc3f/23712690>

Launched at Farnborough and the ALEA event is a range of new V-Link aircraft antenna array that promises auto tracking that is steerable and directional. It features a steerable high-gain beam created by an octagonal array of fixed antenna panels. The unique design enables the antenna to be pointed in either one or two simultaneous directions of the eight available azimuth sectors.

The array includes an integrated internal control system, GPS



receiver and electronic compass assembly which automatically directs the antennas azimuth as the aircraft changes its location and heading.

Last month **Vislink** launched its new support capabilities. Over the past few months the company has been investing in both our staff and processes in order to achieve service excellence.

They are implementing a new automated case management platform that will allow for (1) continual communication of case status to our customers and (2) clear case prioritization and workflow queues. Customers will always know their point of contact and the progression of their case throughout the cycle.

This initiative is just one among a number of initiatives underway within Vislink to ensure our customers have a lifelong partner for success.

Aerodata AG is offering a number of Dornier 328 Surveillance / SAR aircraft for immediate sale. The airframes are now surplus to requirements after the end of an Australian contract period.

Aerodata delivered five Dornier 328 SAR aircraft to AeroRescue, an Australian special mission aircraft operator, between October 2005 and February 2007. The Aerorescue Do 328 aircraft were operated under a service contract for the Australian Maritime Safety Authority (AMSA). During the 10 year operation, AeroRescue flew about 7,500 hours in surveillance missions and more than 9,000 hours in SAR missions. The service contract with AMSA has not been extended so releasing the five Dornier's progressively during the next 6 months. All five aircraft are equipped with a comprehensive suite of surveillance sensors and a mission system utilising a single work station with two 19 inch displays. The aircraft are fitted with conformal observation windows and can carry SAR equipment of up to 1,000 lbs. A modified cargo door for dropping of SAR equipment provides a unique dropping capability and is certified for parachute jumps from the In-Flight-Operable-Door.

The sensor suite includes a nose mounted surveillance radar, a turret mounted EO/IR sensor, broadband and SAR direction finder, transponders to track aircraft (ADS-B) and vessels (AIS), VHF, UHF and HF communication and Iridium Satcom system for voice and data communication.

The aircraft airframe and engines has at normal operating cycle utilization between 20 and 25 years' operating life available.

Aerodata AG and the Brazilian company Fototerra Atividades de Aerolevamento Ltda. recently established a Joint Venture, Fototerra Survey SCP in Brazil with a prime tasking of providing airborne maritime pollution surveillance services for the private sector as well as for governmental agencies. After nearly 18 months of intensive development and production the first fully equipped maritime surveillance aircraft, has been released to service.

Evaluation flights have been carried out of Houston in the Gulf of Mexico equipped with OPTIMARE's the well proven fully integrated MEDUSA Maritime Surveillance Mission System, the Side Looking Airborne Radar (SLAR), IR/UV Line Scanner, VIS Line Scanner, Microwave Radiometer and Laser Fluorosensor.

With its comprehensive mission system the pollution surveillance aircraft cannot just detect oil spills across 20.000km²/h but also map the extent and direction of travel of the spill, estimate its thickness and volume and identify the oil type.

All of the information is made available in **real-time** during the flight via the comprehensive communication suite. This enables the crew to keep the control centre fully informed and support decision making processes. www.aerodata.de



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ACCIDENTS & INCIDENTS

A couple of incident reports from this month seem to show that the fear of embarrassment still reigns as a reason to hide what might be important safety issues from sight. In one case a long time operator of the EC145 seems to have forgotten the date of the incident and to identify the airframe and yet Concern reports count both items as 'normal' information. The whole incident was caught on camera so it could not be forgotten. In the second incident the police seem hell bent on denial that they even found a bullet hole in the rotor of their helicopter.

