

# Police Aviation News

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Number 243 July 2016

PAR

## U.K. HEMS GO LARGE

*More units step up to larger airframes*

## FARNBOROUGH AIR SHOW

**ON THIS MONTH**

## A.L.E.A. EXPO SAVANNAH



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## EDITORIAL

It has been an interesting month. Just two weeks ago elements of the International police aviation community were meeting together on a German police air base in a move that certainly promoted cooperation between industry and their police customers. As ever that event was an unqualified success for every attendee.

One week later came Brexit, where the United Kingdom [or at least most of it] rejected continued membership of the European Union and apparently rejected all things International at a stroke. The two situations appear to sit poles apart.

As just one individual who voted 'out' of the EU and being one having perhaps every reason to 'remain' I can say that it is not as clear cut as it seems and it is certainly not a rejection of Internationalism on my part nor on the part of most who made that decision.

Business as usual and next month PAN will bring reports from the Farnborough Air Show and the ALEA Annual gathering in Georgia.

*Bryn Elliott*

## LAW ENFORCEMENT BRAZIL

RIO DE JANEIRO: Helibras has delivered PR-PMR the first of two new EC145s to the Secretariat of Public Security of Rio de Janeiro. These will form part of the intelligence system supporting the Olympic Games, which opens in the city on August 5 2016. Following production in Germany, the aircraft entered a long role fit completion period in Brazil with Helibras.

The role installation includes police tactical radio, thermal imaging, image and tactical mission console and real-time image transmission recorder. The EC145 also includes load hook, troop seats, searchlight, speakers and a helmet mounted nvg system.

Helibras is contracted to maintain the two aircraft for two years. The second aircraft is expected to be delivered this month, just in time for the Games.



FRONT COVER: Aerial view of desert town Reno, Nevada in July 2012 during the ALEA Exposition in the town. This year the event is being held this month on the other side of the USA in Savannah, Georgia. PAN will be reporting on the event and on the Farnborough Air Show the week before. Join us next month for a flavour of both events.

## CROATIA

**POLICE:** The police have taken delivery of the second of two AW139 helicopters, after receiving the first in January 2016. The two aircraft will have their primary role as border protection. Croatia has the EU's second longest land border with non-EU countries, a total of 745 miles, making it only marginally shorter than the 816 mile border between Finland and Russia. This role has enabled Croatia to benefit from extensive EU funding assistance.

The AW139 is fitted with a Trakkabeam A800 searchlight, an EO/IR turret and a winch. The helicopter c/n 31730 will become 9A-HPH in due course. The Croatian Police also operates three JetRanger, one AB212 and a pair of EC135P2 [Helihub]

## JAPAN

**TOKYO:** The Metropolitan Police of Tokyo has ordered the first two examples of the AW Trekker variant of the basic AW109 Grand New to be used in law enforcement. The Trekker is nominally a simplified 109 featuring a skid landing gear but it is still awaiting certification.

## NORWAY

**POLICE:** The lease on the former Merseyside Police EC135T2 has been extended. With their future air support needs as yet undecided Oslo approached NPAS to renew the lease on LN-OCB and this was accepted a few weeks ago subject to the completion of paperwork.

## UNITED KINGDOM

**NATIONAL:** NPAS are inviting participation in an information gathering exercise around AOC and SMS management systems. The message was sent out by them early last month and circulated within industry. Details are contained within the Bluelight Portal entry and the project expects to have a Presentation Day on July 12.

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As reported last month most of the remaining fleet of MD902 Explorers are for sale and the first, G-SYPS, has been sold. This leaves just two NPAS locations regularly flying the type — Bournemouth and Carr Gates Wakefield. In addition Humberside are still operating the type independently for another two months. Humberside are due to join NPAS on 27 September 2016 when the lease on the Humberside aircraft terminates and therefore will only require the service of NPAS aircraft for the second half of the 2016/17 financial year.

The aircraft and base will remain the responsibility of Humberside Police who will be obliged to meet the known financial penalties incurred in disposing of the aircraft back to the lessor. The aircraft flight hours have exceeded those in the terms of the lease and will need to be regularised.



The fixed wing base for NPAS will be at the Robin Hood Airport Doncaster, an international airport located at the former RAF Finningley. The programme had seen some slippage in aircraft delivery but it is currently assumed that it should still fit in with the current extended base closure plans. The slippage in respect of the delivery date for the fixed wing aircraft will result in aircraft being delivered between April 2017 and March 2018. The delay was mainly due to the delay in confirming the capital funding from the Home Office.

Although the earlier plans to replace Lippitts Hill as the London base with a new site at Elstree foundered the hunt for a new base continues with several ideas being investigated. Among those being looked at is Northolt which was also the favourite of the Metropolitan Police when they were trying to leave the site more than a decade ago. Currently Lippitts Hill is the base for the former EC145 aircraft, police communications masts and some dog activity but it is underused and likely to be even less used when the new 4G cellular based force radio system comes into service in 2017/18.



Already the local politicians are looking at what to do with the site post police operations with a heritage site among the favourite projects. There is clearly no financially viable plan for identifying even the theme for such a project let alone funding one located on what is a difficult to reach hilltop site.



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It was perhaps inevitable that those thwarted migrants stranded on the French coast in sight of the promised land that is Britain would give up the idea of stowing away in trucks or trains and start to believe they could make their way north across one of the world's busiest shipping lanes in small boats. After all, 55 years ago, the British had escaped the beaches of Dunkirk in small boats under threat from dive bombers and other nuisances so surely sailing in the dark in small boats was no big deal after all.

Boatloads of migrants are now being picked up by British rescue teams off the Kent and Sussex coast. Calais's chief coastguard says the Channel is becoming 'the new Mediterranean'. A confidential National Crime Agency (NCA) report warns that small, unpoliced ports and marinas around the country are now a wide-open back door into Britain. After many many cuts the British Border Force admits it now has just three boats to patrol 7,700 miles of coastline.

Only now is it becoming clear that ministers have axed round-the-clock surveillance flights monitoring the English Channel, despite being told the move would undermine border controls.

Home Secretary Theresa May, she who would be the new Prime Minister if rumours are to be believed, terminated the modest £4M contract with aviation firm Cobham to provide an air cover over British waters in January despite the warnings.

Cobham and its forebear Flight Refuelling Services [FRA] have quietly provided a modest sea surveillance service for decades. They apparently left the market years ago when they lost the Fisheries contract but they simply changed what they were watching and maintained a fierce silence about their covert activities with a handful of fixed wing aircraft that bore a striking similarity to the former Fisheries resources.

The Home Office now relies on air surveillance by the National Crime Agency (NCA) – but can only call on it for specific tasks, rather than round-the-clock monitoring. If nothing else there are far less resources. The NCA refused to disclose its capabilities and, as ever, Cobham would not respond to a newspapers request for comment.

In a sign of the times the UK Border Force, the organisation responsible for tackling illegal immigration, relies a charitable group of volunteers, the National Coastwatch Institution, to help it police the coast. The plan is that the volunteers provide a watch in the absence of border officers and alert authorities if they see anything suspicious. Like all volunteers they undertake the task when it suits them.

Similarly Project Pegasus the multi-agency aviation related campaign encouraging the public and law enforcement to join the fight against serious and organised crime and terrorism by reporting unusual activity around small aviation sites is putting pressure on a finite resource but not necessarily being able to fully support any feedback from it.

Surprisingly, and in the face of official disinterest, there have been successes that, if nothing else, simply serve to highlight the deficiencies.



File image



The latest NPAS EC135 conversion undertaken by Babcock at Staverton is G-POLD EC135T2+ (0300) the former G-NMID based at Butterley, Derbyshire. The ownership remains unchanged as Police & Crime Commissioner for West Yorkshire.

