

Police Aviation News

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Helitech Special 2015

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HELITECH 2015

ExCel London Docklands

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HOW WAS IT FOR YOU?

This year's Helitech is over but was it a worthwhile event in terms of value to the business community and the exhibitors or were the doom mongers correct in their prediction of impending disaster?

As with the 2013 event, when Helitech moved from a highly popular Imperial War Museum Duxford facility, it was predicted that holding it at ExCel would surely fail. It was claimed that the venue remained unpopular and that even those attending did not really wish to be there.

Although there are grains of truth in the claims it is not as clear cut as presented. There are a number of exhibitors who would prefer that Helitech returned to Duxford and there are others, potentially a large number, who refuse to attend ExCel for a whole range of reasons.

But none are forced to be at ExCel, they are attending of their free will to do business and even some of the most vehement critics of the moved event have found themselves obliged to attend because like it or not there was a sensible business need.

Whatever the facts the popularity of Helitech in terms of footfall compared with past events, has fallen away. Some of those that are no longer there are the enthusiasts but even so they are missed even though they may only provide bulk and keep the food vendors happy. Footfall at any event is important but business prospects are the most important commodity. It is now a quieter show but thankfully in general the attendees are considered quality contacts.



FRONT COVER: Echoing the front cover of the standard October issue we return to an ExCel background but this time with a civil rather than a military subject in the outside static park. One of the two MD Helicopters MD902 Explorer's leased to the Cornwall Air Ambulance G-CNWL was present on two days of the East London event. [Image ©PAR]

HOW WAS IT FOR THEM?

Naturally the organisers, Reed, hype up the event. For them Helitech International, is the world's third largest dedicated helicopter trade show (after Heli-Expo and Heli-Russia) and was a 'success' and we cannot really expect them to be saying anything less.

The show attracted just three manufacturers, AgustaWestland, Airbus Helicopters and Bell, but others including Enstrom were represented by agents. Of Sikorsky, in the throes of a take-over by Lockheed Martin, there was nothing.

The last time Helitech was in London, the manufacturers on-site included Guimbal, MDHI, Robinson and Sikorsky – helicopter types of these marques were to be found at ExCel but not with manufacturer representation—a fact which fits well with the arguments of the denigrators.

The Emergency Services news items were confined to the police and air ambulance markets, there being nothing concrete emerging on fire but there are still moves in the background which may yet emerge to surprise us all. I am just unsure that it's going to be in my lifetime.

Despite the event being for many being a second rate venue those manufacturers present managed to find some sensible product news to announce to the world at large and set up some 'Contract Signings' – some of which were genuine rather than staged. The number in the airborne emergency services arena was low.

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AGUSTA WESTLAND

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The manufacturer exhibited an AW139 and a mock-up of AW169 on its large stand but there was little direct emergency services content. The denigrators insist the stand was smaller than two years ago, I really cannot recall such details. In the absence of the fully ice certified AW189 the AW139 continues to provide sterling service to the new UK SAR community as the military Sea King's become a distant memory.

The AW169 has yet to enter service with UK air ambulances but clearly is an airframe of the future in that area of the market. For some prospective users of the new type it is a matter of wait and see as the day when Kent, Surrey and Sussex AA take delivery comes closer to realisation, meanwhile it appears that Specialist Aviation Services [SAS/PAS/MAS] have placed all of the six AW169s they have on order and may be looking for more. Kent, Surrey and Sussex are to have two and Lincolnshire and Nottinghamshire one but it is suspected that signatures are still awaited for the other three as probable customers [potentially Essex & Herts and Dorset] await that vital feedback from the initial users.

Staverton, Gloucestershire based SAS have been associated with the MDHI MD902 series in the UK emergency services arena since the late 1990s and are still placing them with customers but the lack of availability of new examples to be placed with potential customers is severely restricting market opportunities. There are other issues with the type but the inability to meet the aspirations of the air ambulance customer is having a terminal effect.

In the air ambulance world the 902 is [was] a good package with a roomy cabin and an overall size that suits those operators wishing to drop into city streets. London AA, the most recent operator to select the type in the UK, regularly fly into relatively narrow streets and would have found itself operationally hampered with any other type. They are not massively larger but the dimensions would call for a major rethink on landing sites, a situation compounded by the disadvantages of not having NOTAR. Nonetheless London were obliged to take a used airframe to fly alongside their current aircraft simply because new is still not an option.

