

# Police Aviation News



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PAR

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## - FUTURE GROWTH

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## EVENT REPORTS:

## DSEi / EMERGENCY SERVICES

PAN—Police Aviation News is published monthly by POLICE AVIATION RESEARCH, 7 Windmill Close, Honey Lane, Waltham Abbey, Essex EN9 3BQ UK. Contacts: **Main:** +44 1992 714162 **Cell:** +44 7778 296650 **Skype:** BrynElliott **E-mail:** [editor@policeaviationnews.com](mailto:editor@policeaviationnews.com)

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# LAW ENFORCEMENT

## CHINA

**NATIONAL:** Liu Daolin, deputy director of the Ministry of Public Security's police aviation management office, has predicted that police authorities across China will double the size of their helicopter fleets within five years.

He states that there are 28 police helicopter squads in 18 provincial-level regions on the Chinese mainland, and they have a total of 47 helicopters.

"The size of existing police helicopter fleets is usually small and their operational capability is weak, leading to less than 10% of mainland cities being covered by police aviation, meanwhile, the police in many border regions still have no helicopter squads,"

The helicopters used by these squads are AC311s and AC312s made by the Aviation Industry Corp of China, and some other types bought from foreign companies.

The first police aviation team on the mainland appeared in 1994, when the Public Security Bureau in Wuhan, Hubei province, founded a helicopter squad.

Since then, the police in large cities such as Beijing, Shanghai and Guangzhou have established their own squads and deployed helicopters on security patrols, search and rescue, and emergency response operations.

Some provinces that have no such squads, including Liaoning and Hunan, plan to establish police helicopter forces in three or four major cities to cover the whole province.

There are currently around 300 unmanned drones used by 150 police authorities in 25 provincial-level areas on the mainland. Most were bought within the past two years. It is estimated that the number of police drones on the mainland will reach 1,000 before the end of 2020. [China daily]

**GUANGZHOU:** The police bureau in Guangzhou are to acquire one Airbus Helicopters H145 and start up a police aviation unit. This will be China's first H145, to be delivered at the end of 2016.

Guangzhou Police and Airbus helicopters signed an agreement for the order the helicopter for law enforcement duties, to be delivered at the end of 2016.

Guangzhou Police's H145 will be equipped with a searchlight, external hoist, rappelling ropes, tactical radio, cargo sling, Bambi Bucket and stretcher.

**FRONT COVER:** This month sees the bi-annual aviation migration to the ExCel Exhibition Centre in Docklands, London to take in the much maligned Helitech International. The cover image is from last month's major event there - the military orientated DSEi—which was, as ever, a great success. It is worth reflecting that unlike Helitech there were few if any words of discontent expressed about the venue by the exhibitors and the attendees. The disquiet surrounding this month's event is therefore one of taste rather than quality. The image is of a Westland Sea King ZA298 which was being displayed by the MoD Disposals agency. They will be busy in coming months as the type is discarded



*Xie Xiaodan, Vice Mayor of Guangzhou and Guangzhou Public Security Bureau Director General (left) exchanged gift with Norbert Ducrot, Airbus Helicopters China President (right). Airbus Image*

**HONG KONG:** Government Flying Services [GFS] a department of the Hong Kong Special Administrative Region, with the main responsibility of providing 24-hour emergency support services is to acquire seven Airbus Helicopters H175 helicopters.

GFS will become the launch customer for this new-generation super-medium-sized rotorcraft in the public services configuration and currently flies three AS332s and four H155s for search and rescue (SAR) and firefighting missions.

The public services configuration of the H175 offers multi-role capabilities, SAR operations, emergency medical services, firefighting, law enforcement and land/maritime border security patrols. Deliveries will begin towards end 2017 with the first batch of three aircraft, followed by the remaining four in 2018.

GFS' H175s will have an inbuilt electro-optical system for observation and tracking, along with an enhanced digital map display, both managed from an operator's console in the cabin. Other mission equipment include dual hoists, loud-speaker hailer, a searchlight, and steerable external lighting. The H175's highly capable autopilot will incorporate additional advanced modes to further decrease pilot workload during SAR operations.

**YUNNAN:** The Provincial Police Department in Yunnan has placed an order for one AgustaWestland AW139 intermediate helicopter. The aircraft will be used for law enforcement, border patrol, special operations, and utility missions in the region and is expected to enter service in 2016.

The contract for the Yunnan AW139 brings the total number of AW139s purchased in China for public services roles in various provinces to seven, more than 130 AgustaWestland helicopters have been sold to Chinese customers to date.

Yunnan Province is the most southwestern province in China, bordering Vietnam, Laos and Burma. It boasts both high plateaus with elevations above 3,000 metres and tropical rainforests in the east. The diverse operating geographies and climate, including demanding hot and high environments, illustrates the performance and multi-mission capability of AW139.

With orders for almost 900 aircraft in more than 70 countries from more than 220 customers and over 730 aircraft already in service, the AW139 is the best-selling intermediate twin engine helicopter in the world. Many operators have chosen or are already operating the AW139 for homeland security, law enforcement and public utility applications in many nations worldwide including China, Japan, Chile, Brazil, USA, Italy, The Netherlands, Bulgaria, Oman, and UAE. The type has also found significant success globally for other applications such as offshore transport, EMS/SAR, executive/private and passenger transport and government roles.

## ISRAEL

**NATIONAL POLICE:** Probably the biggest news of the month is the announcement by Airbus Helicopters Inc. in the USA and Elbit Systems, Ltd. that the latter has ordered six new helicopters that will be placed into service with the Israel Police. The order is for four Airbus Helicopters H125 AStars and two H145s to support Elbit's contract to supply helicopters for the Israel Police. The new aircraft will replace Israel Police's aging fleet of single-engine Bell 206 helicopters.

Israel Police is the civilian police force for Israel and conducts law enforcement, counter-terrorism, border security, search and rescue, and planning in the future to support fire-fighting missions throughout the country. In its requirements for replacing the current fleet of single-engine aircraft, the Israel Police specified advanced aircraft and avionics systems to have the most modern and capable replacement fleet available. Requirements included glass panel cockpit displays, engine FADEC, and modern safety features. The Airbus Helicopters aircraft will be equipped with numerous options, including thermal imagers, searchlights, moving map systems, and cargo swings for firefighting.

The Israel Police have contracted with Elbit Systems to provide financing of the six aircraft, along with full maintenance and spare parts support, to ensure high levels of availability for their demanding mission requirements. Airbus Helicopters Inc. will provide the helicopters, helicopter completion services, flight and maintenance training, and spare parts support throughout the contract term with Elbit. Delivery of the new helicopters to Elbit will begin by the end of 2016.



The H125 is the latest version of the AStar family, which has become the most popular single-engine helicopter in the law enforcement community. The AStar is a high performance and highly reliable helicopter with multi-mission flexibility, and brings next-generation performance to the family. The aircraft is powered by a Turbomeca Arriel 2D engine that delivers

a higher cruise speed and is equipped with a dual-channel FADEC and Engine Data Recorder, which enhance safety and systems management.

The H145 is the next-generation version of the proven BK117 family. The H145 is equipped with new dual channel FADEC engines and an upgraded main gearbox, providing an unprecedented level of one-engine inoperative (OEI) performance, along with superior hover and hot and high performance. The H145's new Helionix® cockpit displays reduce pilot workload and enhance situational awareness, which increase safety margins during challenging missions. The Fenestron® tail rotor system ensures safety on the ground and lower noise levels in-flight. The large cabin provides flexibility for surveillance missions, tactical team deployments, and search & rescue operations.



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## CROATIA

**INTERIOR MINISTRY:** The Croatian interior ministry has awarded ESG Elektroniksystem- und Logistik-GmbH with the Europe wide contract for the modernisation of their EC-135 fleet. The procurement of helicopters currently operating from the airfield Lučko near Zagreb since 2013 did not include completion of aircraft with role equipment. The EC135s currently in service are restricted to transport and training operations. Operations are currently limited to training and transport flights.

With the new order with ESG from 2016, the helicopters will be used for daytime and night-time surveillance tasks.

A main element of the new mission system is the mission workstation for an additional operator based on the PTA<sup>NG</sup>. The 3<sup>rd</sup> generation of ESG's operator console has full HD monitors, an adjustable screen mounting frame, and can be adjusted for a wide range of ergonomic needs during flight. Central connector boxes and quick fasteners ensure quick set-up times. A further element of the mission system is an electro-optical system (EOS) with daylight, MWIR, low light and SWIR sensors, as well as a laser measurement device and laser illuminator. For this, the new FSI Star SAFIRE 380HDc was specified by the customer. As a supplement to the EOS, the customer also required a high-power searchlight with multiple colour filters and the Trakka A800 has been selected.