## UNITED STATES

**CALIFORNIA:** Vector Aerospace has completed the first of three 12-year inspections for the San Bernardino County Sheriff's Department's (SBCSD) fleet of Airbus Helicopters AS350 B3 AStar helicopters.

The SBCSD flew its second AStar to Vector's hangar in Langley, BC on June 20, and returned home with the first completed aircraft, work on which included a full Arriel 2B1 engine overhaul and a comprehensive repaint. Vector is scheduled to receive the third and final SBCSD helicopter early next year for its 12-year inspection.

**TEXAS:** There was a bit of a shootout in Houston in the last days of May. An active shooter incident occurred on Sunday, May 29 on Memorial Drive, Houston where one suspect and one civilian were killed. A lone gunman began shooting at cars in an apparently random and unprovoked attack. Three bystanders, two police officers and one possible suspect were also wounded, though none of them seriously.

According to witnesses, the attack began when a gunman walked up to a man who had just parked his car at an auto body shop and shot him in the head.

The gunman fired on the first officer to respond to the scene, riddling his car with bullets, including many that struck the windshield, at least five shots also struck a responding MD500E [N8375F] police helicopter of the Houston PD.

The officer escaped injury and called for help. A shootout ensued with arriving officers before a SWAT team member shot the suspect dead about an hour after police arrived at the scene.

The dead suspect was armed with a pistol and an AR-15 rifle. A motive for the shooting was not immediately clear.



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# AIR AMBULANCE INDIA

HEMS: Emergency air ambulances in India make small moves towards a meaningful service but the basic needs have yet to be met. The government, in the form of the Directorate-General of Civil Aviation (DGCA), is said to be working on an ambitious plan to allow helicopter ambulances to land anywhere near an accident spot — something that is not yet in place and currently requiring official clearance.

It is said that an inter-ministerial panel with officials from the Ministries of Home, Defence, Road Transport and Highways and Telecom, among others, will *soon be formed* to work out the details. For the first phase, the DGCA has laid down standards for operating the services under which ambulance helicopters can land at pre-designated and surveyed sites. The second phase, for which approvals will be required with the ministries concerned, envisages landing freedom in any open area. This places daylight flights in India at the level night flights are at in the UK.

Helicopter flights are restricted in their movements and only a recent approval has allowed helicopters to fly from point to point without air traffic control clearance in airspace below 5,000 feet. An air ambulance has to seek permission from the air traffic control for all operations, like any other flight as well the ongoing landing site restriction.

A helicopter ambulance will have two trained pilots, technical crew, and a medical professional along with life-support equipment.

According to the plan, a control room will be set up by the helicopter company that will receive information about the accidents through a toll-free number. The control room will then inform the local police to cordon off the area for safe landing. Then, the air ambulance will work like a road ambulance by either providing speedy treatment to the patient or transporting the patient to the nearest hospital.

The DGCA has received a formal request from a Bangalore-based company to run the helicopter medical emergency services. [The Hindu]

## JAPAN

Aichi Medical University Hospital has partnered with an IT firm to develop software designed to better train air ambulance crews.

The software, developed by Nagoya-based Core Corp. Chubu Company, will feature footage of doctors and nurses providing emergency care aboard the Doctor Heli air ambulances.

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It will be filmed using smartphone cameras, with the result shared with other hospitals in Japan that use the rapid-response service.

The hospital, in Nagakute, Aichi Prefecture, deployed its helicopter 317 times last year, locations for landing and patients' conditions were never the same, requiring a high degree of judgment for different situations.

Under the current system for training air ambulance staff, doctors and nurses use manikins rather than real patients. Also, helicopters are not always deployed when trainee medics are on standby, meaning they rarely gain adequate experience.

Recognizing this, the Nagoya Chamber of Commerce and Industry invited engineering firms to the hospital in January to make presentations on how they could create suitable simulators for medical activities in a helicopter.

Core Corporation Chubu Company responded to the request, started developing the system at the end of last year and completed it in March at a cost of ¥10M [US\$98,000].

The smartphone will be attached to the front of a flight suit worn by doctors and nurses aboard an air ambulance, with the camera operated remotely from a control room at the hospital.

The videos, which are filmed close to their line of sight, are sent and stored on a server in the hospital in real time.

The findings of the software training programme will be presented in a meeting organized by the Japanese Society for Aeromedical Services in Saitama Prefecture in October, with the aim of expanding the use of the system to some 50 hospitals nationwide. [Japan Times]





## UNITED KINGDOM

**NATIONAL:** There is some disquiet in the ranks of the air ambulances over the carriage of the media. There is a requirement that any persons carried aboard operational air ambulances are fully trained crew members and this includes the media and film crews. Both MAS and Babcock have decided that as a rule media cannot be carried. There are significant gains, both financial and PR, to be had from gaining TV film series and this affects most operations. The only operations currently exempt are those with their own aircraft and AOC. They can unilaterally train the media members to act as crew to overcome the requirement.

**CORNWALL:** Doctors on air ambulances are not new but equally they are not universal. Cornwall Air Ambulance has launched a two-year programme with South West Ambulance Service NHS Foundation Trust that sees doctors flying on board the county's emergency helicopter service for up to four days a week.

To facilitate the project eight Education Support Physicians (ESPs) have been recruited. All have served either in the military or in other HEMS and have a diverse range of skills; over the next two years they will work with the paramedic crew for at least three days a week to develop clinical knowledge and skills.

Over the next two years the programme will cost the Cornwall AA £200,000, just a part of the annual £3M cost of the charity funded service.

**DORSET & SOMERSET:** The air ambulance service that serves the central southern counties is now to start carrying blood products. The new development for this operation is being set up in a collaboration between the air ambulance charity, Dorset County Hospital, Devon Freewheelers, the South Western Ambulance Service NHS Foundation Trust (SWASfT) and the Henry Surtees Foundation.

Dorset and Somerset started carrying blood in late April, with an official launch event taking place at the airbase on June 9.

Of the 20 air ambulance charities across the UK, Dorset and Somerset Air Ambulance joins 9 others who now carry blood products on board their aircraft and rapid response vehicles. Dorset and Somerset Air Ambulance will carry four units of O type red blood cells, unlike many others who only car-



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**IRELAND:** In last month's edition PAN reported that an Agusta 109 had been in the province promoting the new, forming, air ambulance and that the PSNI operated a real medevac operation from North West 200 when a motor accident took place.

Out of that came allegations that the forming charity was operating beyond its remit.

Alistair Drummond a former colleague of Dr John Hinds, a major campaigner on the issue, questioned why the charity raised funds and operated flights at the North West 200 despite the official service for Northern Ireland not yet being fully in place.

Although Air Ambulance NI is expected to become the official charity partner of the new service, the Department of Health has yet to formally name who will be involved.

On Facebook Drummond claimed the promotional aircraft was used to carry a casualty at the North West 200 and queried why it was not used for other incidents during the race weekend. [Irish News]

*Ed: It would appear that the claim is a mix up, after all a helicopter is a helicopter to many and that it was a police helicopter may have gone unnoticed. The trouble being that such negative remarks may damage fundraising. The charity and the NI Ambulance Service have said they are "hoping to commence the service in autumn 2016" but as yet the new health minister Michelle O'Neill has not signed off on the proposal.*

**KENT, SURREY & SUSSEX:** The charity currently operate two MD902 Explorer helicopters from bases in Marden in Kent and Redhill in Surrey. They had originally planned to move to a green field site at the Old Hay Airfield in Kent after submitting a planning application to build a hangar near Paddock Wood to house their new AW169 helicopter. Those plans have now changed after Redhill Airfield management offered the now vacated Bristow Helicopters facility, hangar10, at the airfield at an attractive rate.

Another factor for staying at Redhill was the arrangement with the charity's aviation partner, Specialist Aviation Services (SAS).

SAS had been considering a corporate helicopter maintenance base near London and has now decided co-location with KSSA at Redhill was an "ideal fit for its future business plan".