Finmeccanica-AgustaWestland [AW] announced that the two AW189 operated by Bel Air of Denmark have recently exceeded 2,000 flight hours, with the first aircraft reaching 1200 and the second unit achieving 1,000, while exceptional availability in the off-shore transport role. The first helicopter is the global fleet leader.

AW has obtained a Type2 Letter of Approval from EASA (European Aviation Safety Agency) as a Navigation Database Supplier for helicopter Flight Management Systems (FMS) making them the first rotorcraft manufacturer to obtain this EASA Certification and sole helicopter company capable of designing FMS and the Navigation Database; timely in adopting solutions recommended by EASA set to become mandatory in the coming years. AW can provide tailored solutions for its customers supplying on-demand Navigation Data. By using the common cockpit technology approach already available for the AW169 and AW189 models, this service is set to be possibly suitable and available for the AW101 in the future.

This achievement was possible thanks to the significant efforts devoted by the Avionics Integration and Customer Support & Training Departments and builds upon the in-house avionics integration and development, customisation capabilities, as well as the unique design philosophy and benefits of the AW Family concept epitomised by the AW139, AW169 and AW189 types which share a common cockpit layout, design philosophy and maintenance concept.



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AIRBUS HELICOPTERS

As might be expected from the market leaders AH brought only a little more to the party although the fact that much of it was related to the emergency services potentially focussed content as far as PAN is concerned.

The Norwegian Air Ambulance (Norsk Luftambulans AS) performs more than 8,000 air rescue missions annually flying thirteen examples of the EC135 P2+, one EC145 C2 and two H145, which are deployed in the challenging environment of the Norwegian mountains and also in Denmark. They will be the first operator to purchase a technically improved H135. Three units have been ordered with the option for further helicopters in the future. The first delivery is planned for 2017.

The Norwegian emergency medical services (EMS) operator will benefit from the latest Airbus Helicopters' enhancements to the versatile H135, which began with engine improvements offering increased performance for CAT A flights from elevated heliports and in hot & high situations. The latest improvements announced at Helitech include a modern 4-axis autopilot, stabilising the rotorcraft in every element of the flight; a redesigned aft cabin roof offering increased space; and the addition of the Airbus Helicopters-designed Helionix® avionics suite, all enhancing the already proven features such as its capability to fly under instrument flight rules (IFR) and its excellent performance in OEI (one engine inoperative) conditions.

Meanwhile the latest current variant of the H135 has been delivered to Bond Air Services and put into service with the Thames Valley Air Ambulance. Clearly this is an earlier iteration of the H135 without the announced 'technical improvements' but it does raise confusion about the conflicting marketing terminology at the same event, the public launch of the aircraft, took place in Oxfordshire the week after Helitech.

The H160 mock-up made its British debut at Helitech but has already aired in public several times at events including the Heli-Expo.

The programme steadily pursues its flight test campaign. The first prototype flights are progressing according to plan and the aircraft has already reached a maximum speed of 175kts and an altitude of 10 000 feet. As the validation of technical parameters is followed closely, the flight tests also provide a perfect opportunity for the fully integrated ground support teams to optimise maintenance activities.

The second prototype (PT2) is progressing as per plan since its power on in June. As one of the key priorities of the H160's development program is maturity at entry into service, the Turbomeca Arrano engines will be installed and tested on the dedicated integration installation called the Dynamic Helicopter Zero before the PT2 performs its first flight by the end of this year.

The type is destined for operations with oil & gas operations, emergency medical services, public service, and private and business aviation but it remains to be seen how popular it will be with the emergency services in a market with many options.

The German Federal Police, Bundespolizei(BPOL), has selected Heli-One, the world's largest independent provider of maintenance repair and overhaul (MRO) services, to fully modernise their fleet of 18 AS332L1 Super Puma aircraft through a NATO/NATO Support and Procurement Agency (NSPA) contract with proven EFIS and avionics upgrades from Universal Avionics and other suppliers.

To quickly respond and adapt to a variety of future Police and EU missions, BPOL needed to rapidly upgrade their AS332L1 fleet with current, reliable and affordable systems for the cockpit and the cabin.

The Electronic Flight Instrument System (EFIS) upgrade consists of twin EFI-890H Displays and Dual UNS 1FW Flight Management System (FMS) from Universal Avionics. In addition, a Barco multi-function display is installed together with a EuroAvionics moving map mission system (Euronav 7). These systems improve pilot awareness and offer the highest functionality, interface capabilities and flexibility for helicopter installation.