ESG has been one of Germany's leading companies for the development, integration and operation of complex, often security-relevant, electronic and IT systems for 50 years. ESG is an aviation engineering company in line with EASA Part 21G, EASA Part 21J and LBA Part 145 as well as an approved aviation company for aviation devices for the Bundeswehr.

[ESG]

## GERMANY

**FEDERAL:** The one day event scheduled in Berlin to mark the 60<sup>th</sup> Anniversary of the current helicopter air support operations by the Federal Police [Bundespolizei] and their Bundesgrenzschutz [BGS] forebears was cancelled.

The event at the Bundespolizei-Fliegerstaffel Blumberg, near Berlin was to include a speech by Dr Emily Haber State Secretary at the Federal Ministry of the Interior and licence presentations to the 35<sup>th</sup> Training Class.

*Ed: That cancellation took place a few days after German Chancellor Angela Merkel announced that Germany was open to all migrants and a few days before the severity of the mass migration into Germany got out of hand and, if nothing else, displayed a degree of intuitive thinking that has not been too evident across the political strata of Europe.*

## NORWAY

**POLICE:** The Norwegian Police Helicopter Service (NPHS) was established in 2003, following a request by the Norwegian Parliament in 2002.

After 1998 trials with an AS350 the unit was initially set up with a single EC135T based on the high skid UK police version in 2004. Following a high profile mass killing incident Norway acquired a second EC135T2+ helicopter with a similar specification. The first helicopter is owned by the police and the second is leased from the UK police. Maintenance is performed by an external Part 145 certified contractor.

The NPHS is affiliated with the Oslo Police District, but it also assists other police districts and special units as required.

The police, represented by the National Police Directorate, is now considering how to most appropriately address the future needs of helicopter services to the police forces and a Request For Information [RFI] is currently circulating in the industry.



The objectives of the RFI are:

- To gather technical and commercial information about potentially suitable police helicopters, mission equipment and installations (including their implementation time).
- To gather operational and commercial information about the maintenance burden, logistical support capabilities, and training programs.
- To gather information to strike the right balance of risk-sharing for the term of the contract.
- To determine the acquisition budget.
- To determine conceptually whether to seek a solution where the helicopters (and associated services) are leased or owned by the police.

A secondary purpose with this RFI, recognising the suppliers' need to manage their resources, is to guide the market on the time and scope that should be expected for the NPHS acquisition.

It is hoped that the feedback from the market will guide the police on how best to structure the tender process to achieve effective competition on the key elements of the procurement, will be taken into consideration when deciding the scope, specifications, and procurement strategy.

## UNITED KINGDOM

NPAS: A week after PAN ran the storyline on the new fixed wing contract being awarded to Airborne Technologies the Austrian company put out their own release and images that provided few additional details on the contract.



With the exception of the forthcoming IFR capability the aircraft will mirror the trial aircraft and the equipment fit of the new EC135T2 conversions in being equipped with the L-3 WESCAM MX-10 and systems from Enterprise Control Systems [ECS] and CarteNav Solutions Inc. Configured with Airborne LINX [the company name for their special mission architecture] the 4 aircraft will set new standards for missions with a heavy workload in a high pressured environment. The Vulcanair P68R can be deployed to tasks so far reserved for bigger and much more expensive aircraft.

An NPAS announcement appearing the same day echoed last month's details in stating that police air support in the UK is set to become 24/7 all-weather capable for the first time with the introduction of fixed wing aircraft into the service's fleet. While the helicopters are very flexible there are conditions which they are sometimes unable to fly, such as heavy fog, the new aircraft are true all weather machines and can guarantee a capability of operating any time of the day, on all days.

After NPAS successfully assured the availability of Home Office capital funding it awarded the contract for four fixed wing aircraft to be based in a single purpose built facility, serving the whole of England and Wales.

Once in service they will replace four helicopters currently in use, providing a minimum 80% of the helicopters' capability with each new plane costing around two thirds less to buy and run than a new helicopter. The displaced helicopters will be sold.

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CarteNav Solutions Inc. (<http://www.CarteNav.com>) has announced that its AIMS-ISR® software has been selected for a second time by the UK's National Police Air Service (NPAS) – this time to be installed on newly acquired, fixed-wing surveillance aircraft. CarteNav's software was previously selected for installation on seven EC-135T2 helicopters.

Four Vulcanair P68 fixed-wing aircraft are being provided by Airborne Technologies of Austria and will provide a 24/7, all-weather flight capability. Each aircraft will be significantly modified and upgraded, including the addition of a sophisticated camera system which can be controlled by CarteNav's AIMS-ISR® software.

The powerful AIMS-ISR® software system will integrate an MX-10 camera and a number of other sensors and features, making the Vulcanair P68 a highly capable reconnaissance and surveillance platform.

The National Police Air Service (NPAS) helicopter based in Rhuddlan was 'retired' from service on September 15<sup>th</sup> as part of the cuts by NPAS to save on annual operating costs. The crew of NPAS Rhuddlan used social media regularly to inform followers of their latest missions, they tweeted the evening before closure for the last time:

"The last day and the final tweet from NPAS Rhuddlan. Thanks for all your kind messages"

The following day the account was closed down – erased from public view.

In recent days the EC135 formerly based at Halfpenny Green as Central Counties, G-HEOI, appeared in service at Redhill. As has been demonstrated for some time few of the aircraft are adhering to their traditional bases and the contraction continues.

*Ed: Which is more than can be said for the NPAS London Twitter account. That continues its strange silence that seems to have its roots in the McIntire image 'telling off' ..... what was once the most prolific and best followed UK police helicopter Twitter site has been silenced. So far its fate has not followed that of Rhuddlan but there has been a long silence since August 4.*

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**HUMBERSIDE:** The police and crime commissioner for the region, Matthew Grove, says he will not sign over the force helicopter to a national scheme until he is assured the area will be sufficiently protected.

The force is currently in talks about joining the National Police Air Service (NPAS), after the service previously announced plans to cut ten of its helicopter bases across the country over the next two years.

Mr Grove said: "I will not be signing Oscar 99 over to NPAS until I am confident that an acceptable level of service will be maintained to East Yorkshire and Northern Lincolnshire."

It was later agreed Humberside Police would remain outside of NPAS due to contractual obligations, but the force would work towards joining NPAS in September 2016.

Mr Grove is now the only police and crime commissioner in the country to have not signed his force's helicopter over to the national service.

When the MD902 helicopter, Oscar 99, joins NPAS it is scheduled to be withdrawn and the area covered by aircraft based elsewhere. [Hull Mail]

**SCOTLAND:** Police Scotland have been ridiculed for spending taxpayers' cash re-branding their helicopter in Gaelic.

Nationalist MP Tasmina Ahmed-Sheikh tweeted a photo of herself sitting in the helicopter which bears the name of Police Scotland in the ancient Scots language.

But the Gaelic rebranding brought staunch criticism of the force, with disgruntled taxpayers slamming at the decision to opt for the Gaelic 'Poileas Alba' over 'Police Scotland' on the side of the helicopter as a waste of money by the united constabulary.

The 2011 census of Scotland showed that just 57,375 people - 1.1% of the population - could speak Gaelic, with the Outer Hebrides - 270 miles from Alloa - being the main stronghold of the language and most unlikely to ever see the Glasgow based helicopter.



Tasmina Sheikh MP @TasminaSheikh · 19h

Huge thanks to @PolScotPSYV & @policescotland for the opportunity to sit in a Poileas Alba helicopter!



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## UNITED STATES

**CALIFORNIA:** It was certainly a news grabber in the US media when an officer in one of San Bernardino County's helicopters fired into a speeding vehicle and killed the driver last month – but it was a scenario that the air unit has been practising for around 30 years and initiated around seven times already and only a matter of time before it took place again.

Stories vary with the publication but it is known that Nicholas Alan Johnson, 32, of Fontana was suspected of a crime that amounted armed robbery and that he was in a grey Chevrolet Tahoe SUV. According to some stories he drove one handed and loosed off automatic gunfire at police as he sped at 100 miles an hour along streets putting members of the public at risk.

According to the officially released reason for direct action he "had been threatening the safety of the public by traveling at a high rate of speed, running stop signs and red lights, narrowly missing pedestrians and traveling southbound on the northbound freeway." There was no mention of a weapon or gunfire.

The chase began after deputies allegedly tried to pull the suspect over because he matched the description of a suspect in a previous armed robbery, a 'home invasion' in Fontana. He then led police on a high-speed pursuit that ended up driving the wrong way on a freeway, the 215.