The helicopters will continue to deploy routinely from Marden, the Charity HQ, and Redhill and the night service will continue as normal from Redhill. KSSA is in the process of acquiring sufficient extra land to allow it to expand the helipad to operate the AW169 from the Kent site by early next year.

The first AW169 is still being prepared for service at Staverton and the preparation of Hangar 10 at Redhill Aerodrome is being planned.





**LINCOLNSHIRE & NOTTINGHAMSHIRE:** The new AW169 for the charity is be registered G-LNAC (which stands for Lincs & Notts Air Ambulance Charity). The latest project is a competition to give the RAF Waddington based aircraft a name. The competition, hosted through the e-mail [helicopter@ambucopter.org.uk](mailto:helicopter@ambucopter.org.uk) requires competitors to provide a name and a 50 word reason on the choice.

The prize for the best entry is a family visit to the air ambulance base. The deadline for entries is Sunday 31<sup>st</sup> July. [West Bridford Wire]

**WALES:** The air operation looks set to become the largest air ambulance operation in the United Kingdom when it takes delivery of a fourth aircraft to commence a six month trial with an EC135 aircraft based in the Welsh Capital, Cardiff from next month.

The charity currently has a fleet of three helicopters operating from bases Llanelli, Caernarfon and Welshpool and plans to change the current EC135 fleet up to the H145. Previous expansions of service have followed on from similar extended trials so there is a good chance that a four-aircraft operation will become permanent.

The fourth service will be operational from the recently re-established Cardiff Heliport on Foreshore Road, Tremorfa.

**YORKSHIRE:** Yorkshire Ambulance Service NHS Trust (YAS) worked with the Yorkshire Air Ambulance (YAA) and commissioners to launch a new Yorkshire Critical Care Team. This will see 11 consultants in emergency medicine and anaesthesia working on the life-saving helicopter 12 hours a day, every day of the year.

The team will carry additional drugs as well as being able to perform emergency anaesthesia and life-saving surgical procedures at the scene of an incident.

YAA serves 5 million people across Yorkshire and has carried more than 6,600 people in its 15-year history, currently operates two ageing MD902 Explorer helicopters.

The first of the two new Airbus Helicopters H145 helicopters, G-YAAC, was handed over at a ceremony held at Nostell Priory near Wakefield on June 7. The machine will not enter service for some weeks as it goes through final preparation for service and crew training.

The launch event was held inside the facility although the weather outside was unexpectedly good. Both of the MD902 aircraft were also on site. The charity made full use of its local connections with the media including the high profile presence of legendary Yorkshire and England cricketer Geoff Boycott.



Both of the new H145 helicopters have been delivered from the factory in Germany but the delivery schedule remains quite long. It is expected that the first machine will be in service in September with the second being declared operational in Yorkshire early in 2017.

*The current MD aircraft are based at Nostell Priory and at RAF Topcliffe, near Thirsk although recent maintenance issues have regularly reduced available services to one aircraft and often none.*

*It all goes to plan, with its brand new manufacturer supported H145s, the YAA may well find themselves with an embarrassing surplus of aircraft hours – albeit at a price.*

## UNITED STATES

**ARKANSAS:** Air ambulance operator Air Evac EMS Inc. has reportedly said it is owed \$10M by Arkansas Blue Cross & Blue Shield (ABCBS), for medical flights provided to policyholders. The company filed a lawsuit in U.S. District Court in Little Rock to collect the money.

The issue surrounds a payment cap of \$5,000 placed on reimbursements, and Air Evac is seeking a judgement to rule that this is a violation of the essential health benefits in the Affordable Care Act. Each flight it makes in Arkansas costs about \$30,000. Air Evac claims that ABCBS will only pay a maximum of \$5,000, and the operator then seeks to collect the balance from the patient, and many are unable to pay. [Helihub]

**CALIFORNIA:** REACH Air Medical Services has acquired CALSTAR a non-profit air ambulance service based out of the Sacramento area.

REACH Medical Holdings, the holding company for the emergency air transport service, has bought California Shock Trauma Air Rescue, more commonly known as CALSTAR. Financial terms were not disclosed.

CALSTAR, located in McClellan in Sacramento County, will be turned into a limited liability company and will operate as CALSTAR Air Medical Services.

CALSTAR CEO Lynn Malmstrom and two of his top lieutenants will leave within the next year, after helping with the sale. The company, founded in 1984, has 225 employees and 14 aircraft. The helicopter fleet has been changing from a mixed fleet to being based mainly on the EC135 operating from nine bases in northern California. REACH and CALSTAR have historically provided backup coverage for each other around Lake and Mendocino counties.

REACH, based in Santa Rosa since 1987 has 40 rotor and fixed-wing aircraft at more than 30 bases in California, Oregon, Nevada, Wyoming, Montana and Colorado. It also has bases affiliated with hospitals in Texas. About 600 people work for the company.

**FLORIDA:** A new TraumaStar helicopter ambulance could be flying over the Florida Keys sooner than expected.

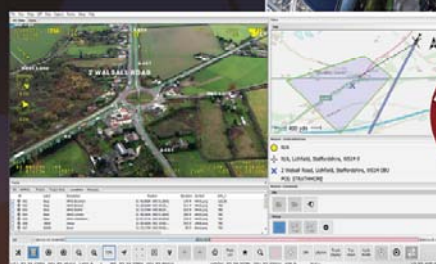
Sheriff Rick Ramsay asked Monroe County commissioners meeting in Key Largo, for a \$2.5M allocation for a possible helicopter purchase. The operation the county's aviation department, operated

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jointly by the Sheriff's Office and Monroe County Fire Rescue, was considering trying to acquire two small ambulance helicopters rather than a used and more expensive Sikorsky S-76 to replace the current 1982 S-76A N911FK.

Several options were on the table for replacing the ageing and increasingly expensive-to-maintain



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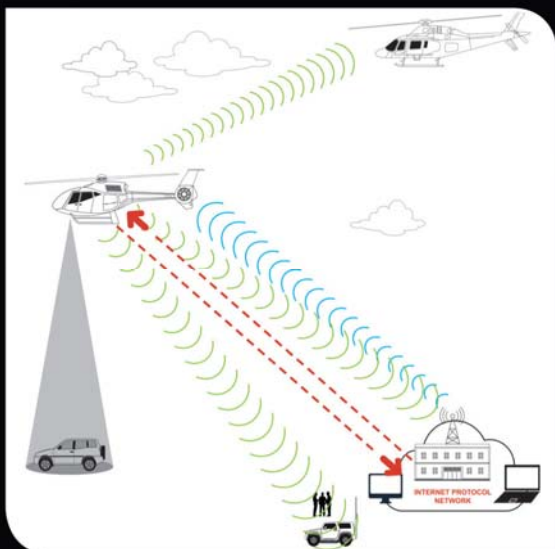


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helicopter and this came a head after Sikorsky Aircraft Corp. called with details of a 2002 Sikorsky S-76C-Plus helicopter, previously flown by as an Angel One air ambulance by the Arkansas Children's Hospital, now available for purchase after being traded in at an attractive price. It was 20 years younger than the existing airframe acquired pre-owned in 2006.

A team of aircraft technicians from Monroe County spent three days in Poughkeepsie, N.Y., going over the helicopter to inspect the airframe and other mechanical aspects.

TraumaStar flew about 400 flights to mainland hospitals last year but is on track for 500 flights this year - about a third for accident victims, the balance for emergency transfers. [KeysNet]

**PUERTO RICO:** Puerto Rico's only active air ambulance company announced on June 7 that it has suspended its services, blaming a multimillion-dollar government debt amid a deepening economic crisis that has affected basic services in the U.S. territory.

Aeromed said in a statement that it has been negotiating with Puerto Rico's government for nearly three years, but that health officials last week rejected a deal to make a minimum payment of \$4.4M, a portion of a much larger overall debt.