17 July 2016 Bell UH-1 N790RJ. Law enforcement and rescue helicopter operated by the King County Sheriff. While operating on a rescue mission over Mount Adams the helicopter severely damaged its left skid and panels under the cabin area when hitting packed snow. It was unable to undertake a conventional landing. It returned to meet up with the Yakima Fire Department at the airport who assisted in building up a landing area of pallets that supported the damaged left side and allowed a safe landing. The Airport Rescue Fire Fighting, or ARFF crew, along with YFD 94 and Battalion 91 responded to the airport to assist with the landing.

30 July 2016 Airbus Helicopters AS350B3 Botswana Police. Gaborone — Six police officers survived a helicopter crash in the Central Kalahari Game Reserve (CKGR) but were left with injuries. The helicopter was on an anti-poaching operation with six officers on board including the pilots. [BPS]

Unspecified July 2016 Airbus Helicopters EC145 Air ambulance of Air Care and Mobile Care, Cincinnati, Ohio, USA. As the aircraft prepared to lift off from a dolly a crew member went to secure reflective window sun screens in hangar as hangar door was coming down. Unnoticed one was dropped on the pad. As the aircraft was wound up to full pitch the loose sun shade was drawn into the rotor disk. The noise and debris led to engine shut-down. The sun screen has a metal wire frame that punctured one rotor blade. [Concern]
Ed: Air Care and Mobile Care, Cincinnati, has operated two EC145 since 2012.

1 August 2016 helicopter Tulsa Police Department, Oklahoma, USA Pilot found damage on a pre-flight inspection that is believed caused by a bullet striking the main rotor blade. They said they noticed the damage on August 2 though they aren't completely sure what caused the damage, they do believe it was a bullet and that it was shot during the evening shift on August 1. The pilot reportedly did not notice any issues at the time. [Fox 23]
Ed: Tulsa fly a Bell 206L4 and an AS350B2 but are not talking openly about the incident which only leaked to the media after 14 days.

3 August 2016 MD500 N692PD. Kansas City Police Dept. The police helicopter made an emergency landing in a street near downtown Kansas City, Missouri. The helicopter experienced a mechanical problem, causing the pilots to make an emergency landing in the intersection of Independence and Elmwood. The pilots were able to land the helicopter upright and as a result they were not injured. [AP]

7 August 2016 Airbus Helicopters AS350B3 9N-AKA Fishtail Air. Helicopter transporting woman and her newborn to hospital crashed at 5,500 feet in at Chucche cliff of Nuwakot district in central Nepal killing all seven persons on-board. The dead included Captain Ranjan Limbu, Staff Nurse Nisha Tamang, one Laxmi Gurung, Kitman Gurung, of Siddhadhibas, Gorkha, his wife Aagyani, Priti Gurung, 19, and her five-day-old son. [Ekantipur]

8 August 2016 Kawasaki BK117C2/EC145 Air ambulance operated as Dr Heli. Japan. A high school student and a doctor were killed in a crash as the helicopter was flying to hospital. The incident occurred in Hadano, Japan, after the helicopter's landing gear allegedly failed. The BK117 was attempting to land outside the Tokai University School of Medicine

when the tail of the helicopter came in contact with the ground. The airframe remained upright but with a collapsed undercarriage. [Youtube/ANNnewsCH]

8 August 2016 Eurocopter AS350 N*A.** Law enforcement helicopter operated by U.S. Customs and Border Protection near Clearbrook, Minnesota. A Polk County Sheriff's deputy suffered injuries from breaking glass when a man fired at the helicopter the deputy was riding in. A man, Carstie Lee Clausen of Clearbrook, reportedly shot twice at the helicopter with a high-powered rifle as it flew over an area in rural Clearwater County where suspected drug activity was thought to be occurring. The Polk County deputy was an observer for Pine to Prairie Drug Task Force. The aircraft made an emergency landing at the Fosston Municipal Airport. [Grand Forks Herald]

16 August 2016 Helicopter. An emergency helicopter carrying a car crash victim to hospital in Austria narrowly avoided a mid-air collision with a drone that flew within metres of the craft.

