Police Aviation News

©Police Aviation Research

Number 205 May 2013

PAF



PAyCon 2013
In Wiener Nuestadt

Austria - this month

Boston Bombing

Wiltshire AA Honours Founder
Columbia collects more 107s



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:** <u>editor@policeaviationnews.com</u>

SPONSORS

Broadcast Microwave
CurtissWright Controls
Enterprise Control Systems
Honeywell [Skyforce] Mapping
L3 Wescam
Excellence in avionics
Powervamp
Troll Systems Corporation

Airborne Law Enforcement Association European Law Enforcement Association www..bms-inc.com www.skyquest.com www.enterprisecontrol.co.uk www.skyforce.co.uk www.wescam.com www.phoenixavionics.com www.powervamp.com www.trollsystems.com

www.alea.org www.pacenet.info

EDITORIAL

There were a number of lessons to be learned from the Boston Marathon bombing and they should be noted both sides of the Atlantic.

Despite a ground swell of public opinion against the searching eyes of police sensors hopefully few US citizens will begrudge the demonstrated ability of the Massachusetts State police to seek out and find the terror suspect in a parked up pleasure boat. The heat of the suspect showed through a tarpaulin covering his body from plain sight – the very type of act that has all too regularly been deemed an illegal search in some US courts and has raised the hackles of many a 'human rights' activist.

In contrast there are many on the enlightened side of industry that will claim a great victory for police aviation in bringing about the arrest of the suspect. The accuracy of that claim may be flawed by the apparent fact that the weather grounded air support the previous day, thereby halting the potential of air support in its tracks and certainly extending the whole manhunt by at least a day.

Yes, air support is important and can make a massive difference, but it cannot be totally relied upon to be the true 24/7 irreplaceable resource that both the police and public require and that some claim it to be. The emergency services have in the recent past made massive claims for replacing existing resources – both men and ground based machines – with aircraft even though at heart we know that air support simply will not work in inclement weather. As one well respected industry commentator has said on many occasions – the industry should not advertise a capability it cannot achieve every time without exception.

The same may be said of the claims of the unmanned aircraft industry. Duncan Sands the UK Defence Minister controversially predicted in 1957 the end of manned fighter aircraft with the launch of the Lightning fighter and now 55 years, and a number of manned fighter aircraft programmes later, Israel has declared the end of the manned aircraft is in sight. It remains to be seen whether they got it right this time but I think most of us have massive doubts about the ability of the majority of unmanned craft to even stay safely in the air.

So far unmanned craft have regularly demonstrated high first costs in unit and support acquisition and a less than promising safety record. If every unmanned craft loss suffered thus far had involved human loss there would be a public outcry. The loss rate is eye watering but fortunately the lost craft conveniently fragment in remote areas or slip unseen beneath the waves to save undue embarrassment to their promoters.

Bryn Elliott

LAW ENFORCEMENT

BRAZIL

PARA STATE: A last month's LAAD Defence & Security event Helibras signed a contract for delivery of two new Eurocopter AS350 B2 helicopters for the Secretary of State for Public Security and Social Defense of Pará These aircraft were acquired to form the security planning of the State Government due to the expected demand for the implementation of the Belo Monte hydroelectric plant being built on the Xingu River, near the city of Altamira.

The helicopters will be role equipped with a rescue winch, cargo hook, multi police radio frequency, armoured cabin floor, rappel kit and sophisticated airborne surveillance system consists of thermal imager, display in HD, uplink and downlink. Pará already has two similar helicopters, having started its flight operations in 2005. The newly acquired aircraft will be delivered in May 2014.

CYPRUS

POLICE AIR WING: After spending many years unused the Pilatus Britten-Norman BN -2T Turbine Islander operated on police duties as 5B-CPA and CP-1 has been disposed of and returned to the United Kingdom and Islander Aircraft Ltd Cumbernauld as G-BPLO. Police operations are now rotary wing. [A-B]





- GPS receiver and data interface for tracking and mapping purposes
- · 10 W output power
- Geo-Point, BMS' proprietary receive site software that uses metadata from the aircraft video camera to display the bearing and distance of the camera video location (requires compatible receiver)
- Operation across multiple mobile platforms and with any BMS receive solutions—including the handheld Carry-Viewer III

The Downlink Experts™

Learn more at our website or call today!

www.bms-inc.com/hc4.html • sales@bms-inc.com • 800-669-9667 (US) • 858-391-3050



GERMANY

BRANDENBURG: In this month's PAvCon Police Aviation Conference you will have a chance to meet up with Airborne Technologies the locally based systems integration company. Last year the company showed their expertise on fixed wing in the form of the Vulcanair Observer and the company now have a 'new' demonstrator airframe based on a scrapped Bolkow BO105 airframe. Last month this was simply an unpainted shell but this month at both the Helicopter Show and PAvCon they expect to have it fully altered to represent their present and future expertise in the field.

Last December Airborne Technologies delivered two upgraded and refurbished EC135 helicopters to the police of Brandenburg [Berlin] just five months after the contract to upgrade the pair was signed. The aircraft featured on the front page of PAN displaying the Trakka searchlight.