Aeromed has operated for the past 22 years but fees paid per flight have remained the same for more than a decade and were in any case in arrears.

A growing number of companies in Puerto Rico are suspending services because of mounting government debt amid a 10-year economic slump.

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# SEARCH AND RESCUE

## MEDITERRANEAN

M.O.A.S: Professional search and rescue charity Migrant Offshore Aid Station (MOAS) will enhance their life-saving efforts in the central Mediterranean this year by deploying two ships, two drones. The drones will expand their patrolling area to cover what is called the 'dead zone': the fatal few miles from the Libyan shore.

MOAS launched its third season of rescues in the Central Med on June 6<sup>th</sup>, with the 40-metre ship *M.Y. Phoenix*, which has just returned from her thwarted mission in South East Asia, and the 52-metre *Responder*, a new offshore emergency response and recovery vessel, that has also just arrived from the Aegean after saving almost 2,000 refugees.

The two vessels will work in concert with the two S-100 Schiebel Camcopters to cover huge swathes of Mediterranean waters. The remotely piloted aircraft stay aloft for about 6 hours, cover 97 nautical miles of ocean at 100 to 241km/h and send back high resolution images using sensitive day or night MX-10 optics.

After three years of constant focus on the perils of humans at risk at sea, MOAS predicts that the situation in the central Mediterranean is expected to be much different this year.

Key differences for 2016 will be: the hardened stance of Europe towards the influx, the increased violence in Libya and Syria and a general lack of choices for people desperate to find safety or hope will cause further hardship for millions of asylum seekers.

MOAS began as a specialized Search and Rescue NGO in 2014 with Search and Rescue and medical professionals on board. MOAS works with all stakeholders and is the only charity accredited by the IMRF to conduct professional SAR in the Mediterranean.

So far, the Migrant Offshore Aid Station has saved the life of over 13,000 people. [www.moas.eu](http://www.moas.eu)



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## NORWAY

**SAR:** As illustrated last month the first AgustaWestland AW101 Norwegian All-Weather SAR Helicopter was unveiled by Anders Anundsen, Norway's Minister of Justice and Public Security, during a ceremony held at Leonardo Helicopters' Yeovil facility in south-west England.

Minister of Justice and Public Security, Anders Anundsen (on right in photo with Leonardo Helicopters CEO Daniele Romiti), said "This roll out ceremony marks the accomplishment of a very important milestone. The helicopter that will be an important and crucial resource for the Norwegian rescue service is now complete and ready for testing. I am very pleased with the effort made by Leonardo Helicopters so far."

Aircraft deliveries to the Royal Norwegian Air Force will start in March 2017 and continue through to 2020. As part of the contract, a fifteen year "turnkey" support solution will be delivered, comprising spares, technical support and training services.

The aircraft is equipped with an advanced SAR equipment package including Leonardo-Finmeccanica's newly-launched Osprey AESA radar. Based around a flat-panel antenna design, Osprey is the world's first lightweight airborne surveillance radar to be built with



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no moving parts and will provide a 360 degree field of view for crews. Other equipment includes a four-axis digital Automatic Flight Control System (AFCS), two rescue hoists, searchlight, electro optical device, mobile telephone detection system and a fully integrated avionics and mission system. Additionally, the aircraft is equipped with advanced systems that enhance flight safety including a Laser Obstacle Avoidance System (LOAM) and Obstacle Proximity LIDAR System (OPLS) which provide warnings of wires and other obstacles.

The event was centred on the second AW101 airframe for Norway. The yet-to-fly helicopter is the first to be painted, the first machine [above] was also part of the day and involved in flying Anders Anundsen and a Norwegian media team after the ceremonial part of the day.

*Ed: It was clear that the ongoing name changes have yet to settle. The products coming out of the Yeovil factory still appear to use all of the names – AgustaWestland, Finmeccanica and Leonardo - but it seems that the Finmeccanica will go. The name changes are new and the workforce have yet fully understand them so if they are confused I will not attempt to resolve the situation!*



Back up displays at the event included tables from FLIR Systems and Smith Myers.

The latter were showing a 'unique' cell phone based SAR device able to find people buried under the snow. Mind you not so unique after all as there was another company, Centum, exhibiting an equally 'unique' device at PAVCon this year.

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# INDUSTRY

At the end of May it was announced that the world's first fully integrated detect-track-disrupt-defeat **anti-UAV Defence System (AUDS)** developed by a trio of British companies including Blighter Surveillance Systems, Chess Dynamics and Enterprise Control Systems has been selected by the US FAA for evaluation at US airports as part of its Pathfinder Programme. The local US integrator and facilitator is Liteye Systems Inc.

This FAA research programme is designed to evaluate technologies that can be used to detect and identify unauthorised unmanned aerial vehicles (UAVs) or drone flights near airports. To this end, the FAA has signed a Co-operative Research and Development Agreement (CRDA) with Liteye Systems, the AUDS team's manufacturing and integration partner in North America, to test AUDS.

The FAA receives more than 100 reports from pilots and others who spot what appear to be unmanned aircraft flying too close to an airport or manned airplane each month. It has become a serious safety concern for the agency and a potential security issue for the Department of Homeland Security (DHS).

The FAA contacted the team following the success of AUDS at US Government sponsored counter UAV trials at the end of 2015. These trials confirmed that the production system was able to detect, track, disrupt and defeat a wide range of micro, mini and larger unmanned aerial vehicles (UAV) or drones – even on unscripted sorties.

The AUDS counter-UAV system can detect a drone six miles (10km) away using electronic scanning radar, track it using precision infrared and daylight cameras and specialist video tracking software



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before disrupting the flight using an inhibitor to block the radio signals that control it. This detect, track, disrupt, defeat process is very quick and typically takes 8-15 secs. The AUDS team has now carried out over 400 hours of 'live' testing in government related trials against more than 400 flown sorties of group 1 UAVs.

The system can also assist airport authorities to track down the UAV pilots for prosecution by providing evidence (video footage or radar tracks) to the relevant authorities and yet integrate 'friendly assets' into the AUDS platform – for example a 'friendly' drone – to extend the threat detection and situational awareness capabilities of the system and to help capture rogue drone pilots. [www.enterprisecontrol.co.uk](http://www.enterprisecontrol.co.uk)

*Ed: AUDS was shown at the 2015 PAVCon but the clash of dates meant that this year they took it to the similarly dated military show Eurosatory - the world's largest international land and air/land defence and security exhibition.*

*Clearly PAVCon's loss after hosting ECS for so many years but quite understandable.*

**Northrop Grumman's** LCR-100N hybrid navigation unit has been chosen by Beechcraft for its popular King Air turboprop platform. The LCR-100N provides critical navigation data to the autopilot, extended navigation capability in extreme latitudes, coasting capability and other key features that help the aircraft achieve required availability and precision. The LCR-100N will be certified and applied first to the Special Mission aircraft within the King Air series.

The unit features gyro-compassing and hybrid navigation, including ARINC outputs, which are essential for Required Navigation Performance flight operations. The LCR-100N, in combination with the flight management system, supports operations in extreme northern and southern latitudes and allows for coasting through satellite outages. [www.northropgrumman.com](http://www.northropgrumman.com)

On May 26 **Enstrom** resumed flight testing of the TH-180 with the second prototype N181TH. The TH-180 took to the air under control of Enstrom test pilot and Senior Technical Fellow, William Taylor. Taylor took the aircraft through a standard production-type acceptance, including all the hover and forward flight checks such as tracking and rigging checks.

Enstrom's third TH-180 flight test vehicle is in production with completion expected this summer. With two aircraft flying, Enstrom is focused on an accelerated certification flight test schedule.