The modernisation programme has begun on one AS332L1 with the remainder of the fleet to follow in quick succession. The work will be completed at Heli-One's 215,000 square foot facility in Stavanger, Norway.

The Airbus Helicopters type of the moment in the UK air ambulance market is the H145 and its variants. Still based on the core of the Bolkow BK117 the series of developments that led to the latest variant is finding a significant following with Scottish Air Ambulance reequipping with them and East Anglia Air Ambulance further raising the profile of the type with having the future king in the pilot's seat.



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The latest air ambulance to select the H145 is Yorkshire. An announcement and formal signing of the contract for the purchase of one H145 was made on day 2 of Helitech although it was announced a few weeks earlier when a high profile fundraiser presented an opportunity and effectively forced the hand of the operator. It will replace one of the two existing MD902 helicopters later this year. Yorkshire researched all the new aircraft options available to the market before deciding on the H145 as it represents a significant step up in capability, offering increased range, payload and cabin space with which to provide critical care service across all Yorkshire and surrounding areas. The agreement also includes the provision of a long-term comprehensive support package, which guarantees Yorkshire Air Ambulance gets the highest levels of availability and highlights Airbus Helicopters confidence in the reliability of the aircraft.

The new helicopter, fitted with a state of the art Bucher interior specifically customised to the users requirements, will be equipped with a rescue hoist which, when combined with its reduced footprint, will enable YAA to provide critical care and transport for patients from remote or inaccessible places. The aircraft is designed with full night flying capabilities and a 4-axis autopilot. Bucher had a replica of the forthcoming interior displayed on a position to one side of the Airbus Helicopters stand.

Top image: The Yorkshire Air Ambulance Charity team immediately before the signing ceremony and below an earlier moment when they were meeting at the Bucher exhibit that displayed the EMS interior that YAA have selected for their first H145.



BABCOCK

Rumour has it that the days of Bond Air Services Limited [BASL] as a separate name are numbered. Although the company name was certainly evident at the Helitech booth there were clear signs of the Babcock names showing through writ far larger than the former Avencis Group name had been. Potentially underlining this 'rumour with legs' is that the hand-over of the newly rebuilt helicopter to NPAS was undertaken at a higher level through Babcock rather than BASL.

BASL had what might be one of their last moments in the spotlight alongside their suppliers with the handing over of the first of the rebuilt EC135s for NPAS.

The resultant job on the former high skid EC135T2 G-SURY bought by the Surrey Constabulary and transferred to NPAS drew much praise from all that inspected it. The conversion is now G-POLB and looking far more pristine than its age suggests. You can do a great deal in a makeover and this was appreciated by a lot of people including the KLPD [the Dutch Police] who are looking for some makeovers themselves for their mixed fleet of EC135s and AW139s and were clearly to be seen all over the NPAS job.

The upgrade has been lengthy with lots of details inserted by the future users but the next conversions will be far quicker to realise. The schedule should see the Chiltern aircraft [G-CPSH] enter into the workshops followed by the North Midlands aircraft [G-NMHS] in January.

For the casual passer-by the condition of the airframe is attractive but for the practitioner it is more of interest to take in the cabin and the crew stations and how they fit together as a work place. A screen and an array of switches can be just that but it is more if they fit into place – if the ergonomics are just right. The feedback is that Bond have done a very good job in bringing together the disparate products from a range of manufacturers including **Avalex, Britannia, CarteNav, Terrafix** and **Vislink** to provide a good office.

The airframe is clearly not new but other elements have been refurbished to good effect. The Spectrolab searchlight was returned to the US manufacturer and remanufactured to the latest standard rather than selecting something entirely new and potentially more expensive. In selecting the L3 Wescam MX-10 weight has been saved in a number of areas without any loss of EO/IR capability over the older technology 15 inch sensor that SURY had been carrying. The modern sensors carry most of their electronics in the head of the sensor, therefore outside of the cabin, which significantly reduces the in cabin black boxes and wiring. Both sensors sit at either end of a Meeker mount step on the starboard side of the airframe and are therefore able to work to



The rear office of POLB attracted lots of attention from passing attendees—not all practitioners but it was interesting stuff.





On the show floor—Cal Meeker of Meeker Aviation sitting on an example of his very own step as fitted to the EC135T2 G-POLB.