It was something of a rush job for both the customer and the integrator. It was not until late in July 2012 that Airborne Technologies was awarded the tender to reequip two EC135 with a complete new surveillance suite containing the L3 Wescam MX15HDi, a Churchill ARS-500 Augmented Reality Navigation

System to operate with an existing downlink and tactical radio suite in an ergonomic work environment.

All components of the interior are made out of carbon fibre and even the bracket carrying the MX15HDi utilised the technology, providing lighter weight and lower vibration levels.

Hans-Dieter Brachmann, of the Brandenburg Police congratulated Airborne Technologies in

completing the project on time and providing great value for money.

Airborne Technologies combines and optimizes aviation, data capturing and data processing knowhow. They own and operate a fleet of multi-mission aircraft / data processing systems for remote sensing applications. The experience gained from these missions provides them with the knowledge for consultancy and the delivery of comprehensive aircraft and sensor solutions. [AT]









MALTA

ARMED FORCES: It has been something of an ongoing saga to use EU money to bring into service a capable twin engine helicopter type to replace the now very old fleet of second hand Sud Alouette III single-engine helicopters used on surveillance and SAR duties over the open waters off Malta GC.

In recent years the country has been on the verge of purchasing Eurocopter EC145 helicopters from the USA production line to undertake the replacement, only to find the plan falling through when it was decided that there was a greater need for the money to be put into Beechcraft King Air surveillance aircraft. Plans to acquire surplus AgustaBell 212 helicopters from Italy also failed to lead to newer airframes arriving. Other options were investigated and it seems that they too have had their own peaks and troughs. The latest storyline has been controversy over the letting of the sale to AgustaWestland.

The AFM issued its latest tender on September 4th last year and was being contested by two bidders - Eurocopter and AgustaWestland.

On December 21st Eurocopter SAS was disqualified from the bidding process as it was adjudged that their proposals were 'administratively non-compliant' in the form of the submission and the weight of their proposal. Eurocopter subsequently objected to this decision.

After a public hearing in late January this year the decision to disqualify Eurocopter SAS was upheld by the Public Contracts Review Board. Similarly further appeals by Eurocopter in February were rebuffed.

It now remains to be seen whether the AFM and AgustaWestland can get on with finalising the three helicopter order. The type has not been disclosed. [PAR]

TRINIDAD & TOBAGO

AIR GUARD: The government of Trinidad and Tobago has launched negotiations with a small Canadian aircraft manufacturer to buy two aircraft that could help in the fight against drug traffickers. Trinidad and Tobago Prime Minister Kamla Persad-Bissessar told Canadian media.

Trinidad and Tobago's Air Guard has launched negotiations to buy two refurbished long-range aircraft from Provincial Aerospace Ltd. of St. John's to help monitor drug traffickers' boats. The company undertakes this work on a range of airframes so no specific type can be assumed.

The United States has asked Trinidad and Tobago to participate in a regional agreement to share intelligence about drug trafficking, although Ms. Persad-Bissessar said the agreement is controversial in the Caribbean because it would not appear to provide for reciprocal sharing of information by the United States. [Globe and Mail/PAR]

UNITED KINGDOM

SCOTLAND: A new chapter in the history of policing in Scotland opened with the advent of a single service from April 1. Police Scotland assumed responsibility for policing throughout the country under Chief Constable Steve House and members of the command team based at Tulliallan Castle. It is now the second biggest policing organisation in the United Kingdom.

Police Scotland has a single helicopter, the former Strathclyde Police EC135T2 leased from Bond Air Services and operated from their Glasgow heliport. This situation is not likely to change in the foreseeable future. [PAR]



NPAS: The press release issued by NPAS on April 1st officially confirmed that police forces in the North East (Cleveland, Durham, Humberside, Northumbria, North Yorkshire, South Yorkshire and West Yorkshire) joined the National Police Air Service (NPAS). This is the third phase of implementation since the launch of NPAS on 1st October 2012. The remaining police forces in England and Wales will join NPAS by January 2015.

NPAS operates under a lead force model through West Yorkshire Police. This ensures that NPAS is led and owned by the police and delivers the operational benefits and financial savings that have been presented to individual police bodies.

Once all forces join NPAS there will be 25 aircraft based at 23 locations that provide the operational capability to deliver an effective and efficient air support service. This will be achieved through borderless tasking and making use of the nearest available aircraft through the central Despatch and Flight Monitoring service which is based in Bradford, West Yorkshire. NPAS will deliver a service with an aircraft available 24 hours a day and is supported by three reserve aircraft when aircraft are offline for scheduled maintenance to minimise reduction in service.

There have been many successful air operations since NPAS launched including the ongoing assistance with the 17 week trial for the murder of two Greater Manchester Police (GMP) female officers. The trial involves significant movement of defendants under escort with the largest demand for air support coverage outside of the Olympics last vear. NPAS is able to meet the requirement through use of the reserve aircraft and regional aid which would have been less easy o access pre NPAS.

The bases for the new additions are located

Carr Gate- Wakefield. West Yorkshire

Sheffield, South Yorkshire

Humberside Airport, Humberside

Newcastle Airport, Newcastle

Durham Tees Valley Airport. Darlington, Teesside

multi-facing multi-sensing multi-linking

Evenlode. The multi-application solution.

Evenlode is tested to DO - 160F EMC and environmental test requirements.