The air crew started firing on the suspect as he drove at speed against traffic. At the Cajon Pass, where the Little League Drive freeway overpass in San Bernardino he jumped from the moving vehicle and ran as the car carried on into a severe head on collision with an on-coming Dodge Durango SUV with three on-board.

The suspect reached the side of the road and died from his wounds. [Media]

*Ed: Sources state that the use of the helicopter technique is so rare that there is no published legal decision testing officers' ability to use the specific tactic. This shooting comes at a time when officers have been criticised for shooting nearly 500 people in 2015.*



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TECHNOLOGIES

OHIO: MD Helicopters, Inc. (MDHI) have completed the work on and returned to service two Columbus Police Department helicopters. Operated as MD 500E models since 2007, the two aircraft are re-joining the Columbus Aviation Unit as new, factory-built, FAA-certified F-models.

In June of this year the Columbus Division of Police committed to a revitalization of their Aviation Unit through the MDHI FAA-certified E-to-F Conversion option.

The first two of four aircraft to be converted arrived in Mesa in late June and each aircraft received a complete inspection and maintenance along with the conversion.

The work has upgraded the engine from the Rolls-Royce 250-C20B to the more powerful RR250-C30, replaced the blades and stabilizers, and added a Fargo Auxiliary Fuel Tank. The result is an increase in the hot-and-high performance capability of the aircraft, as well as improvements in operational range and flight time.

Lieutenant Greg Estep, who oversees the Columbus Police Department helicopter unit, and members of his team accepted delivery of the two newly certified, zero-time F-model helicopters on September 9, and after completing the required Type training flew them back to Columbus where they will return to active service.

Columbus' two remaining MD 500Es will arrive in Mesa this month and return to service with a new, FAA-approved type cert as MD369FF in December.



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# AIR AMBULANCE

## AUSTRALIA

**NEW SOUTH WALES:** THE \$151M helicopter ambulance base at Bankstown Airport is hoped to set a world standard in transporting patients to emergency care.

NSW Ambulance's southern fleet of eight AW139 helicopters will be housed in a new base boasting three operational helicopter hangars, two major servicing hangars, administration offices and a state-of-the-art training centre.

The training centre will include simulators, a water training pool, environment training facilities, medical simulation rooms and an auditorium.

## CHINA

**SHANDONG:** HEMS999, an air ambulance operator under the MIT Group, signed an agreement with Airbus Helicopters last month for an order of seven H130 light helicopters. Scheduled for delivery starting towards the end of 2015, HEMS999 will be providing these rotorcraft for emergency medical services and rescues for road and highway accidents across the Shandong province.

Shandong is a big province with massive highways and a constantly increasing car population and the availability of air ambulance services will be greatly appreciated. The operation will be the country's first provincial HEMS network covering traffic accidents.

The H130 comes from the AS350 Ecureuil/AStar/Squirrel light helicopter family which is typically operated by one pilot, but MIT's H130 will be delivered with a two-pilot configuration to help increase the flight experience of young pilots and adds to the pool of qualified pilots whose demand will keep increasing as China's helicopter market continues to grow.

In addition to the two-pilot configuration, the H130 can accommodate three medical staff or passengers comfortably in its rear seats and a specific HEMS kit inclusive of a stretcher, developed by Air Ambulance Technology. The HEMS kit can be installed via a "plug-and-play" function in less than 10 minutes. Performance and fuel efficiency is enhanced by the modern Turbomeca Arriel 2D engine.

More than 500 H130s are in service today, accumulating 1.4 million flight hours performing multiple missions globally.

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## CROATIA

**HEMS:** An air ambulance pilot project that will run for four months from two bases commenced in early September after successful public tender bidding. The contract signed on 26<sup>th</sup> August went to Italian company EliFriulia, a seasoned HEMS operator, based at Trieste airport.

The contract requires provision of a daylight only HEMS operation at the two bases with role equipped helicopters, pilots, maintenance and replacement helicopter on short notice, when needed.

HEMS crewmembers (medical technicians) and doctors are provided by Croatian emergency medicine institute, but were trained by operator.

One helicopter (EC135 T2+) is based at Rijeka airport on the island of Krk, second helicopter (EC145 T2) is based at Brač airport on the island of Brač and operated by partner company AirGreen, another experienced HEMS operator.

During the test period, many parameters will be monitored for analysis in order to define the regular HEMS service requirements.

The military will continue to provide medevac transports with Mil MI-8 helicopters available on a 24/7 basis.

There was some military and political opposition to the new arrangement, they claimed that the existing military air ambulance system was working well and a cheaper option but Ministry of Health officials prevailed and brought the project to fruition.

## ROMANIA

**SMURD:** Local insurer Vienna Insurance Group has paid €5.5M as compensation following the crash last December of an emergency care helicopter. The SMURD helicopter with four persons aboard crashed in the Siutghiol Lake in Mamaia resort, located on the Black Sea coast. The helicopter had four persons aboard-the pilot, the co-pilot, a doctor and a nurse. They all died.

Part of the pay-out was used to acquire a new helicopter, and part was paid as compensation for the relatives of the deceased.

The crashed helicopter was acquired in November 2012, and it was worth €5M. The money came from European funds. [Romania Insider]

## SWEDEN

**SCANDINAVIAN AIR AMBULANCE:** SAA signed an emergency medical helicopter contract with Region Jämtland-Härjedalen for the continued operation of the EMS helicopter in Östersund, Sweden. The region has agreed with SAA and its subsidiary Scandinavian MediCopter to replace its current AS 365 N2 Dauphin with a brand new Agusta-Westland AW169 from early 2017. The contract itself is valid until December 2021.

Jämtland County has been operating helicopters since the 1950s and contracted a regular helicopter service in January 1994. It has been covered by Dauphin-family helicopters since 1996. [Nordic Rotors]

# ALL NEW



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## UNITED KINGDOM

NATIONAL: The list of nominations for the Air Ambulance Awards has been published.

<http://www.associationofairambulances.co.uk/news/54/>

<b>Outstanding Young Person Award:</b> <b>Sponsor: Bond Aviation Group</b>	Winner to be announced on 16 November.
<b>Charity Staff Member of the Year:</b> <b>Sponsor: Milestone Aviation Group Ltd</b>	Jackie Eastwood, Cornwall Air Ambulance Trust Jason Levy, Midland's Air Ambulance Charity Gareth Brookes, Wales Air Ambulance
<b>Air Ambulance Paramedic of the Year:</b> <b>Sponsor: Prometheus Medical Ltd</b>	Gerry Lea, Thames Valley Air Ambulance Paul Owen, Dorset & Somerset Air Ambulance Jason Morris, London's Air Ambulance
<b>Air Ambulance Doctor of the Year:</b> <b>AgustaWestland</b>	Dr Ian Mew, Dorset & Somerset Air Ambulance Dr Syed Masud, Thames Valley Air Ambulance Dr Gareth Grier, London's Air Ambulance
<b>Air Ambulance Pilot of the Year:</b> <b>Sponsor: Turbomeca UK</b>	Captain Rob Mackie, Devon Air Ambulance Trust Captain Jon Earp, Wales Air Ambulance Captain Graham Cannell, Midland's Air Ambulance Charity
<b>Air Ambulance Campaign of the Year:</b> <b>Sponsor: Lottery Fundraising Services</b>	Cornwall Air Ambulance Trust - The Ground Crew campaign Dorset & Somerset Air Ambulance - Coast to Coast Cycle Challenge EHAAT, EEAST, EAAA, Magpas, BASICS - CPRathon London's Air Ambulance - Your London, Your Helicopter
<b>Charity Volunteer of the Year:</b> <b>Sponsor: BIU Group Ltd</b>	Tammy Thorne, Cornwall Air Ambulance Trust Kate Oliver, Essex & Herts Air Ambulance Trust Olive Nathan, Essex & Herts Air Ambulance Trust
<b>Special Incident Award:</b> <b>Sponsor: Airbus Helicopters</b>	London's Air Ambulance – REBOA Midland's Air Ambulance Charity - Alton Towers Wales Air Ambulance - Monmouthshire RTA
<b>Lifetime Achievement Award:</b> <b>Sponsor: Medical Aviation Services</b>	Winner to be announced on 16 November.
<b>Innovation of the Year:</b> <b>Sponsor: Sloane Helicopters Ltd</b>	EHAAT, EEAST, EAAA, Magpas, BASICS - CPRathon London's Air Ambulance - Dispatch App Dorset & Somerset Air Ambulance - MSc Programme



*aaa* Association of Air Ambulances

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Although the Yorkshire Air Ambulance [YAA] remains the only UK Charity Air ambulance to be outside the Association of Air Ambulances [AAA] the latter maintains its contacts with them.