**CONTROP Precision Technologies Ltd.**, has won several orders for its DSP-HD - High Definition EO/IR camera payloads for helicopter upgrades. The systems were recently supplied to several major customers including installation on United Nations (UN) Mi-17 helicopter, on the Mi-24 helicopter, on the Bell 407, and on the Eurocopter EC-145 helicopter. Furthermore, the CONTROP QUAD-HD High Definition Multi Sensor Payload was also supplied recently to an undisclosed Asian customer to be installed on Helicopters. The payload includes a Thermal Imaging Camera with CONTROP's proprietary continuous zoom lens and image enhancement features, a Full High Definition (HD) Day Zoom Camera, Full HD Daylight Spotter Channel and optional Eyesafe Laser Range Finder (LRF) or optional Laser Pointer. Alternatively, the system may be offered with the unique SWIR long range camera, in place of the Full HD Daylight Spotter Channel.



One of the new exhibitors at this year's PAVCon in Germany was a roof markings manufacturer that has seen recent acceptance in both Europe and the USA.

Thermal roof markings are specified by the Home Office for use on UK Police vehicles, but the patented product was not commercially available until PVL secured an exclusive licence with the developers, QinetiQ and made available as Mirage™ under an exclusive, global licence.

Mirage™ is now being trialled or used by emergency services around the world, including Turkey, Czech Republic, UAE, Australia, USA and Switzerland. Samples and information were taken from PAVCon to further extend this use in the industry.

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Sentient Vision Systems, is excited to announce the signing of an exclusive global distribution agreement with Insitu for the ViDAR (Visual Detection and Ranging) software for unmanned systems within the tactical UAS weight class.

Insitu will incorporate the ViDAR payload into its fleet of unmanned systems, beginning with its ScanEagle unmanned aircraft. The ViDAR software is built into the ScanEagle payload by Hood Technologies.

ViDAR is a wide area autonomous detection system for electro-optic imagery in the maritime domain enabling coverage over 80 times the ocean's surface compared with existing electro-optic sensors. ViDAR transforms the utility of tactical UAS's by giving them a 'find' function for the first time. Operators typically must rely on larger, more expensive aircraft to detect objects in the ocean; ViDAR provides the find capability in a smaller, more cost-effective payload.

The inability to find objects on the ocean's surface has placed a significant limitation on the utility of tactical UAS that ViDAR overcomes. Fast boats, rubber rafts or even a person in the water – ViDAR finds them all – and does so at a fraction of the size and cost of existing technologies.

ViDAR fits a modular slice on ScanEagle that comprises a large backplane digital video camera that continuously scans the ocean in a 180-degree arc in front of the air vehicle. Sentient's ViDAR software then autonomously detects any object on the Media Release surface of the ocean, providing the ground control station with an image and location coordinate of each object detected in real time. The primary sensor can then be cross-cued to the object by simply clicking on the image. In demonstrations, ViDAR has autonomously detected a fishing vessel at 14 nm, a fast boat at more than 9 nm and even the spout of a whale at 1.5 nm from the aircraft.

**Babcock** are meanwhile clearing out their stock of old airframes. Three BO105 airframes in long term storage at Staverton have now been cancelled from the UK register and transported to Southampton en-route to a new owner in the USA. The three 105s, G-BUXS, G-CDBS, G-NDAA were each last used as air ambulances and they are now taking up the marks N191SJ, N192SJ and N193SJ for San Juan Aviation, Arlington WA.



San Juan Aviation was founded in 2001 by Dane Armstrong to provide helicopters for lease and sale and to provide helicopter airframe parts, dynamic components, engine and engine accessories for sale or exchange. They are located at the Friday Harbor Airport approximately 65 miles Northwest of Seattle, Washington and at the Arlington Municipal Airport in Arlington, Washington.

Last month **CarteNav Solutions Inc.** announced that their AIMS-ISR® software has been selected by Babcock Mission Critical International for their seven-year air support contract awarded by Police Scotland.

Police Scotland was formed on April 1, 2013 with the merger of eight regional police forces in Scotland, and is the second largest police force in the UK after the Metropolitan Police.

The news sees CarteNav continue to grow its Airborne Law Enforcement customer base, with their AIMS mission system software being used by police forces in Europe, South America, and South East Asia. AIMS-ISR® will be hosted on **Britannia2000's** Compact Airborne Mission Computer (CAMC) and will be interfaced with a number of peripherals which will help to reduce operator workload and improve overall mission efficiency. The software will also be optimized for multiple interfaces allowing for collaborative working between operators and other flight crew.

**S.A.F.E. Structure Designs** has been awarded a contract to design, engineer and manufacture custom "Safety First" hangar equipment for the MH-60 Jayhawk located at The United States Coast Guard's Air station in Clearwater, Florida. The custom parts racks, cowling racks, blade racks and work tables were designed for use when performing both routine maintenance and complete overhauls on the Jayhawk, and can be used on all models of the Black Hawk.

S.A.F.E. is expected to deliver the custom hangar equipment by late October.

**Scandinavian Avionics A/S** is participating in NATO's Special Group to discuss the future drone technology. They have been testing and demonstrating "sense and avoid" collision-technology to the NATO Group - 40 global companies represented by 67 experts.

Scandinavian Avionics and Integra Aerial Services has established a drone office in HCA Airport in Odense - the Danish test centre for drone technology.

*Ed: It may be noteworthy that the announcement stated that Scandinavian Avionics A/S was assuming that it might still take up to ten years to develop an acceptable sense and avoid system.*

**Viking Air Limited** ("Viking"), the manufacturer of the world-renowned Twin Otter, a former DHC product, has acquired the amphibious aircraft programme from Bombardier.

The amphibious aircraft include the Bombardier CL-415 water bomber and its variants, as well as the earlier CL-215 and CL-215T versions. The Bombardier 415 is the aviation industry's benchmark amphibious aircraft and the backbone of firefighting missions around the globe. Designed and built in Canada with a heritage that dates back almost 50 years, it is the only western aircraft purpose-built for firefighting.

The transaction will see Viking acquire the



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Type Certificates (manufacturing rights) for all variants of Bombardier's amphibious aircraft, and assume responsibility for product support, parts and service for the fleet of some 170 water bombers in service with 21 operators in 11 countries around the world. This follows Viking's successful model of acquiring, supporting and sustaining utility aircraft including the Twin Otter Series 400 aircraft.

Viking will support the worldwide amphibious aircraft fleet from an additional new 50,000 square foot facility located near Calgary Airport. Viking employs approximately 88 people in Calgary and more than 330 at its headquarters and facilities in Victoria and expects to add up to 40 people to its workforce in Victoria and Calgary.

Viking already has an existing 70,000 square foot facility at Calgary Airport and it will be repurposed to accommodate existing Twin Otter activities, as well as the addition of the amphibious aircraft.

The amphibious water bomber was originally developed by Canadair in the 1960s, and has its origins in flying boats used in World War II. The original version, the CL-215, had its maiden flight in 1967 and went into production in 1969. The aircraft was later advanced by Bombardier into the 415 which was introduced in 1994.

While primarily a firefighting aircraft, these have multi-mission capabilities, including for uses like maritime patrol, and search and rescue.

Viking's acquisition of the amphibious aircraft program from Bombardier builds on a long history between the two companies. Viking's collaborative relationship with Bombardier began with spare parts manufacturing for the Beaver and Otter aircraft, growing until Viking became a key supplier of structural sheet metal parts and assemblies for the Twin Otter as well. Bombardier's Customer Service Centre for out-of-production de Havilland aircraft was transferred to Viking in 2005, allowing Viking to work directly with operators for supply of new parts and technical support, and in 2006 Viking acquired the Type Certificates (manufacturing rights) from Bombardier for the Twin Otter and all out-of-production de Havilland aircraft. In 2007, Viking brought the Twin Otter Series 400 into production. Viking has booked sales of more than 150 new aircraft, with its 100<sup>th</sup> aircraft scheduled for delivery in July 2016. [www.vikingair.com](http://www.vikingair.com).