Enterprise Control Systems Ltd (ECS) recent acquisition of Phoenix Aerospace Ltd creates a unique partnership that offers a lot more than just equipment and software. Our combined strengths are in providing systems which are technically advanced, high quality, flexible, configurable and turn-key.

Evenlode is a lightweight data terminal designed specifically to meet the demanding requirements of airborne, ground and maritime applications.

Acting as a bi-directional network repeater, Evenlode provides innovative solutions for any information exchange requirement.

Our team of experienced professionals work with customers to deliver leading edge capability. Our consultative approach enables us to converge legacy and next generation technologies.

The ECS turn-key solution includes:

- An extremely flexible COFDM transceiver system
- The ability to interface with multiple sensors
 An open architecture delivering data over IP
- The ability to control the terminal and sensor remotely
 EASA Part 21 design services
 EASA Part 145 for avionics maintenance
 GCAA (Gulf CAA) design approval

ECS delivers capability ranging from interfacing simple navigation and communications through to complet and demanding police or special forces mission



To see is to believe. For a live demonstration contact ECS or Phoenix Aerospace.





Enterprise Control Systems Ltd ECS Technology Park, Wappenham, Northants. NN12 8WJ United Kingdom

T: +44 (0) 1327 860050 F: +44 (0) 1327 860058 enterprisecontrol.co.uk www.enterprisecontrol.co.uk

Phoenix Aerospace Ltd Phoenix House, Rutherford Way, Manor Royal, Crawley. RH10 9RU United Kingdom

T: +44 (0) 1327 860050 F: +44 (0) 1327 860058 enterprisecontrol.co.uk www.phoenixavionics.com

The next group to join NPAS will be South West from July. This will bring in the force areas of Devon & Cornwall, Dorset, Avon & Somerset, Gloucestershire, Dyfed Powys, South Wales, Gwent with aircraft to be located at Bournemouth Airport, Bournemouth, Exeter Airport, Exeter, Filton, South Gloucestershire, Pembrey, Dyfed-Powys, St Athan, Glamorgan, South Wales. [NPAS]

Ed: The arrival of southern Wales into NPAS should really tax the reportedly ailing command and control system of NPAS. Nothing worse than adding some unpronounceable names into the mix that the good operators have apparently failed to shine at already. I have commented previously on the massive difficulties that regional dialects inject into hampering the capabilities of well meaning operators but adding a difficult minority language that few in Wakefield are likely to have even heard before will really scupper efficiency.

Last month's tale of woe about the non-availability of the South Yorkshire MD902 aircraft and the disbandment of the maintenance organisation did not stop there. The Explorer was replaced in service by an NPAS spare – the former Cambridgeshire MD902 G-CMBS –and this led to the most senior police officer in the county to praise NPAS by saying the county has a 'better' helicopter service now that air support is no longer provided in-house.

Former Chief Constable Med Hughes, who retired in 2011, raised concerns about sharing helicopter resources when South Yorkshire was initially only to have access to aircraft based in West Yorkshire [902], North Midlands [EC135] and Humberside [902]. He feared that delays in launching helicopters would impact on the force's ability to fight crime. The outgoing Police Authority agreed with Med, a police chief who was considered by many to be a fanatical promoter of the MD902 in the region, and fought his corner.

But after lengthy negotiations it was agreed that South Yorkshire Police could retain its own helicopter and operate it from Sheffield for 10 hours a day until 2018, with the remaining hours serviced by the NPAS helicopters from neighbouring counties.

South Yorkshire's now has a new Chief Constable, David Crompton, and he said he is pleased with the new system. He disclosed that the helicopter has been out of action for a reported two months for its annual. Under the previous system South Yorkshire would have simply had no air support cover. Crompton now says that the county has cover 24 hours a day, every day of the year rather than an average of half of the week."

Ed: In many ways the whole secret society that has surrounded the operations of the MD902 fleet under individual county control is unravelling as 'the books' are opened. Last month there was talk in these pages of a 902s enjoying a few weeks downtime each year for the annual when undertaken by a commercial provider and now confirmation, long suspected, that a police operated maintenance organisation is taking significantly longer to keep the aircraft under its care in flight worthy condition. So around 10% down time for the commercial option and 20% for the 'do it yourself' option. It does not bode well for the future of in-house police maintenance if those results prove consistent.



Image is Everything.

For over twenty years, RDDS Avionics Limited has provided global Police and Military mission operators the finest airborne surveillance equipment available.

Surveillance Mission success depends on the quality of the visual information received. In side-by-side comparisons, our end-users have chosen RDDS Avionics' displays over the competition based on the clear difference in superior image brightness, enhancement and definition.





F+44(0)1843 233 031

Star Lane

Margate

Kent CT9 4ED



Image Matters. ...but so does Support

Because RDDS equipment is designed in-house from the ground up, our engineers have deep understanding of the proprietary components used in every display we manufacture. Through-life support is paramount at RDDS and our commitment to providing long-term support for every product we sell is based on the fact that RDDS products are not dependent on other companies' COTS components.



AVIONICS LIMITED

Image is Imagination.

Rugged, reliable and fully supported, RDDS equipment is also innovative. Our Engineers engage with our end-users in a collaborative approach by harnessing the latest technology to create bespoke products. RDDS expertise in video processing, display technology, mission computing, mission system software, video conversion and routing allows RDDS to offer unique system solutions to specific Customer requirements.