Last month the YAA were hosting a BHAB operator meeting at its Nostell Priory base and, although they are not strictly operators in any sense, the AAA was present.

**EAST ANGLIA:** The operation is having a new base constructed near the control tower at Cambridge Airport where the unit helicopter has traditionally parked. [Cambridge News]

The chief executive of the charity has told fundraisers staff cannot pass on messages to the Duke of Cambridge who works as a pilot.

The second in line to the throne started work at the charity in July and has so far responded to emergencies across East Anglia including a man having a heart attack and a prisoner who overdosed.



**GREATER MANCHESTER:** As part of National Air Ambulance Week (21-27 September) Central Manchester University Hospitals NHS Foundation Trust Charity (CMFT Charity) launched its new £3.9M Charity Appeal to build a dedicated helipad for the Trust on the roof of the new multi-storey car park on Grafton Street. It will be connected to the hospitals by a high-level link bridge and roof top corridor.

The Helipad Appeal will enable the creation of a brand-new 24-hour access primary helicopter landing site, the first of its kind in central Manchester, potentially saving more lives and improving recovery rates.

Four of the Trust's eight hospitals are based on the central Manchester site including Royal Manchester Children's Hospital, Manchester Royal Infirmary and Saint Mary's Hospital. As a whole, the hospitals see over one million patients each year offering internationally recognised specialist services.

Currently, the Trust relies upon a secondary landing site in a nearby park an arrangement which means that patients initially transported by air ambulance must then be transferred the final mile of their journey by land ambulance. [MEN]

**LUCYS AIR AMBULANCE:** Back in March when the UK Government was handing out its windfall largesse to the air ambulances charities one of the winners was a children's transfer group called Lucy's. There have been some really strange handouts.

For instance Essex based Lucy Air Ambulance is getting £1M to go towards the rapid transfer of children 0-16 years who require specialist care which is not available locally and to repatriate those who have been admitted to hospital, for a variety of reasons, a very long way from home and family.

All very laudable but please do not inspect the accounts....

The Tye Green Harlow Essex based charity must be jumping for joy at the promise of a million pounds. Their record of fundraising is not exactly blinding, over four years they have not turned over anywhere near half a million pounds and profits, the stuff that provides the funds for repatriations, are negligible.

According to the accounts registered with the Charity Commission they have only made around 37,000 surplus and last year they spent some £20,000. The best year of fundraising so far has brought in way less than £200,000.



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NORTHERN IRELAND: Health Minister Simon Hamilton has said he is committed to establishing an emergency medical helicopter service in Northern Ireland as a key part of Trauma Network which is being established.

The estimated cost for the service is £2.38M for initial infrastructure, with £1.8M annual operating costs.

It seems clear that there is no enthusiasm for central funding and therefore there is a political desire to offload the cost on to what has been described as a robust and recurrent charitable funding contribution.

Likely operators of such a charity are said to have been identified but the region has been in this position before with significant charity income being swallowed up by fundraising costs and damaging the willingness of the population to give freely.

Since that last failed attempt to create a charity funded air ambulance the project has received a measure of positive pressure in commemorating the life and death of motorcycle race medic and intensive care consultant Dr John Hinds. Before his recent death he was a keen proponent of an emergency medical helicopter and 83,500 people signed a government petition to support his dream - only time will answer whether that paper pressure is enough to attract fundraising. Ominously recent rhetoric seems to be expressing an expectation that a cash strapped government will provide capital funding.

Northern Ireland has been without an emergency helicopter since the RAF [72 Squadron Westland Wessex] were withdrawn with the Peace Process in 2002 and since then there have been occasional attempts at fundraising, demonstrations by vendors and the use of outside agencies to meet specific aeromedical needs. The lack of a service was highlighted during the G8 summit in Enniskillen, County Fermanagh, in 2013, when organisers had to rent an air ambulance from Scotland.

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## UNITED STATES

LOUISIANA: Air Evac Lifeteam operate from over a hundred locations across fifteen states. The latest base which opened in late August is off US Highway 165 south of highway 383 at Kinder, Allen Parish. Surrounding rural parishes are also served out to some 70 nautical miles.

Kinder's Air Evac Lifeteam base, Air Evac 125, is operational 24/7, on standby for any medical emergency call. [KLPC]

OKLAHOMA: Med-Trans Corp. has launched McAlester Regional Air Care, a critical care air medical helicopter flight operation to serve McAlester Regional Health Center. The McAlester-based Bell 407GX helicopter carries a medical flight crew consisting of a pilot, registered nurse and paramedic trained to provide superior clinical care in an operation that is replacing service previously provided by EagleMed LLC.

Med-Trans is a part of the AirMedCare Network, America's largest air medical transport membership network that provides economical emergency access to the highest levels of care for its subscribers.

The aircraft is equipped with state-of-the-art safety equipment and features, such as night vision goggles, radar altimeters, GPS navigation, satellite tracking and communications and helicopter terrain alert warning systems. Its Garmin G1000H™ dual screen flight deck provides the pilot with critical flight information at a glance for greater situational awareness and safety.

The Bell helicopter's Rolls Royce turbine engine delivers exceptional performance with the ability to cruise at more than 150 miles per hour. The 407 helicopter will provide quick and easy patient loading and unloading provided by a bi-fold door with a 61-inch opening. [Med Trans]

## VIETNAM

HANOI: *The* Vietnamese Minister of Health has called for a helicopter for the on September 12, the health sector should have helicopter and special vehicles for transporting donated organs.

Minister Tien visited two patients who had undergone heart and lung transplants in the hospital, in which the organs were donated by those suffering from brain death were transported to hospital by air using scheduled flights operating between Hanoi and Ho Chi Min City.

Ms. Tien highly appreciated the transportation of donated organs via air, yet she supposed if there has been no flights between Ho Chi Minh City and Hanoi, transplants would face difficulties and would therefore need air and ground resources.

## FIRE CHINA

By the end of this year Russian Helicopters will supply to China three Kamov Ka-32A11BC helicopters for use for firefighting, patrols and supporting special operations.

Ka-32A11BC meets the requirements of FAR-29, AP-29, has been certified by EASA. Successfully operated in Austria, Azerbaijan, Brazil, Indonesia, Spain, Canada, Kazakhstan, China, Portugal, Russia, Switzerland, South Korea and Japan.



Participating Agency



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H225 of Argentine Coast Guard ©Airbus Helicopters Anthony Pechi

## SEARCH AND RESCUE

### ARGENTINA

**COAST GUARD:** In the middle of last month, at a ceremony presided by the Prefecto Nacional Naval Luis Alberto Heiler, Airbus Helicopters officially handed over an H225 helicopter to the Argentine Coast Guard.

This new helicopter, which will be based in the city of Mar del Plata and used for search and rescue missions in the Argentinian sea, marks the start of the renewal process for the Coast Guard's fleet of SA330 Puma helicopters.

The H225 delivered to the Argentine Coast Guard has an Automatic Flight Control System (AFCS), an invaluable flying aid that allows SAR missions to be carried out with greater precision, safety and effectiveness. In its SAR role, the aircraft is equipped with searchlights, a winch and a rescue basket, although it can also be rapidly reconfigured to carry out other missions such as coastal surveillance, port security or aid missions for coastal communities.

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## CHINA

Sikorsky Aircraft Corp. has delivered six S-76D helicopters to the China Ministry of Transport (MOT) for Search and Rescue Operations (SAR), further enhancing the MOT's maritime capabilities with the Bureau of Rescue and Salvage. The MOT's S-76D helicopter fleet is on track to include a total of eight S-76D aircraft by the end of the year.

In December 2012, the China MOT purchased four S-76D SAR helicopters, and then contracted for four additional aircraft of the same model in July 2013. The latest SAR contract is the fifth that China's MOT has awarded to Sikorsky for the S-76® series of helicopters since 2000. When these eight aircraft are delivered, the MOT will operate a fleet of 16 S-76 helicopters, which have formed the foundation of China's aerial SAR capabilities for maritime operations for more than a decade.

Sikorsky has delivered more than 800 S-76 helicopters to customers globally since 1979, contributing daily to a growing of more than 6.7-million flight hours.

## UNITED KINGDOM

SAR: Bristow Helicopters continue to experience delays with the introduction of the AgustaWestland AW189, and has no plans to operate the type on the national Maritime and Coast Guard Agency contract until all of its issues are sorted. The AW189 is still not fully certified for operation in icing conditions and Bristow will not therefore be using them in this demanding environment.

The contractual requirement is for 20 helicopters, two at each of ten bases, and the company tendered a fleet of 22 to provide two spare helicopters for maintenance cover, one of each type. All along the plans have been for five bases operating the S92 and five with the AW189, along with the spares for a fleet total of eleven S92s and a similar number of AW189s.