The drone was spotted by the helicopter pilot at the last second and he was able to steer the aircraft out of the way and prevent a collision.

"We were just around 5,000 feet high and flying at 250 kilometres an hour when I suddenly noticed something," the pilot told the Krone Zeitung. "It was a drone that was flying two metres from right to left under the helicopter."

The helicopter was on its way to Klagenfurt hospital after picking up a 50-year-old critically injured patient from the site of a car crash in Maria Luggau.

22 August 2016 Bell 206L-4 5Y-COP Kenya National Police. Two police officers were injured after a chopper they were using for a training mission crashed at Wilson Airport, Nairobi. The flight was a training session with an instructor and a trainee when it went down. The Bell crashed upright, with a fully collapsed landing gear and a broken tail [Media]

22 August 2016 Eurocopter AS350B2 RP-C2688. Air rescue helicopter operated by Macroasia Air Taxi Services in the Philippines. Aircraft went missing on a rescue mission on a mission to rescue stranded construction and engineering personnel at the Sumag diversion tunnel in Quezon province, the wreck was found five days later with two crew dead inside. The two dead were identified as Captain Miguel C. Logronio and aircraft mechanic engineer Jay Gregorio. [Enquirer]

PEOPLE

The new Accountable Officer for the National Police Air Service based at Wakefield, West Yorkshire is **Chief Superintendent Tyrone Joyce**. He replaced Ian Whitehouse when he retired earlier this year on a temporary basis from a previous post as the NPAS Programme Director. His position has now been confirmed.

In the wake of the recent Police and Crime Commissioner [PCC] elections no change has taken place in West Yorkshire, **Mark Burns-Williamson OBE** remaining in post but the NPAS Strategic Board announced that there were changes in the PCC representations to the board. Ron Ball (Warwickshire) was standing down and John Dwyer (Cheshire) and Christopher Salmon (Dyfed-Powys) had not been re-elected. Salmon had been a very high profile figure in the difficult negotiations over the shutdown of the Dyfed-Powys air support base.

It is expected that new political representatives will emerge after the July 21 meeting of the Association of PCCs.

MOVE ALONG THERE

Born and bred US observers still speak with admiration that police officers in the UK manage day-to-day policing without carrying guns and without losing too many officers in the line of duty. Whether the admiration is real or not does not matter too much for they probably cannot ever understand the whole 'no guns' thing as it is diametrically opposed to gen-

eral US thinking.

Now the whole thing has entered a further phase that will further confuse their understanding of the UK police mindset.

In the wake of recent European terrorist attacks it was decided that an additional number of officers would be trained up from the existing 31,000 personnel to double their availability.

This is not just handling a sidearm, it is the whole 'SWAT' weapons and tactics option that pretty much takes them completely off normal police duties all together. As a rule armed officers are prohibited from dealing with day-to-day incidents when armed.

And guess what, it seems that the numbers of volunteer officers opting for the added 'comfort' of carrying a gun is not going to fill those 600 vacancies any time soon.

There was a time when UK television soaps reflected real life, a couple of days a week they would intrude into our couch potato lives with scripts that on reflection were like watching paint dry. A bit of moaning and chat and an occasional drunken highlight.

When the TV officials realised that people were lapping it all up they poured money into them, more soaps appeared and they took up half the evenings viewing and rather than reflecting life they became life. But watch the ratings! There then was a rush to think up something that was headline grabbing in the real world to boost the viewers and the ratings. They reflect life as hopefully we never have to live it.

Heaven forbid if there is a need to change the set! That calls for major disaster surgery that also usually accompanies a special event like a wedding. We have already had a 1993 plane crash that not only changed the way of life in Emmerdale Farm, it was so serious that the farmers stopped farming and the whole slant of the soap changed from milking to bickering in the pub. We have already done helicopter crashes in soaps – in 2002 Brookside was hit by a crashing AS355 police helicopter in an apparent bid to pump up the ratings. That plan failed – the programme has now ceased 'soaping' altogether, and a slightly re-named Emmerdale took a hit from a helicopter during a wedding last year.