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**BIRD Aerosystems** specializes in the developing and deploying of Airborne Missile Protection Systems (AMPS) and Airborne Surveillance, Information and Observation (ASIO) solutions. The company will showcase the newest configuration of the Airborne Missile Protection System, AMPS-MV, which will be installed on the MI-8 Helicopter of Ukrainian Helicopters at Farnborough International Airshow.

BIRD Aerosystems, will present the AMPS-MV missile protection system which provides the most enhanced protection for military and civilian aircraft against the growing threat of ground to air missiles (MANPADS). The AMPS system was developed in cooperation with AIRBUS Defence and Space and is installed in over 2,000 aircraft and provides more than 85% of the global market outside of the United States.

AMPS-MV is based on a patent concept implemented into the Missile Approach Confirmation Sensor (MACS). MACS performs confirmation of suspected incoming missile threats and reduces the system FAR to practically zero enabling optimal deployment of counter-measures and/or a DIRCM system for ensuring highest aircraft survivability.

By achieving a practical zero FAR, the AMPS-MV complies with the European Aviation Safety Agency (EASA) and Federal Aviation Administration (FAA) civil aviation regulation procedures and is uniquely capable of being installed on both civil and military aircrafts.



**FLIR Systems, Inc.** has acquired Armasight, Inc., a leading developer of precision sporting, hunting, and military optics products, for approximately \$41M in cash.



Armasight, based in San Francisco, is a global leader in night vision, thermal, and daylight imaging products for hunters, outdoor enthusiasts, law enforcement, and military customers. Armasight develops and distributes a wide range of rifle scopes, spotting scopes, binoculars, goggles, and illuminating tools that improve safety and the enjoyment of the outdoors as well as enable military users to detect, recognize, and identify targets from extreme ranges at any time of day or night. The acquisition will combine FLIR's existing lines of Personal Vision Systems and Thermal Weapon Sights with Armasight's products thus providing FLIR the ability to better serve hunters, wildlife enthusiasts, police, and military customers with advanced day and night capabilities. The combined business line will be named FLIR Outdoor and Tactical Systems™ and will be reported within FLIR's Surveillance segment.

**Dallas Avionics** plans to demonstrate a PowerSonix PS-SPK-300 and PS-AMP 800 public address system at the Airborne Law Enforcement Agency (ALEA) annual convention in Savannah, Georgia, from 16:10 to 16:30 prior to the Pig Picking July 21, 2016.

Savannah Police Department Chief Pilot Scott Yackel will be flying the department's MD500 aircraft

equipped with the PowerSonix equipment. The public address system will be playing a pre-recorded loop to show the power and sound quality of the system.

"The Powersonix systems are high quality systems that provides law enforcement officials with the ability to amplify their voice over the loud noises in urban settings," said Dallas Avionics Southeast Regional Salesman Todd Enloe. "We appreciate the people of Savannah and the Savannah Police Department for demonstrating the quality of this system at ALEA for us."

Dallas Avionics will have several Powersonix demonstration models including the latest (MODEL NUMBER) and other vital law enforcement communication equipment in the ALEA exhibit hall booth number 221 for attendees to see.

*Ed: PAN and PAvCon will have a booth at the show. Look out for us the 2016 ALEA Expo in Savannah, GA. You will find us 'Police Aviation Research' in Booth #438.*



From commercial and military aircraft to helicopters and space systems, **Airbus Group** will be presenting its wide range of products and technologies at the Farnborough International Airshow, which runs from 11 to 17 July 2016.

Two Airbus test aircraft, an A350 XWB and an A380, will be on static and flying display as will static park an A400M military freighter alongside two C295W aircraft, one from the Portuguese Air Force and one featuring air to air refuelling equipment.

In the helicopter sector a twin-engine H145 will be on static display, representing Airbus Helicopters' most advanced rotary wing offering, including the latest engines and Helionix advanced avionics suite.

It was supposed to be a secret but Airbus has already announced that this airframe will be the second example of the H145 for the Yorkshire Air Ambulance. This will be officially handed over at a public ceremony on Wednesday, July 13 and will be Airbus Helicopters' key product on display at the show. Airbus Helicopters will highlight its UK research activities at the UK Technology Showcase with an exhibit demonstrating blade dynamics at the Aerospace Technology Institute stand in Hall 3. Airbus Defence and Space will showcase its products using virtual reality (VR) cockpits in the Pavilion and in the Space Zone as well as the static park.

Late last month Portugal's Minister of Internal Administration Constanca Urbano de Sousa requested Russia's **Minister of Emergency Situations** to service the country's fleet of six ten-years old Ka-32A11BC helicopters. The Kamov's are mainly used for fire fighting.

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# ACCIDENTS & INCIDENTS

**29 May 2016 MD Helicopter MD500E N8375F** Houston Police Dept., struck by gunfire while attending a fatal shooting incident in Memorial Drive, Houston.

**2 June 2016 Airbus Helicopters EC135** Air ambulance of SMURD Romanian Air Ambulance. The helicopter was operating a flight from Iasi, Romania to Vulcanesti, Moldova to collect a patient for transport to a hospital in Chisinau and was operating over the village of Haragas, Moldova in foggy conditions when it crashed killing the four occupants. A last sighting suggested they were operating low under the overcast. The four people who died in the helicopter crash were Romanian pilot Doru Gavril, 53, having over 4,180 flight hours on helicopters his co-pilot Voicu Socae, doctor Mihaela Dumea, and nurse Gabriel Sandu. The pilot and co-pilot worked for the Interior Ministry while the doctor and nurse worked at the Sfantul Spiridon Emergency Hospital in Iasi. The helicopter was performing mission in Moldova Republic based on an agreement between Romania's and Moldova's Governments, which had been signed in 2014. [Media]

**3 June 2016 Bell 407 N4999 [53323]** Air ambulance of Welmont Medical, operated by PHI Air Medical, was dispatched to Highway 91N Mountain City, Johnson County Tennessee to transport a patient to the hospital for injuries sustained in an auto accident at the junction of Cold Springs Road. Upon lift-off with the patient the helicopter reached about 80 to 100 feet in the air and the engine failed. The Bell plummeted to the ground in a cloud of blue smoke. The skid gear collapsed and the pilot was injured. The on-demand air medical flight was conducted under the provisions of 14 Code of Federal Regulations Part 135. Visual meteorological conditions prevailed and a company flight plan was filed for the flight that originated from the parking lot; destined to Johnson City Medical Center Heliport (TN91), Johnson City, Tennessee. During initial climb, about 125 feet above ground level, the pilot heard a loud "bang" that was accompanied by a left yaw and rapidly increasing measured gas temperature. The pilot rejected the climb and set for landing immediately but had to manoeuvre the helicopter right to avoid ground personnel, level the helicopter with cyclic control, and used all available collective to cushion the landing. [Media]

**8 June 2016 helicopter** Air ambulance of EagleMed made an unscheduled landing in Marquette Kansas after an emergency light went on. The air ambulance was transporting a patient to Wichita when the light came on. The pilot brought the helicopter down safely at the Marquette rodeo arena, and another helicopter was sent there to take the patient on to Wichita.

## FLIGHT SAFETY

Poor weather can often make the operation of rescue helicopters a highly risky business, and sometimes even impossible. A new helmet-mounted display, developed by researchers at the Technical University of Munich (TUM), may in the future be able to help pilots detect hazards at an early stage, even when their visibility is severely impaired: the information required to do this is created in an on-board computer and imported into digital eye glasses. A new study has shown that this augmented reality improves the performance of pilots.

The new technology is still in the research stage and mainly being progressed via a flight simulator with Alpine foothills simply a projection, the pilot a TUM



engineer rather than a qualified aviator.