Bristow is focusing on how to fly the contract without AW189s up to the time that they have the full icing clearance. In July 2015, a further two bases started operations with Bristow – Caernarfon with S92s as planned and Lydd with smaller AW139s in place of AW189s. The substitution of AW139s will continue with St Athan in South Wales following the Lydd example this month.

Bristow Helicopters have confirmed to HeliHub.com that the bases going live in January 2016 will see Newquay fly S92s as planned, and Prestwick start with S92s rather than AW189s. As there are already ten S92s in service, along with the maintenance spare aircraft, these plans for the start of 2016 require a fleet of fifteen S92s, four more than the original plans. HeliHub.com asked AgustaWestland for a comment on the current position with the AW189 icing clearance, but they have not yet replied. [HeliHub]

## INDUSTRY

In the USA the advanced technology development office, **DARPA**, are working on a way to solve one of the greatest limitations of helicopters: landing on uneven surfaces, or even worse, moving terrain.

Landing on moving ships that tilt left and right because of waves, or on angled surfaces and rough terrain. Level surfaces are the best place to put a helicopter down, and only extremely experienced pilots manage to land helicopters on the more dangerous surfaces.

A Robotic Landing Gear being developed by DARPA is currently being flown in miniature RC models, with plans to be implemented in real-life helicopters in the near future.

The idea behind the Robotic Landing Gear is fairly simple: the standard helicopter skids, or fixed wheel landing gear, are replaced by a system using automatically articulating landing legs. These legs will fold while cruising, and when the machine is landing they will stretch out and touchdown by "feeling" the ground, similar to how four-legged animals find balance on uneven terrain.

**CM International Financial Leasing Corp., Ltd. (CMIFL)** is to acquire 100 Airbus Helicopters Ecureuil-series rotorcraft over five years, with the initial order of ten units to be delivered in 2016.

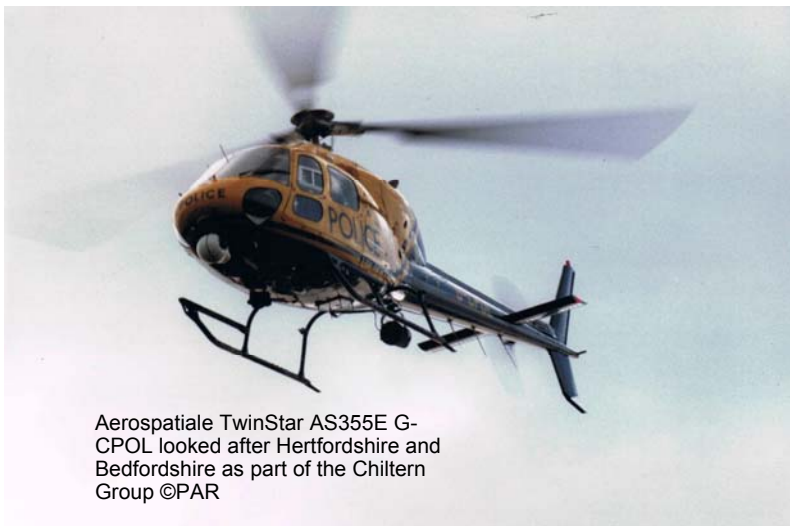
CMIFL plans to offer these light single-engine helicopters to operators complete with financing solutions, paving the way for easier and faster development of China's burgeoning general aviation sector.

The agreement for H125 and H130 Ecureuil versions provides a framework for CMIFL to become the first – and largest – rotorcraft leasing company in China. CMIFL has an equivalent capital of 1 billion euros, and is a subsidiary of one of the largest Chinese investment companies, with interests in the financing of aviation sector projects.

**Airbus Helicopters** has dropped the AS355 Ecureuil II light twin from its range, as part of a drive to rationalise its portfolio and focus on key products.

Production of the 2.6t helicopter – which is also known as the Twin Squirrel or Twin Star in the USA – is, however, likely to continue through next year but the backlog in to be delivered sales in low. The type was the staple police aviation asset across the UK in the 1990s and remains in service with a number of nations in the law enforcement role.

The manufacturer says the decision was driven by a need to trim its product range and focus on stronger-selling models to better answer the needs of the market and its customers.



Aerospatiale TwinStar AS355E G-CPOL looked after Hertfordshire and Bedfordshire as part of the Chiltern Group ©PAR

The same **Genesys Aerosystems HeliSAS** (Helicopter Stability Augmentation System) and autopilot that was FAA approved on the R66 earlier this year is now available on Robinson's top selling R44.

The R44 autopilot option has all of the same modes and functionality as the R66 including basic stability augmentation, heading hold, altitude hold, navigation signal tracking, and approach guidance. A flight test and FAA certification program ensured the comfortable flying qualities and workload-reducing features found on the R66 autopilot installation were carried over to the R44.

**Turbomeca** (Safran) delivered the first production Arrius 2R engine to Bell Helicopter on schedule in August. Selected to power the Bell 505 Jet Ranger X, the Arrius 2R is the only turbine in the 500shp range to feature a dual-channel FADEC. With seven million flight hours already logged by Arrius variants, the 2R will also offer an unmatched level of maturity at entry-into-service.



A brand new drone training school formed by a team accustomed to flying drones across Hollywood movie sets and commercial airliners across some of the busiest airspace in the world has opened. **UAV Air** is the brainchild of four senior airline pilots along with two of the country's most widely respected drone operators, Cloud12 and UAViate.

The courses are built on manned aviation principles and offer a full schedule of with accessible three-day fast-track options, all approved by the Civil Aviation Authority (CAA). The first dates started in Berkshire, Staffordshire and East Yorkshire throughout September and October.

Course content is structured to equip pilots with a strong technical, theoretical and practical understanding. Students are taught the theory and flight assessment standards necessary to fly drones commercially in the UK with development of flight procedures and operations manuals also included for those working towards a PFAW.

Would-be commercial drone pilots can choose from a total of four UAV Air courses, with a flight assessment and conversion course available for those already in possession of a theoretical qualification.

**Mason Advisory** will form part of the KBR team appointed to support the Home Office in delivering the new mobile communications service for police, fire and ambulance users in the UK. Mason Advisory will support KBR with technical and public-safety expertise for this complex and critical service.

Last month KBR was announced as the Home Office's Delivery Partner for the £1 billion Emergency Services Mobile Communications Programme (ESMCP). Mason Advisory will support KBR throughout the four-year programme with expert resource to manage and assure the rigorous testing and trials programme – essential to ensure users have the confidence that the Emergency Services Network (ESN) meets mission-critical requirements – and to provide assurance of the underlying ESN technology and service elements in partnership with the Home Office team.

The programme will securely deliver broadband data and voice services that will ensure the emergency services have cost-effective access to a mobile communications platform that supports an increasingly data-centric world.

**SkyQuest KODIAK** Sales Africa, LLC was operating its East African Kodiak Tour 2015 during September. The team travelled in a new Quest KODIAK 100 Aircraft. The Tour included Kenya, South Sudan, Tanzania, Zanzibar, Zambia, and Zimbabwe. The aim of the Tour is to give interested operators, government entities, and individuals a chance of getting first-hand experience with the aircraft, and see what it is capable of achieving in the African flying environment.



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The Product Support Centre of **ESG Elektroniksystem- und Logistik-GmbH** is responsible for the complete maintenance work for the A800 searchlight from the manufacturer Trakka Corp.

ESG will carry out service and maintenance measures for the Australian manufacturer in the key region of northern Europe. In addition, ESG offers its customers tailor-made servicing contracts for mission equipment in accordance with both German and European law, thereby significantly improving the operational capability of their customers. Short reaction and repair times, access to original replacement parts, handling of imports and exports, as well as the availability of replacement systems and a telephone hotline are standard parts of the service and are implemented by experienced internal and external support technicians. The work will be carried out exclusively by ESG's EASA-certified Part 145 repair shop.

Beijing **Capital Helicopter** (BCH), a subsidiary of Hainan Airlines Group, has been appointed as Airbus Helicopters' service center in China. It will carry out maintenance, repair and overhaul (MRO) work on the H125 and H135 – two of the most popular light helicopters operating in the country today. Already a customer of Airbus Helicopters owning

Earlier this year **Metro Aviation** of Shreveport were working with Airbus promoting the EC145e the new lighter weight and lower cost version of the highly successful Airbus Helicopters EC145 at shows and on tour. The company has now contracted to purchase six EC145e twin-engine helicopters from Airbus Helicopters Inc. Metro is the first North American customer for this model.