AVIONICS LIMITED

Avionics Design & Manufacture



UNITED STATES

DELAWARE: The State Police are to acquire two Bell 429 helicopters for use in both airborne law enforcement operations and helicopter emergency medical services.

"For the mission and operations for the Delaware State Police, we evaluated all helicopter options in the light-twin category, as well as multiple medium-twin options. After careful consideration, the selection team chose the Bell 429 as the best combination of speed, power, performance and working volume to meet our mission needs," said Colonel Nathaniel McQueen, Jr., Delaware State Police superintendent.

The new Bell 429s, configured to perform airborne law enforcement missions, including patrol, surveillance and search and rescue, as well as emergency medical services (EMS), are scheduled to be delivered in early 2014.

The two aircraft will join the Delaware State Police Aviation Unit, consisting of 25 pilots and medics providing 24 hour coverage from two locations, Georgetown and Middletown. Each year, the unit averages 2,000 missions, transports approximately 300 trauma patients and flies nearly 1,500 hours. In addition to the new Bell 429s, the Aviation Unit operates four helicopters – three 407s and one 412 as well as a fixed-wing Cessna 182. [Bell]

MASSACHUSETTS: The US Civil

Rights Movements in many states are a major critic of police airborne cameras [and UAVs] and in particular their supposed ability to see through walls. Some states have major issues with the right to search by IR - even accidental searches have been ruled illegal.

Over a few days in April the Massachusetts State Police and their Federal allies altered much of that perception at least temporarily in their search for two young men who it was believed had planted and set off bombs in the crowds watching the Boston Marathon.



There have been subsequent doubts cast upon the FBI and how they came to know the suspects so quickly but on the face of it the operation was undertaken with consummate ease and speed

and brought to a conclusion using air support.

Reports indicate that the air wing couldn't deploy over the car chase and subsequent escape of the bomber at 1am April 19 due to weather. The one uncertainty is whether the remaining terrorist brother might just have been tracked and caught earlier thereby avoiding the economic loss associated with shutting down the city and the loss of civil liberties when police performed hundreds of searches of homes without warrant





MICHIGAN: West Michigan police agencies now have an eye in the sky to assist them on the ground and they too are attracting the attention of the civil libertarians. One of the two Michigan State Police helicopters will make routine patrols over Grand Rapids and surrounding communities, mainly utilising the 1993 vintage Bell 206L3 N111SP Trooper 2 flying from the Rockford post.

Before the state police decided to shift resources, helicopters only flew over West Michigan when requested or during special operations such as searches for marijuana grows. The helicopters routinely patrol Detroit, Flint and Saginaw.

Each of the State Police helicopter's is equipped with a GPS, an infrared camera and a 30-million candle power searchlight with the pilots wearing night vision goggles.

The state police recently decided to use the helicopters to assist area agencies with curbing violent crime. The decision had been in the works for some time but a spike in violent crime at the end of 2012 and beginning of 2013 pushed it forward.

The regular patrols started April 1 and will continue through June under the current plan - an extension beyond that date is expected but with limited resources – the other types operated are a Bell 430 and a Cessna 182 fixed wing. The capability is limited and the state large with 56,954 sq mi (147,511 sq km) of land mass. Some 1,200 flight hours were accrued by all three aircraft in 2011, a low level of operations even with additional fixed wing hours being added by other state aircraft.

Ed: Despite the tiny capability actually being offered by the State Police some sections are up in arms about the perceived level of intrusion into citizens lives. Some are wondering if the benefits from having these eyes in the sky are worth the cost and possible invasion of privacy.

"There's certainly a place for technology and helicopters in law enforcement," said Miriam Aukerman, an attorney for the West Michigan branch of the American Civil Liberties Union. "We want to make sure these patrols don't become Big Brother in the sky."

Nationally, the ACLU has raised questions about police helicopter patrols claiming that police helicopters "do raise privacy issues." They highlight an incident in 2005 when a police helicopter in New York City tasked with monitoring a street protest instead focused its infrared camera on a couple having sex on a dark, rooftop patio.

Auckerman said the West Michigan branch is concerned about the use of drones by police locally although no-one has even considered that as an option in police circles.

According to figures released by the operator in 2011 the Bell 430 flew around 175 sorties, the LongRanger 210 and the Cessna just 70. It suggests around 1,200 hours a year at most spread over some 57,000 sq mls of territory. Read the study here.





NEW YORK STATE: The State of New York is getting a new helicopter that is reported to cost four times as much as the one it is replacing. The state budget contains \$12.5M for a new helicopter to replace one that was damaged in a crash on the last day of August last year.

The lost helicopter was a Bell 407 N11SP that crashed whilst undertaking a search operation for a missing woman in the town of Campbell. Having lost power it autorotated into wooded area seriously damaging the helicopter and slightly injuring the pilot. [NTSB/Media]



OHIO: The whole fleet of helicopters owned and operated by Columbus Police was temporarily grounded for inspection of the airframes and maintenance records. Police were ready to sell one of the machines when they discovered 'gaps' in the maintenance records. Police hired a Cincinnati helicopter company, East West, to inspect the records and to checkout each airframe - that unscheduled task cost \$20,000. After a week the fleet was progressively returned to operations as the inspections progressed.