TUM state with confidence that is all you need to demonstrate the possibilities of augmented reality: the rotor purrs, the cockpit vibrates, clouds approach and obscure the view all without moving. The head-mounted display paves the way with green lines representing the outlines of mountains and houses. A red outline in between depicts wind turbines, construction cranes and high buildings. The goal at the Institute of Helicopter Technology is to increase safety for pilots using augmented reality by developing software that combines terrain information with sensor readings that can be taken during a flight. Light Detection and Ranging, LIDAR for short, has proved especially useful. All of the data is processed on-board and projected directly to the see-through head-mounted display. This allows the pilot to not only see what he can detect with his own eyes, but also the digitally-generated outlines of the landscape and potential obstacles. Furthermore, flight data, such as speed, altitude, position and course, can also be displayed. In addition, a head-tracking system ensures that the projections adjust to the pilot's line of sight – depending on whether he is looking forward, downward or out the side of the cockpit.

The TUM researchers conducted a study with 16 professional helicopter pilots. They were allowed to test the new head-mounted display during various simulator flights. The engineers recorded how the participants flew and queried them afterward on their stress symptoms. It was determined that for ranges of sight below 800 metres the pilots benefited measurably from the terrain and flight data displayed. They flew more quickly and more safely than without the head-mounted display, and felt that the flights had been less demanding both physically and mentally.

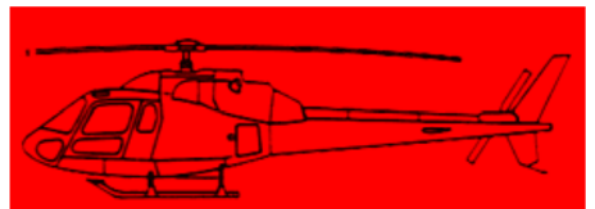
It may take some time before pilots benefit from this in daily practice: the collection, evaluation and projection of the data must first be tested in flight.

Technical University of Munich (TUM) is one of Europe's leading research universities, with more than 500 professors, around 10,000 academic and non-academic staff, and 39,000 students. Its focus areas are the engineering sciences, natural sciences, life sciences and medicine, reinforced by schools of management and education. It has a campus in Singapore as well as offices in Beijing, Brussels, Cairo, Mumbai, San Francisco, and São Paulo. [www.tum.de](http://www.tum.de)

**Airbus Helicopters** has included crash-resistant fuel systems as standard equipment for EC130 T2 helicopters delivered in the United States since the type certificate was approved on July 30, 2012. As of March 2015, Airbus Helicopters decided to do the same for newly manufactured AS350 B3e helicopters delivered in the United States.<sup>6</sup> The manufacturer is also developing a retrofit kit for existing AS350 B3e and EC130 B4 helicopters already in operation, with completion and availability to owners and operators planned for early 2016.

A retrofit kit for similarly designed variants, including the AS350 B2 and AS350 B3, is also being developed with completion of the AS350 B2 retrofit kit also planned for this year. The NTSB is concerned that the FAA's and EASA's approval for retrofit kit installation would not be prioritized because it is outside the scope of airworthiness. The NTSB concludes that the availability of an approved retrofit kit to install a crash-resistant fuel system into existing AS350 B3e and EC130 B4 helicopters would assist owners and operators in mitigating the demonstrated safety risk of post-crash fires in survivable accidents.

*Ed: This is a situation created by circumstance. The AS350 is now a very dated but successful design from the mid-1970s and most of the structure is anything but crashworthy. The attempts by Eurocopter/Airbus to improve the crash survival characteristics of the original Aerospatiale design included crash worthy seating that has clearly worked well. The problem, or part of it, is that crews are now surviving the initial impact but dying in the resultant inferno. The new tanks may go some way to mitigate that problem but cannot fully meet the JAR design requirements that place fuel under rather than behind the cabin.*





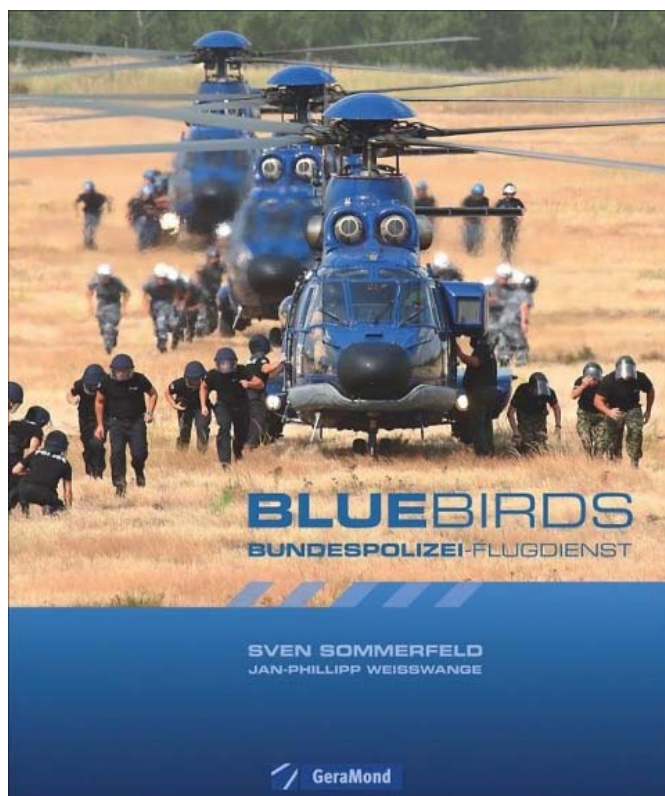
## BOOK

Having become an owner of a copy of this book under very pleasing circumstances at the recent PAVCon Police Aviation Conference in Germany I may be swayed as to its contents so perhaps I shall avoid any critique at all! BLUEBIRDS – Is a superb visual photographic review of the German Federal Police Air Support by Sven Sommerfeld [Author] and Jan-Phillipp Weisswange [Photographer] over a period of seven years.

An original German language published by [GeraMond Verlag](#) also available in English.

Images of the Federal police interspersed with a few of police of the individual state police aircraft undertaking day and night security, air rescue, disaster relief, transportation and public safety are backed up with introductory pages and long captions explaining what Bundespolizei aviation formations are about.

This is a book of its time that makes no attempt to pring up the historical background but gives the reader a set of striking visual insights into the everyday work, the structure and technique of one of the largest organisations of its kind.



192 Seiten, ca. 200 Abbildungen, Format 22,9 x 27,2 cm, Hardcover

ISBN-13: 978-3-7654-7391-3 at the unit 35 Euros

ISBN 978-3-7654-7392-0 [the English edition] Both versions can be obtained through Amazon and other Internet providers in both languages at around 35 Euro/£26 [iGeraMond Verlag](#)

## MOVE ALONG THERE

A 'mind how you go' story this month. We all know about ITAR restrictions [or do we?] but even the Australians have their own version called DGSGL. In this instance it seems that one Oz company persistently failed to take notice of both warnings and prosecutions and is paying the price!

West Australian manufacturing company, Cyber Technology Pty Ltd, has been fined \$16,000 for attempting to export goods controlled under the Defence and Strategic Goods List (DSGL) without a permit. The sentence was handed down on June 28 in the Perth Magistrates Court and follows an earlier conviction for a similar offence. On 29 August 2014 the company was found guilty of attempting to export a prohibited item. The company was ordered to forfeit the goods, worth \$80,000, and received a 12 month good behaviour bond with a \$5,000 surety.

On 9 January 2015 a Cyber Technology Pty Ltd export was examined and was found to contain an unmanned aerial vehicle, a controlled item on the DSGL. No permit had been sought for the export, as is required.

On 10 August 2015 a further Cyber Technology Pty Ltd export was examined and was found to contain two forward looking infrared cameras, also a controlled item for which no export permit had been obtained.

Goods on the Defence and Strategic Goods List require export permission, otherwise they are a prohibited export under Regulation 13E of the Customs (Prohibited Exports) Regulations 1958 (Cth).