The first phase of the EC145e demonstration tour continued through September with the aircraft will be available for demonstration flights at the upcoming Air Medical Transport Conference, October 19-21 in Long Beach, California. A second phase of the demonstration tour will begin after AMTC and continue through mid-November.

The EC145e is a single-pilot, VFR aircraft that retains the power, performance and reliability of the EC145 and has the same large cabin with rear clamshell doors for easy, safe loading and unloading. The EC145e glass cockpit features the Garmin G500H and GTN 650 GPS and communication system. It has a maximum take-off weight of 7,903 pounds, the same as the EC145, but the useful load is up to 300 pounds greater. The aircraft can seat up to 11 passengers, depending on the configuration.



The Metro demonstrator at the ALEA Show in July

**Helicopter Technology Company** (HTC) are offering Metal Main Rotor Blades for UH-1 helicopters. The HTC Part Number 204P2100-101 Main Rotor Blade is a direct replacement for the Bell Helicopter – Textron Part Number 204-011-250-113 Main Rotor Blade. HTC designs and produces its own line of Helicopter Main and Tail Rotor Blades at its Facilities in Los Angeles, California. The company is an FAA Approved Production Approval Holder and Repair Station (#HQPR671X) with ISO 9001:2008 + AS9100C and ISO 9001:2008 + AS9110B Certifications.

HTC, formed in 1994, has Rotor Blades in Service in more than 40 countries around the world. Seeing that there was a need in the UH-1 market for Main Rotor Blades, they worked to get these blades certificated and into production for UH-1 operators to insure that blades are available when they need them.

The HTC UH-1 Main Rotor Blade is fully interchangeable and carries a life-limit of 2,600 hours. Installation of this Blade is covered by FAA Supplemental Type Certificate (STC) Number SR02492LA.

Finmeccanica – **Selex ES** has been awarded a contract worth several million pounds by the United Kingdom's Home Office to develop, supply and support a national automatic number plate recognition service (NAS). The system will be used by all UK law enforcement agencies and a series of rolling contracts is expected to guarantee the service for the next six years.

The system will make use of existing in-service cameras that can read number plates on fast-moving vehicles in all light and weather conditions, equipped with advanced optical character recognition algorithms. If a vehicle is logged as of interest, a centralised system can then alert law enforcement agencies in milliseconds.

The new system will replace several existing platforms and suppliers and, for the first time, will provide a single nationwide service to all of the UK's law enforcement agencies. Such a national system will contribute towards the Home Office's ability to deter and disrupt criminal and terrorist activity while at the same time reducing the costs of law enforcement operations.

This latest contract follows Selex ES's successful implementation of automatic number plate recognition technology in Italy, where the system is used on a daily basis by 3,000 Carabinieri officers, and the United States, where it is deployed in every US State and used by the NYPD.

Ten of the Royal New Zealand Air Force's Bell UH-1 Iroquois helicopters are to be sold to **Dakota Air Parts**, subject to final approvals by the United States and New Zealand governments. The deal includes the airframes and spares. The remaining three airframes will be retained for display.

The Japanese Coast Guard (JCG) has selected **Heli-One**, the world's largest independent helicopter MRO, to deliver a major overhaul to an AS332L1 aircraft at Heli-One's facility in Stavanger, Norway. Using a mixed fleet of aircraft, the Japanese Coast Guard delivers border security and search and rescue services on behalf of the Japanese Government.

**Airbus Helicopters Foundation** has provided support to ongoing humanitarian relief operations in the Caribbean island nation of Dominica, which was hit with heavy rainfall and mudslides in the wake of tropical storm Erika in August.

Chartering an H120 helicopter from Martinique-based operator Héliblue Hélicoptère, the Foundation said it has been able to support assessment flights over the island in partnership with the Red Cross. Volunteers are still working in Dominica to provide support for the more than 300 people evacuated from the storm's path.

"Thanks to the support of the Airbus Helicopters Foundation, we have been able to identify specific areas where our help is the most needed and where we have to focus our efforts," said Stephen Omollo, head of strategic partnerships and international relations for the International Federation of Red Cross and Red Crescent Societies (IFRC). "We are also able to better quantify the number of people in need, which is invaluable for our humanitarian response."

Following initial flights in the H120, aid workers have been able to identify that some 8,000 people are without water, said Airbus, which represents nearly half of the entire island. As of 17 September, nine areas had been classified as special disaster areas and multiple health centres were no longer operational. The Red Cross is continuing its efforts to provide relief to those in need and will perform additional flights according to the needs of relief organisations on the ground.

**Microturbo**, a subsidiary of Turbomeca (Safran), have opened a new facility in San Diego, California dedicated to the production of auxiliary power units (APU) for commercial aircraft.

Pierre Yves Morvan, CEO of Microturbo and Rick Elgin, Microturbo VP/GM of Microturbo San Diego presided over the ribbon-cutting event attended by local officials and industry partners.

The 22,000 sq. ft. facility includes a 6,500 sq. ft. production area and will support Microturbo's growth in the business aviation market since it has taken the full responsibility for APU of the Bombardier Global 7000/8000 and Dassault Aviation Falcon 5X. A total of 60

people are currently employed, with further growth envisioned when full-rate production is attained.

**AgustaWestland** has completed the capability concept demonstration (CCD) of its unmanned PZL-Swidnik SW-4 helicopter for the UK Ministry of Defence. The CCD program has been underway since 2013, with AgustaWestland testing their Rotary Wing Unmanned Air Systems (RWUAS) at Llanbedr Airfield in Wales. The programme saw the unmanned PZL-Swidnik SW-4 helicopter undergo a total of 27 hours of flight trials. This included 22 landings on the back of a moving truck used to simulate landing on a frigate deck and demonstrate the helicopter's ability to land on pitching and rolling surfaces. [Flight]

## ACCIDENTS & INCIDENTS

**19 June 2015 Beechcraft King Air 200 N911MN** air ambulance of Avera McKennan Careflight, Sioux Falls, South Dakota. The aircraft was transporting a patient from Aberdeen, SD to St. Paul, MN. The LH landing gear indicator failed to properly illuminate upon gear extension. The approach was aborted and an indication discrepancy was relayed to the tower. The pilots declared an emergency. A pass over the runway was conducted for the ATC tower to visually confirm that all gear appeared to be down. The landing was uneventful. It was found that a light bulb had burned out on the gear indicator. [Concern]

**10 August 2015 Bombardier Lear 31 N381AL** Air Ambulance of AirLife Denver Aurora, Colorado, operated by International Jet Aviation. The Lear departed Centennial Airport en-route with two nurse crew on board and no patient. Shortly after take-off the right engine cowlings opened and caused damage to its self and some surrounding components. A slight vibration, similar to the flaps being deployed or landing gear being raised was felt by the crew. Additionally, an engine generator indicator light illuminated. The pilots made a decision to immediately return to the airport and made an uneventful landing. The cowlings did not depart the aircraft. It is not known whether the cowlings were left unlatched (partially or otherwise), or if it opened in-flight due to an external foreign object. [Concern]

**24 August 2015 Airbus Helicopters EC145 N911MK** Air ambulance of Avera McKennan Careflight, Sioux Falls, South Dakota. On departure the aircraft struck a bird at 2500'MSL 4nm east of the helipad. All systems indicated normal, however, the crew aborted the flight and returned to the helipad. The aircraft was taken out of service, and inspected by the Director of Maintenance. No abnormalities or defects were noted and the aircraft was returned to service. The bird remains were not positively identified, however it is believed that the aircraft struck a Canada goose. [Concern]

**3 September 2015 Eurocopter AS365 Dolphin** United States Coast Guard. A helicopter crew from U.S. Coast Guard Air Station Traverse City, Michigan made an emergency landing at the Ephraim-Gibraltar Airport in Ephraim. The helicopter and its crew were returning from hoisting a man experiencing chest pains from the tug Joyce L. Vanenkevort. Weather conditions diverted the helicopter crew from its original destination. [Media]

**5 September 2015 Hawker Siddeley HS125-700A 6V-AIM.** Light jet operated in the air ambulance role by Senegalair carrying seven people, including a French patient, crashed off the coast of Senegal. It had been flying from Burkina Faso to Dakar with a crew of three, three medical workers and a French patient and was last seen by radar over the Atlantic, 111 kilometres (69 miles) west of the Senegalese capital.