Meeker steps are fitted to all recent UK EC135s and quite a few other police aircraft across the world. use equipment mounts of his design.

gether effectively under the eyeball gaze of the pilot and rear TFO. Despite all the technology 'eyes out' and good VFR visibility remain a prime requirement in police aviation. Other items without a direct tactical use, including the PowerSonix public address system are located on the port side

All this reduction in the bulk and weight saving has enhanced the space in the cabin and freed up the space in the rear via the clamshell doors – allowing the return of the light stretcher to the cabin. Air ambulances may well be moving into the realms of night flight across the UK but analysis of the individual operations show that all have assigned a different meaning to the service they are offering and that leaves NPAS and the Bristow Coastguard SAR operations to fill the gaps and provide a true 24/7 service.

In terms of numbers some 150kg has been saved overall and that can be taken as passengers carried or fuel loaded. The aircraft remains a four seat craft with three standard crew members plus the ability to take a fire service or police 'Silver' or 'Gold' commander when required. The refurbishment goes some way towards stemming the inevitable weight growth that is the Achilles Heel of operations. Some may recall that most of the police AS355 fleets of yesteryear were crippled by weight and could only undertake 20 minute missions towards the end of their careers.

Caption One high skid EC135T2, G-CPSH, is in Bond now and should emerge as G-POLC, G-NMHS will follow next year.

At the actual handover ceremony David Plester, CEO Northern Europe for Babcock Mission Critical Services, handed the keys over to West Yorkshire



The newly freed rear space in G-POLB with drop down access and below the official handover . Left to Right: West Yorkshire PCC Mark Burns-Williamson, Chief Supt. Ian Whitehouse NPAS and David Plester of Babcock.



Police and Crime Commissioner Mark Burns-Williamson as other NPAS luminaries looked on. Plester said: "I'm delighted to be able to hand over this aircraft to NPAS. This is the first of seven we have been contracted to upgrade and we believe this to be the most advanced police support helicopter anywhere in the world today"

Burns-Williamson who chairs the NPAS National Strategic Board said: "Air support is very important to policing: it can help save lives and catch criminals and this helicopter has some of the best kit available to help support police in their work."

BAE SYSTEMS

With its roots set in the shrinking high end of the market – both civil and military - in recent months BAE has been seen to be dabbling in other areas of commercial aviation looking for areas in which they can place their products. Their presence is all about dialogue and they were busy doing just that with potential customers including the OEMs and operators.

BAE has the products that might interest many but they also have a daunting image of high costs that surround the military market so they simply need to get the 'lower end' of the market used to their presence. On this occasion they brought a head-up display – 'LiteHUD' – and a Chinook servo as hardware but there are other areas where they might be successful where others have failed including helmet pointing which they have a lot of experience in. Again the trouble is that helmet pointing maybe a dead end on grounds of cost.



BELL HELICOPTER

Although they were very present on the floor and busy the Bell Helicopter stand was understated. The company was exhibiting a mock-up of the Model 505 JetRanger X and a small model of the 525 but off the stand they had a 529 in the indoor static and another providing

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the only customer demonstration flights the event could muster. A Bell 407 in the indoor static represented the type.

The selection of only the model representing the 525 reflected the fact that its projected area of the market, mainly Oil & Gas, remains muted to match the current downturn in the oil and gas markets leaving the main displays to the 505 and 529. The type may have a place in SAR but this is likely to come later and Bell have already slowed the programme to match assumed demand.

In contrast the new 206 replacement, the 505, remains at high importance. Turbomeca is moving towards Arrius 2R certification by end of this year. 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. The first production engine was delivered to Bell Helicopter on schedule in August. The handover took place at the new B505 assembly centre in Lafayette, Louisiana and marked a major step in both 505 and the Arrius 2R programme.



CHURCHILL

The company is well known for its ARS- Augmented Reality System that was a leader in adding street names to an otherwise 'normal' airborne mapping system and variants of the ARS continue to be on offer to the market. There is a strong following of this MS Windows based system in the USA law enforcement community.

New to the show was a video recorder with a difference. Tom Churchill noted that on most existing in aircraft recorders there was no clear visual reference to what was being fed into the machine. Most had lights – easily lost to view in daylight and potentially lost among a myriad of lights at night and often mounted way below line of sight - but the new offering, the ION, has a small but clear image of which feed is being fed through to the recording cards. The ION offers simultaneous recording of 2 channels of HD-SDI video, one channel of analogue video, audio and metadata and the units can be stacked for a nominally unlimited number of recording inputs. ION includes playback while recording and built in wifi for real time video streaming to tablets and other mobile devices.