Currently, the department owns seven helicopters, five being airworthy. One that crash landed last summer is still being worked on, and the department is still trying to sell the seventh helicopter.

The findings of East West are not yet in the public domain. The fleet was grounded as a precaution while East West made its inspections, the 21 officers assigned to the city heliport continuing to report for duty there.

The Columbus police operation is a 16 flight hours a day, seven days a week, service that responds to about 7,000 calls a year and had a budget of \$3.1M in 2012.

Ed: Last September the city lost a federal lawsuit when a jury decided that the city had sold a defective helicopter to a Canadian businessman. The machine was forced to make an emergency landing after just 30 hours of flying.



OKLAHOMA: The Stephens County Sheriff's Office's new Bell UH-1 Huey made its official appearance last month after a period of role preparation after being acquired in October 2012.

The helicopter was acquired through the Law Enforcement Support Office, a function of the Department of Defense for a one-off fee of \$5,000. The Huey had only 6,890 hours of flight time but was cosmetically in bad shape. The preparation for service was sponsored locally significantly reducing the expected \$20,000 preparation costs.

The aircraft will be used for law enforcement support as well as search and rescue equipped with a small BAMBI bucket with a capacity of 150 gallons. It is intended to acquire a 400-gallon bucket in the future funded by grants.

Stephens County Sheriff's Office has two pilots available and on-call to respond to any requests for the helicopter. Sheriff Wayne McKinney and Deputy Kent Courkamp are licensed to fly the aircraft – both have around 10,000 hours of air time. Another deputy with a license has applied.

When they got the helicopter, McKinney said it was in excellent mechanical condition with only 6,890 hours of flight time but was cosmetically in bad shape.

It is expected to support other counties outside of Stephens County as needed and possible including Jefferson County, Grady County, Comanche County and Carter County. [scs]

TEXAS: Uniflight LLC of Grand Prairie Texas has announced the award of a contract by the Houston Texas Police Department to provide maintenance support for the department's helicopters.

The contract awarded to Uniflight is for one base year and two additional option years. The contract is for the support of Bell Helicopter 412 helicopters operated by the Houston P.D. [ULLC]



AIR AMBULANCE

NIGERIA

FLYING DOCTORS: Ola Orekunrin was studying to become a doctor in the UK a few years ago when her younger sister fell seriously ill while travelling in Nigeria. The 12-year-old girl, who'd gone to the West African country on holiday with relatives, needed urgent care but the nearest hospital couldn't deal with her condition.

Orekunrin and her family immediately began looking for an air ambulance service to rapidly transport the girl, a sickle cell anaemia sufferer, to a more suitable healthcare facility. They searched all across West Africa but were stunned to find out there was none in the whole region.

The nearest one at the time was in South Africa but a 12-hour activation time meant that the girl was dead by the time they were ready.

Motivated by the tragic death of her sister, the young doctor decided to leave her job in the UK to take to the Nigerian skies and address the vital issue of urgent healthcare in Africa's most populous country.

Orekunrin set up Flying Doctors Nigeria, the first air ambulance service in West Africa, transporting victims of medical emergencies, including industrial workers from the country's booming oil and gas sector. Currently in its third year, the Lagos-based company has so far airlifted about 500 patients, using a fleet of planes and helicopters to bypass the poor road network.

Last month, the World Economic Forum recognized Orekunrin's achievements by naming her amongst its prestigious Young Global Leaders class of 2013, a group it describes as the best of today's leaders under the age of 40. ICNNI

UNITED KINGDOM

LONDON: In some parts of the world 4G is a day to day matter of fact – surprisingly to some outsiders London has yet to see this latest development in wide use. A single operator, EE, is currently providing 4G in limited city locations in the UK and one of those is London.

London's Air Ambulance have now formed a strategic partnership with mobile operator EE, to develop new systems that will use 4G technology to enhance its service and cut vital minutes off mission times to benefit its patients. Trauma teams are already using tablet PCs with navigation apps, using EE's 4G network, in rapid response cars, which are used at night to deliver a senior trauma doctor and paramedic to the patient.

While the paramedic drives, navigation falls to the doctor. Previously a traditional A to Z map book was used to plot the route, with a sat nav as back up. Now the address can be directly inputted into the navigation app on the tablet, which generates a direct route without having to flip through pages on the hard copy map. Applications using 3G networks have been previously trialled but when travelling on high speed through London, the ability of non -4G services to refresh mapping have failed.

EE is currently looking to develop an application that will reduce the time it takes to get the aircraft airborne. Instead of gathering the data on paper, then running on foot with the paper to the helicopter, it is hoped that the new system will transmit information wirelessly, and instantly, to an on-board iPad, potentially shaving off seconds or even minutes to take-off time.

The London charity office has now moved to the City of London after many years of residency at the Royal London Hospital.

The office move has been prompted by continuous growth within the charity. While the clini-

cal and aviation teams will continue to be based at the new helipad at the Royal London Hospital in Whitechapel, the move is an opportunity for the charity to benefit from closer proximity to existing and potential sources of funding in the City and central London.

The new address is London's Air Ambulance, 7-8 Philpot Lane, London EC3M 8AA. **Tel:** +44 20 7220 5470 <u>info@londonsairambulance.co.uk</u> the helicopter remains based daily at The Helipad, Royal London Hospital, London E1 1BB

After 30 years with the health service the founder of London's Air Ambulance, Alastair Wilson is retiring.