The plane crossed the path of a Boeing 737-800 operated by Ceiba Intercontinental Airlines, an airline based in Equatorial Guinea and some suggestion has linked the two flights. [Media]

**6 September 2015 Airbus Helicopter AS350B3 N914SM.** Air ambulance of CareFlight Grand Junction, Colorado operated by Air Methods. CareFlight4 was requested to launch for a scene flight in San Juan County in southwestern Colorado. While unloading the crew

the tail made contact with some willow bushes. During the walk around prior to loading the patient the pilot noticed that the tail rotor indicator tabs were slightly bent. The aircraft was taken out of service. CareFlight3 was launched to rendezvous with the CareFlight4 crew, who were transporting the patient in the Silverton Ambulance to a lower LZ. The patient was taken on to St Marys Hospital. [Concern]

**7 September 2015 Westland Sea King** Royal Navy SAR helicopter from HMS Gannet in Ayrshire. The Royal Navy has launched an investigation after a man's body slipped from a helicopter harness while being winched from a Scottish loch. Former University of Aberdeen chaplain Dr Bill Murdoch, 64, drowned in Loch Fyne, Argyll. The body was being winched aboard when it slipped from the harness and fell into the water. There were signs that Dr Murdoch had passed away prior to the rescue, which was confirmed by the post-mortem. [Media]

**9 September 2015 Airbus Helicopters AS350B N253HP.** Utah Department of Public Safety. The Utah Department of Public Safety says one of its helicopters nearly crashed while trying to retrieve the body of a fallen hiker in the mountains east of Draper.

The pilot, Kent Harrison, and another officer on board were attempting to meet with rescuers on a cliff ledge. The crews were attempting a "skid load," intending to rest one skid on the ledge while essentially keeping the chopper hovering, when a rope became tangled in the craft's main rotor.

The tail passed over the heads of rescuers and hit the cliff wall. The aircraft was spinning toward the ground, but the pilot managed to steady it and fly down to a park in Highland, landing upright but damaged.

*Ed: And the corpse that this aircrew put their life on the line for was dead and remains dead.*



**23 September 2015 Bell 206L PP-ELA** Law enforcement helicopter of Secretari de Grupamento Aéreo da Polícia Militar, Alagoas, Brazil. Three police officers and major in the fire department died when the helicopter crashed in the city of Maceio, capital of north-eastern Alagoas state. The names were subsequently given as De Moura, Melo, Assuncao and Milton.

The helicopter was participating in an operation against a band of criminals and crashed for unknown reasons onto a parked - and empty - automobile on a street in the Santa Lucia residential neighbourhood on the outskirts of Maceio. A fire broke out after the crash and consumed all except a few parts. [Media]

## FLIGHT SAFETY

Another incident report from the Concern Network relates to an incident in early January that might have some interesting aspects for operators of the EC135.

An EC135P1 air ambulance N137MH operated by AirLink Critical Care in Bend, Oregon was returning to its home base with a crew of three.

When approximately 70 minutes into the flight the aft XFER Fuel Pump caution light illuminated. The pilot performed the emergency procedure which requires switching off the aft XFER Fuel Pump. Shortly after this, with still approximately 140 kg's of fuel indicated in the main fuel tank, the pilot noted that both engine supply tanks were decreasing as if the remaining forward XFER Fuel Pump was not working. Although there were no cautions indicating a problem with the forward XFER Fuel Pump, the pilot decided that a precautionary landing was imminent and the crew began to look for a safe place to land. During this time, the #1 and #2 Low Fuel



Warning Lights illuminated and the warning gong activated. The pilot made an uneventful landing in a large rural pasture. The Communications Center activated the base PAIP under Precautionary Landing protocol. Communication was established by cell phone with the pilot, confirming a safe landing, and recovery efforts initiated.

On an earlier flight that night the pilot noticed the aft XFER Fuel Pump caution light had illuminated when the main fuel tanks indicated 145 kg's during landing. However, after refuelling, both fuel XFER pumps operated normally, and he made an uneventful 50 minute flight back to home base.

Although the aircraft was located about 25 miles from home base after the precautionary landing, and only two miles from a rural highway, it took about two hours for a sheriff's vehicle to reach the crew. Locked pasture gates and a spider web of unmarked roads made navigating to the aircraft location surprisingly difficult. Subsequent discussion with county SAR revealed that their mapping resources and expertise in navigating to remote sites would be very helpful in these situations.

Technicians inspecting the aircraft after landing confirmed the main fuel tank was empty. Subsequent inspection of the fuel probes in the main fuel tank revealed metal particulates and small grains of dirt coating the inside of the fuel probe tubes. This contamination likely caused the fuel quantity indicating system to indicate approximately 140 kg's of fuel in the main tank even though the fuel was depleted.

Some of the metal particles may have come from the fuel nozzle scraping the sides of the filler neck when refuelling the aircraft. There was no evidence of water contamination. The aircraft fuel tanks had been regularly sumped on daily preflight inspections with no indication of particulates. Contamination within the probes could only be cleared by removing the fuel probes and cleaning them according with maintenance procedures (reference ASB-28-018). The Low Fuel warning system operated correctly despite issues with the other probes. Metro Aviation was informed by Airbus Helicopters that they have identified a solution for the erroneous transmitter operation. The replacement parts will be available for replacement on an occurrence-by-occurrence basis by mid-2016.

*Ed: Although the report from the UK AAIB on the Glasgow accident to a police helicopter has yet to be published and to link or confirm suspected fuel management issues to the accident, there are some parallels with fuel management in this US tale on the EC135 as a type.*

## PEOPLE

The U.S. Navy has removed contracting suspensions imposed on two former senior executives with Italy's Finmeccanica SpA in February 2014, after they were cleared of bribery charges by an Italian court, according to an attorney representing the two men.

Former Finmeccanica Chief Executive Giuseppe Orsi and Bruno Spagnolini, who headed AgustaWestland helicopter division, were removed from suspension in August.

The Navy's decision means that both men are now eligible to bid for contracts with the US Navy.

Scotland's Charity Air Ambulance (SCAA) has appointed David Craig as its new chief executive.

The 41 year old from Livingston spent eight years as a press officer for Stakis/Hilton Group before taking a position with The Anthony Nolan Trust.

He is also a former trustee and chair of the fundraising committee of Bliss, the UK charity for premature and sick babies, and during his five years in office helped to establish Bliss Scotland.

SCAA is in its third year of operation and relies exclusively on donated funds although the government recently gave money that will lead the charity to leave operations of the BO105 and move on to an EC135. [Third Force]

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# EVENTS

## DSEI 2015 ExCel London

As the premier bi-annual defence show in the UK DSEI attracts some attention and usually that includes a fair sprinkling of anti-war protesters and therefore lots of police and high barrier fences. It is therefore a very expensive event to put on – even without the high cost venue of ExCel in London's Docklands.

Security must have worked this year for I failed to see any protesters.

The show has attracted an unprecedented level of UK Government support involving the Department for Business, Innovation & Skills; Foreign & Commonwealth Office; Home Office and the Ministry of Defence (MOD). Many ministers attended the show including John Hayes, Security Minister at the Home Office but most were defence related.

Within the show there is just a tiny percentage of airborne emergency services interest- but in the wider sense things like boots, uniforms and even armoured cars fit quite well in the interest stakes. In many ways DSEi fits better than some so called security shows that claim a largely spurious anti-terror roles.

When presented with the preview floor plan I was attracted to the area that suggested it was going to be crammed with unmanned craft. It wasn't. Indeed one of the exhibits in this space was a company selling property [real estate] in the West Country. Disappointing stuff. Unfortunately that theme of things being in the wrong place was repeated all too often. It is an unfortunate result of the aspirations of the organisers not being reflected by the exhibitors.

The show is large and this year attracted an unprecedented number of naval war vessels from across the world to the dockside that was once bulging with a different class of ship.

The aircraft static park – actually pretty much all helicopters – is likely to put this month's Helitech to shame. But we will have to see how that works out. A US military Chinook was the largest exhibit with a supporting cast of a Sea King [representing the dozens of the marque due to be offered on the world market in coming months], new RAF Puma, a Navy Merlin and an Apache. Not exactly in the static park but mention might be made of the Lynx on the flight deck of HMS Iron Duke moored right alongside, though not perhaps the Meggitt unmanned targets ranged on the aft deck of the training ship the VN Partisan.

The Partisan, operated by Sea Owl a French company already undertaking regular work for the French defence forces, is registered in the UK and seeks to enlarge its customer base in the military and oil and gas markets. The owners are involved in providing low cost training facilities offering targets and boats for a range of purposes.

When built the Partisan had large open rear decks but subsequent additions have added a





substantial helideck capable of accepting helicopters up to the size of the NH90 and cabins that are clearly container based. Within what is now the well deck are a range of small craft that includes a Meggitt unmanned rib. The low crew levels keep costs down and enhances the value of the package to potential customers.