<http://www.cybertechuav.com.au/>



## EVENT NEWS

11-17 July 2016. Farnborough International Airshow [FIA]. Farnborough, Hampshire.

[www.farnborough.com](http://www.farnborough.com)

18-23 July 2016 ALEA Annual Conference & Exposition. Savannah, Georgia. [www.alea.org](http://www.alea.org)



## LATER THIS YEAR

Helitech International has announced this year's event schedule is shaped to give visitors more flexibility to tailor their own programme and get the most out of the three-day event that will run in association with the European Helicopter Association (EHA) from 11-13 October in Amsterdam.

The show will provide members of the global rotorcraft community with the chance to discover new business opportunities and identify solutions that will enable them to enhance their services and tap into new growth areas.

Responding to feedback from exhibitors and visitors, the programme for 2016 will be made up of a variety of concise and content-rich sessions for attendees to drop in and out of. This will allow attendees the flexibility to build their own custom programme and make the most out of their time at the exhibition.

2016's seminar and workshop programme will centre around the return of the highly successful Business Leaders Forum, which will take place on the morning of Wednesday, 12 October. It will feature a panel of leading industry figures, who will discuss key issues the rotorcraft industry is currently facing. Last year's panel included Jim Payton, V.P. Customer Business, Civil Helicopters & Light Turboprops Rolls-Royce Corporation, Glenn Isbell, Senior Vice President Customer Support and Services, Bell Helicopters, David Balevic, Senior Vice

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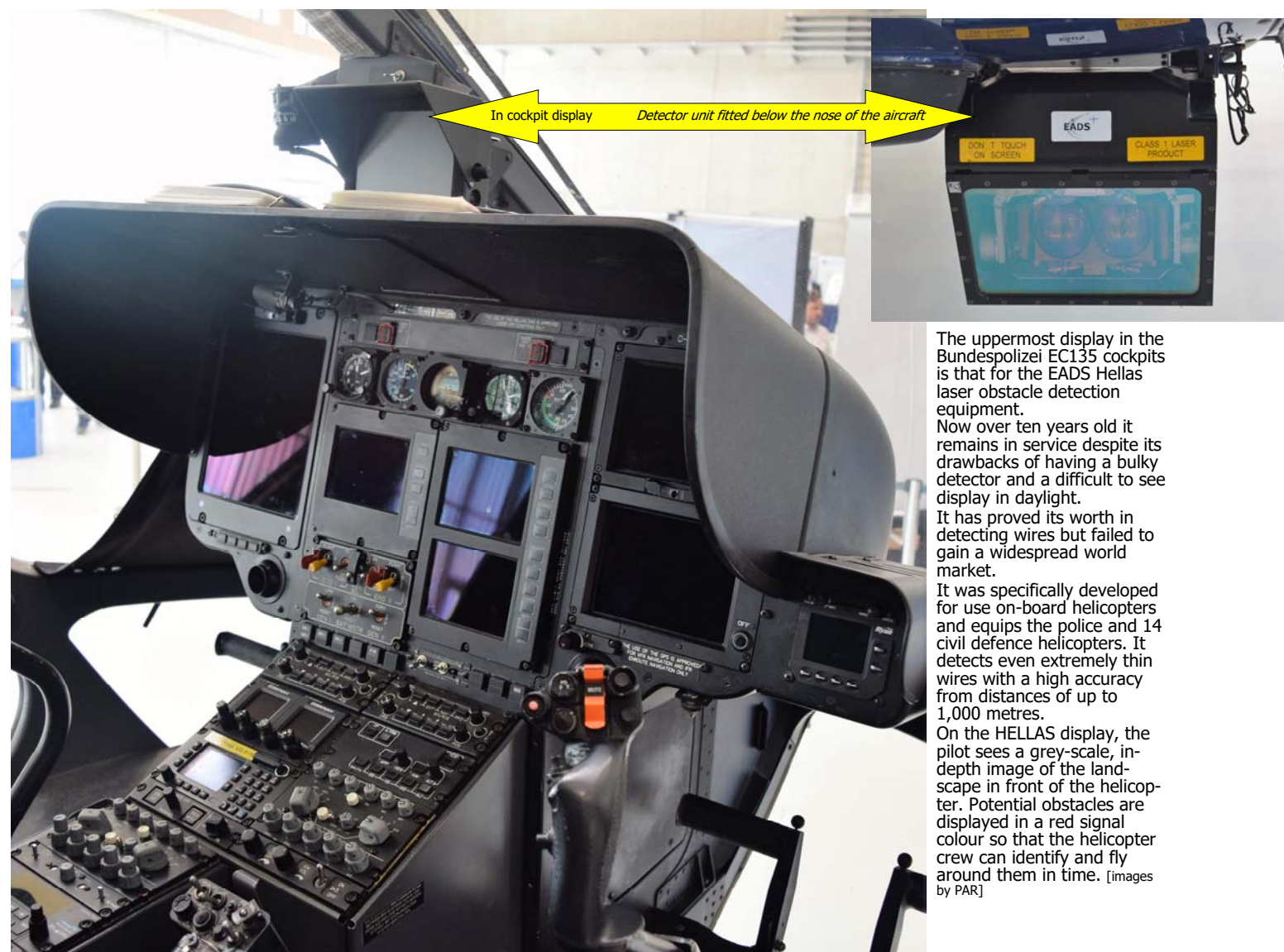
President, Engineering & Operations, CHC and Mike Platt, Chief Executive Officer, Lease Corporation International.

Networking opportunities will continue to be a core focus, with an industry reception for all exhibitors and visitors taking place on the evening of Tuesday, 11 October. Co-hosted with RAI Amsterdam, attendees of the show are invited for drinks and canapes to continue conversations from the exhibition floor in a less formal environment.

The European Helicopter Association's (EHA) Rotorcraft Seminars will take place on Tuesday, 11 October. Covering the updates on regulations in the civil aviation industry and findings from new projects. <http://www.helitechinternational.com/whatson>.

21 August 2016 World Helicopter Day. World Helicopter Day aims to raise awareness of the contributions that helicopters make to our society and celebrate the diverse range of people that design, fly and support them. The day is held on the 3rd Sunday of August each year. Throughout the world every day there are people relying on helicopters for rescues, disaster relief, transport, firefighting, medical transfers, powerline maintenance, tourism, agriculture and many more roles. There are an estimated 56,200 helicopters worldwide and the industry employs more than 500,000 people. <http://worldhelicopterday.com/>

1-2 September 2016 Commercial UAV Show, Suntech Centre, Singapore. A conference designed to bring together commercial communities to learn and see how UAV's can help them save money, time and lives. The co-located exhibition will showcase the capabilities and applications of UAV's, from surveillance and monitoring to surveying and delivery and will attract some of the world's leading UAV manufacturers and their suppliers. In 2016 the show will be run alongside two complimentary events: The IoT Show Asia and The Smart Machines Show Asia, together creating the Emerging Technology Show 2016. Event run by Terrapinn. [www.terrapinn.com](http://www.terrapinn.com) [Download the brochure and find out more.](#)



In cockpit display

Detector unit fitted below the nose of the aircraft

The uppermost display in the Bundespolizei EC135 cockpits is that for the EADS Hellas laser obstacle detection equipment.

Now over ten years old it remains in service despite its drawbacks of having a bulky detector and a difficult to see display in daylight.

It has proved its worth in detecting wires but failed to gain a widespread world market.

It was specifically developed for use on-board helicopters and equips the police and 14 civil defence helicopters. It detects even extremely thin wires with a high accuracy from distances of up to 1,000 metres.

On the HELLAS display, the pilot sees a grey-scale, in-depth image of the landscape in front of the helicopter. Potential obstacles are displayed in a red signal colour so that the helicopter crew can identify and fly around them in time. [Images by PAR]



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