Twenty-five years ago there was no London air ambulance; it was simply an idea that Accident & Emergency consultant Alastair Wilson and others had. With the acquiescence of the late Margaret Thatcher he helped set up the service and was awarded an MBE for his efforts. [BBC]

LUCY: The Lucy Air Ambulance for Children has joined the Association of Air Ambulances (AAA), the representative body for Air Ambulance Services in the UK, as an Associate Member. The charity funds life-saving medical air transfers for critically ill children from local hospitals to the relevant centres of excellence with the co-operation and assistance of regional air ambulances.

Clive Dickin, National Director of the Association of Air Ambulances commented: "We are pleased that Lucy Air Ambulance has joined the Association. Their membership shows their

CREATE AN UNFAIR ADVANTAGE.





HD IR Image

EO/IR Image Blended





Operate with the most capable technologies available:

- All digital, full 1080p HD EO/IR imaging
- High-Magnification, Large-Aperture Optics Superior range performance
- Image Blending Uncover more detail from one image stream
- Single LRU systems, common electronics and common interfaces simplifies integration and swapping amongst the fleet

For more information on these technologies visit WESCAM.com or call +1-905-633-4000

WESCAM wescam.com

Police Aviation News May 2013 15

commitment to delivering a professional charity that will work with the established air ambulances, charities, NHS trusts and foundations."

This service is provided at no cost to those children requiring hospital transfers by air, and will be mobilised at the request of the senior medical staff co-ordinating their care. AirMed and other specialist aviation companies have already been working closely with Lucy during the entire set up phase and will continue to be involved with future continue to be involved with future transfers requiring a fixed wing aircraft. Having direct access to both



rotary and fixed wing aircraft will enable Lucy to undertake all transfers on the most appropriate platform, depending on the care needs of the patient.

Ed: This service is an entirely different model to that offered by The Air Ambulance Service [TAAS] based in Coventry. Lucy uses existing regional aircraft resources and funds them to undertake the limited number of child transfers occurring each year. TAAS has rejected both membership and the ideals of the AAA by fundraising against the other charities in their own areas for a centrally located helicopter that many see as uneconomic.

NORTH WEST: Bond Air Services (Bond), the largest operator of air ambulance aviation units in the UK, has been awarded a new seven-year contract by North West Air Ambulance (NWAA). The contract, worth just over £10M, is to provide air ambulance support across five counties in North West England.

Under the new contract, Bond will continue to provide a complete helicopter support service out of Blackpool Airport and City Airport Manchester, including aircraft, crew and maintenance support. The service will cover the counties of Cheshire, Cumbria, Lancashire, Greater Manchester and Merseyside, an area of over 5,500 square miles with a population of approximately eight million people.

Bond has operated Helicopter Emergency Medical Services for NWAA since the charity was founded in 1999, and this contract renewal builds on their very successful partnership. NWAA now operates two EC135s provided by Bond. [BHL]



WALES: Night flying by UK air ambulances remains a controversial future development that some in the charity air ambulance world doubt will prove worthwhile.

Even as other operators work with the CAA to get the go-ahead for regular operations the Wales Air Ambulance claims to have completed a historic first ever night mission on March 25. The fight saved the life of a 59-year-old man who had suffered a heart attack.

The mission follows weeks of extensive night flight training for pilots and paramedics at the Wales Air Ambulance base in Welshpool.

After receiving an emergency call, Wales Air Ambulance staff quickly diagnosed that the patient was experiencing a heart attack, and took just 46 minutes to transport the man from Welshpool to the nearest cardiac centre at North Staffordshire University Hospital in Stoke; reducing the transport time for this patient by at least an hour compared to travelling on land.

The Wales Air Ambulance began night flight trials at the start of the month, having collected £6M to upgrade its three aircraft based at Swansea, Welshpool and Caernarfon. [WAA]

WILTSHIRE: Trustees of Wiltshire Air Ambulance Charitable Trust held a reception to thank its co-founder Dr Richard Riseley-Prichard for more than 20 years of service. The doctor was born in Hereford but learned his craft at Oxford and London before joining the RAF and qualifying as a jet fighter pilot as well as being military surgeon. He retired from the RAF in the rank of Air Vice-Marshall in 1985.

A few years later he was holding medical posts in civilian life when, as a member of Swindon Health Authority, he became involved in negotiations with the Wiltshire Constabulary that led to the creation of the current joint police air ambulance operation launched in March 1990. Funding was undertaken by Wiltshire Air Ambulance Appeal.

The appeal raised money to part fund the operation to top up the police funding. In 2006 after a number of changes took place in the structure of the NHS the joint arrangement with the police was under threat as the Great Western Ambulance Service threatened to pull out and at the same time there were fears the money in the Wiltshire appeal's coffers would be used to fund an air ambulance in Bristol.

Dr Riseley-Prichard mobilised support and a new contract was signed between the ambulance service and the police to continue with the joint helicopter using a new air ambulance charity that will eventually take over the whole cost of the operation from late next year.