The Merlin on display in the static was a Mark 1, but the significant story at the show was about progress on the Mark 2. The significant milestone of the £807M upgrade programme has now been met, following the delivery of 24 out of a total of 30 Merlin helicopters to the Royal Navy.

The upgraded Merlin Mk2s are the world's most advanced maritime helicopter and have undergone improvements to their anti-submarine/surface warfare combat capabilities, including radar upgrade, as well as being fitted with advanced glass cockpits. Each aircraft has improved aircrew consoles, touch-screen displays and are fitted with over 40km of new wiring. The new technology gives them the enhanced ability to detect and track targets, and to share data with other aircraft and ships while airborne.

It is not yet certain whether the AUDS anti-UAV surveillance and disruption system announced at the 2015 PAvCon will make an appearance at Helitech but it was present at DSEi.

A number of products have been proposed to disable unmanned craft before they can undertake attacks. Some are fairly basic and unsophisticated, simply physical means of disablement. The latest offering is in another league of sophistication and is the result of three British companies, Blighter Surveillance Systems, Chess Dynamics and Enterprise Control Systems joining forces to combat a perceived threat. Flexibility in the overall PAvCon programme allowed a short presentation on this 'high end' point defence device to be given to the gathered delegates but the appearance at DSEi was a physical gathering together of the components in one place with a system, albeit short of components and therefore inert.

AUDS is designed to electronically detect, track and then disrupt the signals to the suspect craft – whether something more lethal may need to be added to the array in the future remains to be seen.

There have been questions asked as to whether this [or similar] systems are appropriate at a helicopter show like Helitech or whether the police can afford what is after all a high end, high cost defence product. Sadly in both instances there may be no choice in the matter.

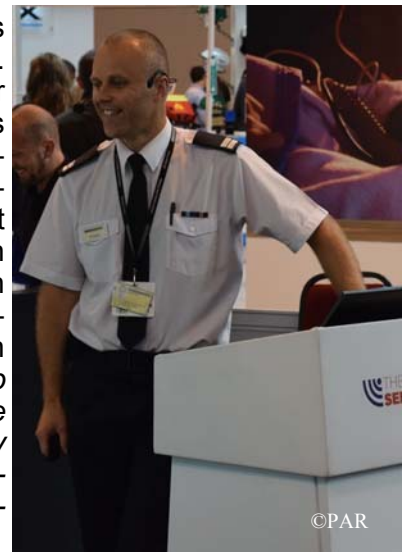


## EMERGENCY SERVICES SHOW

Not far behind DSEi on September 23-24 was The Emergency Services Show [ESS] in Birmingham and as featured in last month's edition this included promotion of the CAA-approved UAV training courses offered by Sky-Futures, a global leader in drone based oil and gas infrastructure inspections. The company can train remote pilots to fly safely and procedurally in increasingly demanding, operational training scenarios using best practice from manned aviation and its 8,500 hours of operational drone flying experience.

Sky-Futures has already stepped out of its oil industry comfort zone to address the needs of law enforcement and other emergency services- hence the appearance at the ESS. This company has already undertaken training with the UK police in Kent and Essex as well as the Fire and Rescue Services of both Kent and Mid and West Wales. Sky Futures has also been in conversation with police aviation interests in Europe, including a recent host of PAVCon.

One of the longer UK users of the unmanned craft – and one that abhors the use of the term 'Drone' – is the West Midlands Fire Service [WMFS]. The WMFS has now moved on from its first trials of a red quad copter seven years ago, technology creeps ever onward. That £30,000 craft was leading edge technology at the time but for the same sort of money operators can offer a massive improvement in reliability and capability and after just a handful of years purchasing the earlier craft ownership of it would now be laughable. At the ESS Innovation Theatre Jim Grove of the WMFS [right] gave an update on the latest position in and around Birmingham where they now use the Aeryon SkyRanger as their primary UAV. *As a back-up they do use small cheaper systems that are nominally set aside for operational use in dirty conditions on the basis that although less capable and easy to fly they are more disposable assets.*



Generally, despite the best efforts of the organisers, the ESS remains a fire fighters show the sponsorship is very focussed towards those skill sets and as a result aviation takes a back seat. Although the aviation MROs and Vendors have attended in the past the visits have been one off and none were repeated by the individual attendees.

In the past the few areas of aviation – including the Skywatch Civil Air Patrol [SWACAP] - have been easy to dismiss as unimportant especially as they have been from the voluntary sector. More recently the increased drawback from 'normal' aviation as illustrated by NPAS has driven individual police forces to reconsider engagement with the voluntary sector to meet their aviation needs.

The organisers need to be congratulated in their support for the volunteers. I would assume that few if any of the more than 50 'Z area' occupants of the shell scheme have needed to pay for their presence. It is one thing to provide space but another level of commitment to provide free shell scheme space. Many of the occupants of these spaces were organisations that clearly could never be able to afford to pay for such spaces and the whole event was richer for their presence.

On a negative note though not all of this commitment is being honoured by the recipients. There were named spaces, within the free area, that were left abandoned throughout the whole of the first day. Not a good reflection on the other grateful volunteers.

Even if you have visited The Emergency Services Show before and were unimpressed, this time it proved yet again that it could attract many new exhibitors and grow this event even if wholly within the fire service core. With over



440 companies on display visitors were able to see the latest in communications, IT, vehicles, vehicle equipment, PPE and uniforms, training solutions, medical equipment and operational kit.



After only a few years since its last move from the very rustic Leamington Spa Showground the event is again expanding and will take over a larger hall next year. Who knows maybe real emergency services aviation will join in?

## COMING THIS MONTH

Early in the new month is the **Commercial UAV Expo taking place in Las Vegas October 5-7, 2015, the SPAR Point Group's Drone Conference and Trade Show Focussing on Key Commercial Industries.**

**This is a** conference and exhibition focused exclusively on the commercial sUAS (small Unmanned Aerial Systems) market in North America and they include law enforcement in their target audience.

The event will have more than 50 educational sessions, keynotes, plenary panels and breakouts.

**So off to** Caesars Palace in Las Vegas [and avoid the machines at least during the day] and find out how Small Unmanned Aerial Systems are completely changing how some data-driven industries are collecting critical information. According to [Drone Analyst Research](#), the commercial market for small UAVs that operate at 500 feet or below in the United States is expected to reach approximately \$5 billion by 2019.

Commercial UAV Expo expects to bring together more than 1,000 professionals who are using or planning to

## HELITECH INTERNATIONAL

In the same timescale Europe is offered Helitech as a focus for the world rotary wing industry in the London Docklands. The event is at ExCel 6-8 October.

The doom merchants remain certain this will be a disaster of a show, there are a significant number of people who have never forgiven the organisers for leaving the Imperial War Museum at Duxford, if only because that stopped them flying their own helicopters into the event and perhaps stopped them seeing helicopters flying at the event. And of course they are annoyed that they will not get free access to a backdrop of Spitfires and other historical aircraft.

Those with other opinions see the venue as a welcome showcase for their products and a chance to meet up with new customers in a business atmosphere. Overall it is not unlike the HAI Heli-Expo.

Which opinion will hold sway remains to be seen but Sloane Helicopters the agent for Robinson and AgustaWestland for instance are not exhibiting – they are having an event at their home airfield that will cost significantly less than the basic stand space at ExCel. Others may follow suit.

The importance of safety in rotary wing operations is highlighted by the Safety Workshop on the final day of Helitech International. Hosted by the European Helicopter Safety Team (EHST) and the International Helicopter Safety Team (IHST), the Safety Workshop will be



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staged at Excel London on the Thursday [the 8th]. The focus will be on technologies and processes aimed at 'Enhancing Situational Awareness and Making Better Decisions', and will feature leading experts from industry and academia.


## FOR YOUR DIARY

**19-21 October 2015 Association of Air Medical Services [AAMS]** Long Beach, California Annual Conference and Exposition. Location Western Region Location, USA. The annual AMTC provides up-to-date information on the latest techniques and innovative approaches to air medical practice from community experts while giving attendees lots of opportunities to earn continuing education credits. Top-notch keynote speakers and expanded educational offerings (including mechanics technical briefings, special information exchanges, new clinical sessions, scientific abstracts and poster sessions) [www.aams.org](http://www.aams.org)

**20-21 October 2015 The Commercial UAV Show at ExCel, London.** It's a conference and exhibition featuring the latest Unmanned Aerial Vehicle (UAV) technology and most innovative end user case studies from around the world.

Leading police, fire and other emergency services organisations from across Europe are visiting, speaking at and even exhibiting this event including the Copenhagen Fire Department, Hampshire Fire and Rescue Service, West Midlands Fire Service, Metropolitan Police Dorset Police, Netherlands National Police and many more!

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