Many dismissed the Churchill systems due to their reliance on simple systems like MS Windows and the use of a range of 'cheap' off the shelf controllers including those from such as home gaming machines but in the end it was the customers who decided what they wanted and not what others thought they wanted. Churchill flourishes. www.churchillnavigation.com

TURBOMECA

Turbomeca (Safran) showcased some of its engine solutions for the helicopter market with three engine mock-ups – Arrius 2R, RTM 322 and Makila – featured on the Safran booth (E60). In addition they highlighted the achievements during 2015.

In March, the Arrano was exclusively selected to power the new Airbus Helicopters H160. The following month, the first suite of engines was delivered for use in the ground test program and the first flightworthy example will be dispatched in the coming weeks. First flight is scheduled for the beginning of next year and entry-into-service in 2018. Certification of the Arrano will meet that timetable.

By the end of the year, Turbomeca will start ground tests of the TECH3000. This full-scale technological demonstrator will be at the core of a new family of engines in the 3,000 shp range designed to meet requirements of the new-generation ten ton-plus helicopter market. TECH3000 will enable Turbomeca to validate the design and basic performance figures of such high-power engines capable of delivering 25 % better fuel economy compared to the state-of-the-art engines available today on this segment.

In 2015, Turbomeca is also celebrating an achievement: a total of 100 million hours flown by its engines. Somewhere in the world, a Turbomeca-powered helicopter takes off every nine seconds, all day every day.

Turbomeca (Safran) and Bristow Group announce the signature of a global Support By the Hour (SBH) contract for Makila and Arriel engines. The contract covers approximately 150 engines from the Arriel and Makila families. Bristow Group operates a large fleet of Turbomeca-powered rotorcraft, including the AS332, H155, H225 and S-76C series.



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PRATT & WHITNEY

Pratt and Whitney Canada [P&WC] were present at the show but it was a muted presence with a few visual cues in the form of some very attractive engine models.

P&WC has boosted the basic Time Between Overhaul (TBO) for the power section of the PT6B-37A turboshaft engine by a full 50%, jumping from 3,000 hours to 4,500 hours, resulting in improved operating economics. All PT6B-37A engines in service are eligible for the basic TBO increase, meaning no minimum build standard is required.

The PT6B-37A powers the AgustaWestland A119 Koala single-engine helicopter. More than 460 PT6B series engines power helicopters in service with 93 operators in 35 countries. The engines serve varied applications including corporate and oil and gas transport, emergency medical services, firefighting and other utility operations. The PT6B-37A engine has an automatic fuel control and an electronic power turbine governor with a manual back-up – a feature unique to single-engine operations.



H&S Aviation were displaying this turbine engine cutaway to illustrate their support services.

P&WC has completed its Entry Into Service (EIS) process for the new PW210A engine which will power the AgustaWestland AW169. The first delivery is imminent.

The engine features a Dual Channel Full Authority Digital Engine Control (FADEC) that raises the bar for ease of pilot operation and maintenance diagnostics. Engine information can be downloaded from the FADEC and engine memory storage device to P&WC standard ground-station software, a powerful tool linked with P&WC's online interactive publications and the latest diagnostic tool, Spotlight™.

The PW210 has been designed for low maintenance and maximum availability: 3,500 hours TBO; no scheduled oil change, no boroscope or vibration checks, and an easily accessible and integrated nozzle for compressor wash – all of which help to maximize time-on-wing with no compromise in reliability. The PW210A engine received Transport Canada Certification in July, 2014 and EASA validation in December, 2014.

It was left another exhibitor, **Adams Aviation**, to highlight some PWC Service Bulletins [12221, 14496, 13485, 3472 and 1754] that call for the inspection/replacement of the Fuel Pump on various PWC PT6 models.

Adams Aviation currently has stock of the Argo-Tech replacements called for by the Bulletins and is offering them at up to a 70% saving on the price on an off-the-shelf basis. The

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Adams were also offering options for complete overhaul of PWC PT6 engines or an exchange replacement engine with minimum down-time and a 7-year warranty.