Now aged 88, he was presented with a model of the joint Wiltshire Police helicopter/air ambulance by the Lord Lieutenant of Wiltshire, Sarah Troughton at the gathering in his honour. [Gazette & Herald/PAR]

Ed: This year will see further major decisions made by the Trustees of the Wiltshire Air Ambulance Charitable Trust. The plans to raise sufficient money to replace the larger police contribution are on target, with a mix of part funding the current operation and reserve building in place for late next year. The current aircraft will go. The MD902 G-WPAS owned by Police Aviation Services is the first of its type to enter service in the UK and will be around 15 years old by the expiry

Dr Riseley-Prichard with his wife [left] and the Lord Lt of Wiltshire in front of the Wiltshire Air Ambulance MD902 G-WPAS. [PAR]

of the current contract. The aircraft will need to be de-roled from the police fit and that will leave a lot of holes! Around July the Trustees will select the new type and decide whether to lease or buy, they hope to announce the result of their deliberations by September.

YORKSHIRE: Yorkshire Air Ambulance paramedics treating patients in severe pain can now administer the powerful drug ketamine; until recently, only doctors were able to administer the drug at an incident.

The development will help people such as those with multiple fractures who could be trapped in a vehicle for some time before they can be airlifted to hospital. [Worksop Guardian]



UNITED STATES

NATIONAL: A report considering the cost-effectiveness of air transport compared with ground ambulances in the USA states that there were an estimated 44,700 US helicopter transports from injury scenes to level-1 and level-2 trauma centers in 2010. The average cost of each is about \$6,500 per transport with a total annual cost of around \$290M.

Helicopter medical services generally bill patients' insurance providers directly, some patients may pay part of the bill out-of-pocket and others face paying the whole cost due to a lack of insurance cover.

Emergency helicopter transport is most needed in remote, rural areas where transport by ground can take longer than by air, but sparser populations and fewer runs make it difficult to recoup the overhead cost of helicopter services. The study, published in the Annals of Emergency Medicine, found if an additional 1.6% of seriously injured patients survive after being transported by helicopter from the scene of injury to a trauma center, then such transport should be considered cost-effective.

The study only considered situations in which both ground and helicopter transport to a trauma center were options – in areas where the distance or topography ruled against options it was assumed that the case was proven. [UPI]

CALIFORNIA: Metro Aviation have now delivered the third of eight new EC135s to California Shock Trauma Air Rescue (CALSTAR). The new aircraft are part of a comprehensive fleet upgrade and standardisation plan for the HEMS based in McClellan, California. The EC135s replace a mixed fleet – and thereby have released some MD902 helicopters subsequently snapped up for use in the UK.

The EC135s are equipped with the Voyager Isolette Litter, single external LOX, air pump and medical seating for three. The aircraft will also utilize North Flight Data Systems' Light Aircraft Recording System (LARS).

Set up in 1984 CALSTAR now provides medical transportation around the clock and specialises in the air transport of paediatric patients. [Metro]



FLORIDA: After completing the first three EC155s to be used for HEMS operations in the US early last year, Metro Aviation is preparing to complete another Eurocopter EC155, this time for Shands at the University of Florida's ShandsCair.

Metro Aviation received an FAA Supplemental Type Certificate (STC) for a complete Emergency Medical System kit and associated options for the Eurocopter EC155B1 in December of 2011. The STC includes: Aft Storage System, Portable Oxygen Mount, Supplemental Strobe Lights, Secondary Patient Restraint, seating for up to five passengers, 10 Litre LOX (526-RTI Aero ORB), Dual Gas Towers, IV Support Rail and a Medical Inverter, as well as other configurations that give caregivers the resources they need while in the air. The ShandsCair 155 will also be equipped with the Spectrum Aeromed Litter System, which is currently being used in their fixed wing service and will allow for direct transfers between the rotor and fixed wing aircraft.

Metro Aviation will receive the green airframe in the late third quarter of this year, with plans to deliver the EC155 to ShandsCair no later than the first quarter of 2014. [Metro]

WYOMING: Continuing the 'news from Metro' thread we have news that the completion company completed a new Eurocopter AS350 AStar for EagleMed for a base expansion in Cody, Wyoming.

The AS350 is equipped with Metro's EMS kit that includes the transfill oxygen system with two outlets, medical inverter system, flip up seats, and LEMS litter. The aircraft will be used for medical evacuations within 150 to 200 miles of the base and provides a non-stop range of 350 miles.

With the delivery of EagleMed's AS350, Metro Aviation is on schedule to deliver 35 new aircraft this year. [Metro]

FIRE

UNITED STATES

OREGON: Columbia Helicopters has taken delivery of the first three of ten heavy lift helicopters purchased from the Swedish Department of Defence. The total order includes six Boeing Vertol 107-II and four Kawasaki Vertol 107-II models.

Three Boeing Vertol 107-II helicopters arrived at the Port of Tacoma, Washington, on March 25 to clear US Customs, be loaded onto trucks and shipped to the company's Aurora State Airport-based headquarters and maintenance facility. Three Boeing helicopters are ready to be shipped from Sweden, while shipping dates for the four Kawasaki Vertol V-II aircraft have not been determined.

Designated by Sweden as HkP-4s, the helicopters were operated in search and rescue, anti-submarine warfare, and mine-sweeping operations. Sweden's military has transitioned to the more modern NH Industries-built NH90.

All of the helicopters are reported to have been very well maintained and each having under 10,000 hours flown.