The latest helicopter victim is a hospital based serial programme called Casualty, [it would be called Emergency Room if a US Soap]. A bit like in Emmerdale they made the mistake of having a party to celebrate 30 years on-air – clearly something well overdue for a spoiler. This time its an air ambulance colliding with a quad UAS that brings disaster.

A common thread at the moment is that the 'favourite' helicopter airframe is the Agusta A109. No slur intended it's just that in 2002 the top supplier of spoof police helicopters [and real ones] was Aeromega they had an AS355 fleet where the currently favoured company is Castle Air – by choice an operator of various marks of the Agusta [asnd wreckage props to make it all look good on screen].

That may have spurred the only 'real life' UK HEMS operator of the 109, to protest that it was giving air ambulance safety a bad name, but it also resulted in their neighbours, Midland, complaining about the show before the event.

After the event however the producers were generally congratulated and the production images generated some well reviewed and copied you-tube footage. The slant was naturally against the young flyer of the rogue UAS and it may have done some good but only if they watch soaps.....

<https://twitter.com/BBCCasualty/status/769624990853558274>

There is some renewed conversation among those in the industry about whether such a crash would be possible or whether the downdraught from the main rotor may actually sweep a small quadrotor safely out of the way.

In any case—this is Soapland so mind how you celebrate!

PHOTO FINISH

Soldiers are suing the Ministry of Defence after their military aircraft plummeted 4,400ft when the pilot's camera got stuck.

A civil servant and nine soldiers claim they suffer from post-traumatic stress disorder after the incident as they flew to Afghanistan from the UK in February 2014.

They were amongst 200 passengers on the Airbus Voyager, which was flying at 33,000ft over the Black Sea when the captain's camera became wedged against the jet's controls. Many of the crew and passengers were bashed against the roof of the cabin as the aircraft plummeted at up to 15,800ft a minute.

The Nikon camera had been used by the captain to take pictures of the cockpit. But it was stuck between an armrest and the side-stick controller, sending the aircraft towards the sea. The jet was in a nosedive for about 27 seconds before the pilot got the aircraft under control.

That was two years ago of course and since that time the British seem to have changed their attitude as a result of that mostly surprising impending exit from the EU called Brexit. How else can we explain the second place of the Olympic 'Team GB' in the medal tables? USA first, UK second and China third? Just does not make sense unless Prime Minister Teresa May has been spoon feeding the team with steel tablets! Still I understand that having the UK snapping at the heels of its team has not greatly stirred the people of the USA – after all its neither Baseball or World Series, they simply did not notice the Olympics.

EVENT NEWS

In the next few weeks event goers are being offered [at least] two Unmanned Aircraft events to soak up. Two events with the same core subject are being put on by Terrapinn in the Suntec Centre, Singapore on September 1 and at Excel in London [UK] in October. Each is being run in conjunction with a conference in which the great and the good seek to inform others about the market and its technical possibilities. In civil industries, UAVs or drones are increasingly taking off for commercial missions and these events are supposedly about showing paths to how businesses can effectively adopt these unmanned aerial vehicles to save money, time and lives.

THE COMMERCIAL
SHOW
ASIA 2016

The Commercial UAV Show Asia is to discuss the future plans to improve RPAS regulation in the region. And that is the point, The USA might be struggling with regulation but in many parts of the Middle East and Asia things are far more difficult, even getting the right to fly a non-government helicopter in the region is a major undertaking so an unmanned camera carrying craft is likely to be a much bigger issue.

There will be speakers from the Singapore Civil Aviation Authority, the US FAA, Dubai and the **Civil Aviation Authority of the Philippines on Day 1 and more of an industry slant on Conference Day 2** (2 September 2016).