Adams Aviation were exhibiting a wide range of equipment at Excel London and were due to return to the same venue on October 14 the MRO Europe Conference and Exhibition. Attendees at the last ExCel Helitech may recall the event coincided with the MRO event at Excel although they were at opposite ends of the exhibition venue. It worked out better for Adams this year in that they could take a week off – running stands at shows either end of Ex-Cel in 2013 was a logistical nightmare. It is tempting to wonder whether the two very different shows could actually complement each other if they were held at the same time and closely located.

The Adams exhibition team was joined by AEM; Airwolf; Bose; David Clark; Eln; Mid-Continent Instruments+Avionics; Powervamp and Whelen, some of whom would traditionally be found exhibiting in their own right. It is not that they necessarily rejected Helitech outright as individual entities but there were other clashing events in the calendar. Powervamp for instance, usually a significant presence at Helitech was much reduced by another airport event in Munich and had to make a decision.



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FEC HELIPORTS

FEC Heliports Worldwide Ltd who offer heliports and landing equipment were able to announce two further major helipad projects at the show, one in Africa and one in the Middle East.

The first of these projects is in Ghana for the design, manufacture and supply of a 21.0m x 18.3m aluminium rooftop elevated helipad for the newly constructed UNICON Hospital in Takoradi. This will be the first aluminium roof-top helipad in Ghana and is being installed to serve the burgeoning Ghanaian oil and mining industries.

The helipad will have a maximum take-off weight capacity of 11.0 tonnes. The design and supply package includes all horizontal structural support steel for the helipad and access walkway, ICAO compliant aviation and obstruction lighting, remote lighting control and meteorology station with SMS messaging, fuel containment and AFFF fire suppression together with an installation team.

The second project, in the United Arab Emirates, is to design, supply and build 3 helipads for use by police and emergency services helicopters. The installations, located at three Dubai Metro main depots, comprise one semi-elevated and two ground bearing aluminium helipads. All three helipads are 17.5m square, include aviation lighting packages and are designed to accept Agusta Westland 109, 139, 169 and 412 helicopters, operating in compliance with the requirements of GCAA - CAAP 70: HELIPORTS standards and recommended practices. The projected completion date is December 2015.

In addition to its helipad design, manufacture and installation offerings at this year's Helitech, FEC Heliports was demonstrating its range of heliport equipment, including the FEC HeliLight Portable Battery Powered LED Helipad Lighting System, a Remote Lighting Controller (RLC) and the DeVore Aviation HAPI-PLASI system. These are already in service with UK air ambulance operators and others.

FEC's Remote Lighting Controller is an all new, fully digital design that combines ease of installation and use with sophisticated yet simple and secure configuration via the IP65 rated keypad and LCD display or via SMS.



Now there is a new way to control your lighting and peripheral circuits using FEC's new Remote Lighting Controller (RLC) integrates both traditional VHF PCL and adds SMS control and monitoring with the option of automatic weather reporting (wind speed/direction, temperature, dew point and pressure) right from your helipad. The controller sits at the heart of a monitoring and control capability bringing together for the first time remote lighting control, helipad weather and system reporting.

The architecture can be used simply to control lights or, with additional meteorological sensors, to provide richer monitoring and reporting both by helipad operators and other agencies.

<p>EVENLODE SURVEILLANCE SYSTEMS The multi-application solution Evenlode is an IP enabled data terminal, tested to DO - 160F</p> <p> Phoenix Aerospace Ltd phoenixaerospace.co.uk</p>	<p> 130mm x 126mm x 218mm 3kg approximate Lightweight air platform transceiver</p>	<p>Delivering World-class Surveillance and Inhibition Capability</p> <table border="0"> <tr> <td data-bbox="821 1848 941 1982"> <p>surveillance</p>  <p>Surveillance</p> </td> <td data-bbox="941 1848 1077 1982"> <p>inhibition</p>  <p>RF Inhibition</p> </td> <td data-bbox="1077 1848 1228 1982"> <p>aerospace</p>  <p>Aerospace</p> </td> </tr> </table> <p>• Police & Military Surveillance • Force & VIP protection • Aircraft system integration & design, EASA Part 21J & Part 145 • DAOS, GCAA & ISO 9001 approval</p>	<p>surveillance</p>  <p>Surveillance</p>	<p>inhibition</p>  <p>RF Inhibition</p>	<p>aerospace</p>  <p>Aerospace</p>	<p> Enterprise Control Systems Ltd Enterprise Control Systems Ltd ECS Technology Park, Wappenham, Northants, NN12 8WJ United Kingdom T: +44(0) 1327 860050 E: sales@enterprisecontrol.co.uk enterprisecontrol.co.uk</p>
<p>surveillance</p>  <p>Surveillance</p>	<p>inhibition</p>  <p>RF Inhibition</p>	<p>aerospace</p>  <p>Aerospace</p>				

ROCKWELL COLLINS

Rockwell Collins brought a very popular hands on training and demonstration exhibit to the show.

The flexible and modular Rockwell Collins Pro Line Fusion integrated avionics system has been selected for 20 aircraft, including business jet, air transport, the AgustaWestland 609 tilt-rotor and military flight decks. It has even been flight tested as an unmanned aerial system ground station.

For the first time, the brand new Pro Line Fusion demonstrator was at Helitech in its rotary wing variant. The system made its debut into the commercial helicopter market earlier this year, with the company recently announcing an agreement with Airbus Helicopters and Vector Aerospace to jointly develop and market the integrated avionics solution to upgrade Airbus Helicopters platforms.

Featuring advanced graphical interfaces, intuitive icons and easily configurable multi-function display windows, Pro Line Fusion makes it easy for pilots to keep their eyes forward, with the right information in the right place. Now, pilots can more naturally and effectively stay focused on the mission during all phases of flight and in all flying conditions.



With an intuitive layout that can be preconfigured to match specific operational scenarios, the system offers a variety of innovative technologies designed to reduce pilot workload and enhance situational awareness.

The mission-specific operational profiles include offshore platform approaches; hover in place; extended search and rescue patterns; and other critical mission capabilities. Combining large, high-resolution displays with the ease of touch-screen operations (complemented by intuitive keypad and cursor controls); Pro Line Fusion can meet the demands of any helicopter mission today and for the future.

In addition to Pro Line Fusion, Rockwell Collins also showcased the RTA-4100 MultiScan™ Weather Radar which represents a major step forward in automation for helicopter flight crews. The system automatically scans ahead of the aircraft and combines the returns through advanced digital processing and analysis algorithms to display not just precipitation rates, but the actual weather threats.

The capable DF-500 Direction Finder system pinpoints distress signals with unmatched accuracy and reliability. It enables aircraft to receive and immediately locate activated 406 MHz Emergency Position-Indicating Radio Beacon (EPIRB) signals, allowing crews to go directly to people in distress.

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SPECIALIST AVIATION

As previously mentioned the Specialist Aviation Services Ltd (SAS) Group continues to promote the MD902 Explorer as a previously used commodity but is increasingly obliged to offer its customers airframes from others manufacturers to meet their aspirations for truly new airframes. Currently the airframe of choice is the AW169 but this must ultimately be customer led. As has always been the case the 'Group has sought maintenance beyond its own fleet and specialist knowledge in particular areas. Twenty years ago they specialised in representing the original NAT [Northern Airborne Technology] a Canadian communications company that reigned supreme in the UK in the days before digital radios temporarily sidelined them, more recently SAS undertook the Tetra fit into a range of emergency services craft and at the show announced a new tie up.

Having failed in an earlier attempt to specify its UK agents [PremiAir - they went out of business even as the contract was signed] NVG specialists, Aviation Specialties Unlimited Inc. (ASU) of Idaho, USA teamed up with SAS announced the appointment of SAS as a dealer and service centre for ASU's ANVIS 9 night vision goggles.

As more European HEMS operators expand their services into the hours of darkness, SAS is setting up its own NVG servicing capability at its Gloucestershire, UK based headquarters and at the same time is taking on the regional distributorship which includes the UK and Ireland.

"We selected SAS to partner with in the United Kingdom and Ireland because of their capabilities and experience," said ASU President Jim Winkel. "For more than 20 years ASU has provided customer service to operations around the world from our headquarters in Boise. We have sent our team of experts out, but now a strategic partnership with SAS will allow our customers the ability to receive critical support and service locally."

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SAS has been equipping aircraft for NVIS and providing night HEMS services since 2012. During this period SAS has undertaken extensive evaluations of commercially available NVGs prior to adopting ASU ANVIS 9 white phosphor goggles as its standard. It will have 20 sets of goggles in service by this fall.