The event, organized by Terrapinn, is expected to attract over 1,000 attendees with featured case studies on the drone deployments in the mining, utilities and energy, agriculture, transport and delivery, search and rescue, humanitarian efforts and more.

The Venue: Level 4, Hall 406, Suntec Singapore International Convention & Exhibition Centre www.terrapinn.com/uavasia

The Commercial UAV Show London runs in the Excel, London Docklands during 19-20 October.

Among the regulatory speakers are Paul Cremin, Head of Transitional & Emerging Aviation Technologies, International Aviation, Safety & Environment, UK **Department for**

Transport, Jean-Pierre Lentz, Policy Officer, **European Commission**, Wes Ryan, Manager, Advanced Technology, USA **FAA**, Angela Kies, Head of Issue Management UAS, **DFS (German Air Traffic Authority)**, Gerry Corbett,

UAS Opps Policy Specialist, UK **CAA** and Craig Shepherd, Unit Commander, **Victoria Police – Air Wing, Australia.**

A free to attend on-floor seminar theatre will welcome speakers such as: Seamus Kearns, Head of Operations, Surrey Search & Rescue; Ross Henderson, Crew Commander, Hertfordshire Fire & Rescue; Andy Hamilton, Inspector, Devon and Cornwall Police; Colin Smith, Police Advisor, Home Office.



Perhaps underlining the growing interest in unmanned craft is the 19-23 September 2016 6th China International UAS Conference and Exhibition. Beijing, China Aviation Promotion Ltd., Tel: +86 10 87730503 uaschina@126.com www.uaschina.net



ExCel London Docklands from the Emirates cable car

Image © PAR

Emergency Services Show 21-22 September 2016 Birmingham NEC

Lessons learned from major UK incidents including the Shoreham air tragedy, Bosley Mill fire and 2015 floods in Yorkshire will be shared by emergency services and partner agencies at this year's Emergency Services Show. Curated and inspired by JESIP and the National Operational Guidance Programme, the free seminar programme will take place in the new Learning Zone in Hall 5 at the NEC from 21 to 22 September. It will include case studies, panel discussions and sessions on new technology, as well as plenty of opportunities for delegates to ask questions.

West Sussex Fire and Rescue Service will be sharing what they have learned from the Shoreham air tragedy in 2015 when 11 people lost their lives. Assistant Chief Fire Officer Neil Stocker will be facilitating an extended one-hour session with colleagues drawn from other local agencies involved with responding to the crash.

A full appraisal of the Bosley Mill disaster will be given from a range of operational perspectives. It will explore how an Urban Search and Rescue team deployed for 110 days and how Cheshire Fire and Rescue Service managed both the needs of the journalists and the sensitivities that existed within the small community rocked by the tragedy. Speakers include Sian Corrigan, Corporate Communication Manager, Cheshire Fire and Rescue Service, and Rob Norman, USAR Officer, CFOA National Resilience.

Flooding is a major focus of the programme, as emergency services and planning officers prepare for this year's winter weather. Delegates will be given the fire command, police and local authority perspectives on how resources and community volunteers were co-ordinated during the December 2015 floods affecting much of Northern England. The Environment Agency will provide an overview of its response, recovery and learning, and the National Flood Forum will look at recovery issues and how grass roots communities can be empowered for the future.

During the lunchtime sessions on day one, emergency services will explain how they are deploying new forms of technology including drones, body worn video and social media to influence the operational response to incidents. Speakers include representatives from Surrey Police, Hampshire Fire and Rescue Service, Mid and West Wales Fire and Rescue Service and West Sussex County Council. Meanwhile the College of Policing, National Ambulance Resilience Unit and National Operational Guidance Programme will host a panel considering how the three blue light services learn and identify existing and new synergies. All sessions in The Learning Zone will be available on a first-come first-served basis, so visitors are advised to arrive in plenty of time to secure a place.

The NEC is next to Birmingham International station and Birmingham Airport as well as being directly accessible by motorway. www.emergencyuk.com