According to SAS Flight Operations Director, Capt. Dave Burgess: “The ANVIS 9 goggles have the highest quality resolution and image intensity for any commercially available NVGs and we believe that the black & white images generated by white phosphor goggles provide the most natural view and one which crews find easiest to adapt to. We will now be able to service our own goggles in house and we will also be able to offer the same facility to third party operators this side of the Atlantic.” For more information visit www.asu-nvg.com or www.specialist-aviation.com

One of the more recent contracts to supply two MD02 to the Cornwall Air Ambulance was represented by one of the two assigned aircraft being outside in the static park – it arrived Day 2 as the weather had been a problem.



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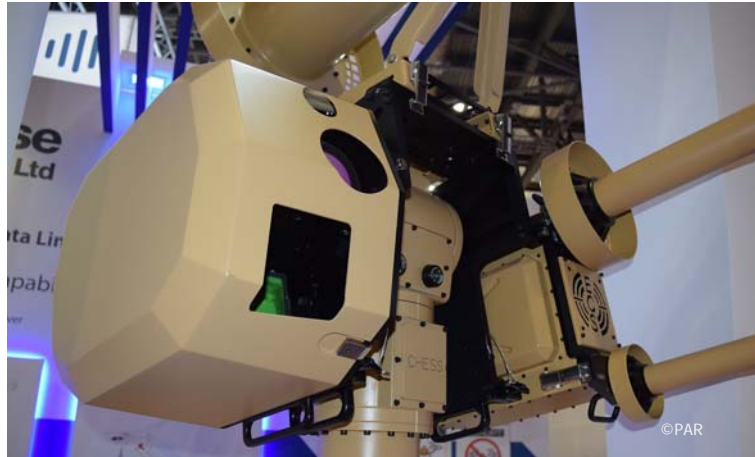
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In the October edition of PAN report on DSEi at ExCel there was mention of the AUDS anti-drone device on the Enterprise Control Systems stand and whether the device would make it to the 'helicopter show.' Well it did and it quickly caught the eye of the media with newspaper reports in the vein of The Guardian's 'drone-death-ray-device-liteye-auds' and footage on the BBC News. For ECS, Blighter and Chess, the development team, this was the stuff of dreams and way beyond the cost of the stand in advertising worth.



The Guardian article spoke of the team of British technology firms having developed a "death ray" for drones that can knock an unmanned aerial vehicle out of the sky by turning it off in midair up to a mile away but they were reporting on the Liteye USA version of the equipment to be displayed at the Commercial Unmanned Aerial Vehicle (UAV) Expo held in Las Vegas days later. It was the same AUDS just badged as Liteye, based in Colorado, the distributor in the US and Canada.



It is not the first anti-drone device to appear this year. Boeing debuted a giant laser gun last month, touting its ability to knock out drones from safe distances but perhaps being an over-kill device. As with all things the market will decide.

UNIVERSAL AVIONICS

The Tucson, Arizona, USA based company was focussing its Helitech business on a new AS332 Super Puma installation designed to replace the existing ADIs, HIS, Airspeed Indicators, Altimeters and Vertical Speed Indicators with a EFI-890H Advanced Flight Display system - not quite a full glass system but not far off.

Ominously perhaps in the world's largest market for the type there was nothing to be found on the MD902 upgraded cockpit work that Universal were undertaking.

How to get noticed? When you are relatively unknown in the market and want to attract attention you need that little extra edge and Huntsville Alabama based RMCI promoted their XRDS diagnostic system for helicopters through no less than Lego. By the simple expedient of being seen to be building a model brick helicopter model and subsequently giving it away in a business card draw a wide range of visitors and exhibitors were attracted to the stand.



Participating Agency



WHAT ARE WE GOING TO DO ABOUT HELITECH?

Not everyone is asking this, but mainly it is the people who do not attend there and that does tend to devalue their contribution somewhat.

There were Duxford lovers in the halls but the point is they were present to do business regardless of their personal preferences. There were also those that are considering where else Helitech might go in the future, probably not in 2017, more 2019 but some of us may be past caring by then.

This year at least two of the exhibitors apparently voted with their feet and left early. I asked the organisers about one that left and I am still waiting to hear. Was it boredom, was it bad business, some pre-planned or wholly unexpected pressure to leave. Knowing these might be important. Exhibitors leaving early or even failing to arrive are not unusual at shows and usually someone knows the reason. But it whatever the reason it does not help the event.



A few more views from the shop floor of Helitech 2015



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