Columbia Helicopters will refurbish and modify each helicopter to meet the operator's fleet standards, and bring them up to missionready status for heavy lift work and aerial firefighting. One helicopter will go into Columbia's maintenance shop upon arrival. The others will be stored until engineering capacity is available.

One change will be the removal of the two Rolls-Royce/Bristol Siddeley Gnome H.1200 power plants. These licence built T58

engines will be replaced by standard GE CT-58 engines which offer a higher maximum power rating of 1,500 SHP.



SEARCH & RESCUE

CANADA

COAST GUARD: The Public Works and Government Services Canada has issued on behalf of the Canadian Coast Guard, a Request for Proposals (RFP) for the procurement of light helicopters, under the Coast Guard helicopter fleet renewal procurement.

The current fleet of Coast Guard BO105 helicopters support activities such as ice reconnaissance; maintenance and construction of aids to navigation and telecommunications equipment; personnel and cargo transfer between ship and shore; and support to science and fisheries enforcement.

The RFP is to acquire up to 16 light lift helicopters with four options over the next five years to renew the capability of its existing fleet of helicopters and support the future missions of Canada's new polar icebreaker, the CCGS John G. Diefenbaker.

INDUSTRY

AeroSimulators has entered into simulator maintenance and support agreements with Bond Air Services and INAER Helicópteros Off-Shore. Under the support agreements, AeroSimulators will be responsible for the delivery and provision of spares, support equipment, maintenance and re-certification services, as well as on-site training and documentation

These support services will cover an EC135 FTD Level 3 simulator at Bond Air Services' facility in Gloucestershire, UK and a Bell 412 FTD Level 3 MCC device at INAER's facility in Alicante, Spain.

Whilst both simulators were manufactured and supplied by a separate entity, AeroSimulators' experience with a wide range of simulator technologies led the two Avincis Group operating companies to select AeroSimulators as a provider of choice.

Selex ES is now promoting their Light ISR system as a readily-available solution to a growing demand for low-cost airborne surveillance assets.

The Light ISR system comprises the ATOS Lightweight, a de-scaled version of Selex ES's best-in-class ATOS mission system, integrated on-board the light and versatile Italian Omasud Skycar aircraft to offer a new affordable maritime and overland surveillance option.

The Skycar can be easily converted to adapt it for several different operational modes incorporating a range of sensors including surveillance radars such as the Selex ES Gabbiano T-20 Radar and electro optical day/night turrets such as Selex ES's EOST 46. The Skycar's light ISR configuration can integrate Automatic Information Systems (AIS), SAR DF and tactical communications, including line of sight and beyond line of sight data links. The aircraft's unique design also offers a rear door that can be opened during flight to launch SAR Kits, Medi-Kits, and other mission-specific supplies.

Offering 3.5 hours of patrol time, the Light ISR system is a highly versatile and effective surveillance asset, covering a wide range of requirements for military, paramilitary, civil defence, environmental monitoring and search and rescue operations. Making use of Selex ES's experience in Unmmaned Air Systems (UAS), the Light ISR system has also been developed with



a remote mission operator variant which allows users to deploy the platform on missions without carrying a mission operator on-board in addition to the pilot. This allows the platform to carry additional fuel and payloads and for mission operators to work from a centralised mission control centre, able to support and coordinate more than one aircraft at the same time. [Selex]

Rotorcraft Services Group, Inc. (RSG), has announced the development of a Universal Gimbal Mount system for the AgustaWestland AW139 helicopter. The lightweight mount design was completed to satisfy the requirements of Nippon Housou Kyoukai (NHK), Japanese National Broadcasting Corporation for Electronic News Gathering (ENG) and datalink transmissions in two recently delivered airframes for the Japanese market. A further example is being configured for 2014 delivery.



The systems modular design can be quickly attached to mounting provisions on the LHS or RHS of the AW139 helicopter and can be used interchangeably to accommodate varying gimbal sizes and weights up to 16 inches and 120 lbs. The precision machined bayonet mount design with integral handles allows payload to be quickly installed and removed to satisfy mission requirements - Gimbals can be securely released by removing two safety pins and rotating the turret to the unlocked position and lowering it into a storage receiver or an optional carriage assembly.

RSG introduced the new **RSG Products** Air Conditioning Service Kit, a kit was inspired after years of advising customers on how to accurately service a helicopter air conditioner unit, providing service training and specialty equipment for standard maintenance. This comprehensive kit includes all the basic equipment and tools needed for routine maintenance and servicing of the RSG Air Conditioner.

The kit contains a manifold gauge set, leak detector, fin comb set, clutch removal tool, digital scale, venturi effect vacuum pump, extra o-rings, snap ring pliers, valve core removal tool, test thermometers and various handy adaptors all safely enclosed in a pelican tool case. Several pieces are custom designed to save time during the servicing process. The Venturi Effect Vacuum Pump is unique because, it is smaller and uses compressed air to operate as opposed to its larger electric alternatives. This portable kit is a valuable asset to have in your maintenance bay to keep your helicopter air conditioner running at peak performance.



RSG recently delivered two new AS350B-2's for **Sundance Helicopters** a helicopter tour company located in Las Vegas. They operate a fleet of 23 helicopters, and are one of RSG's many long time valued customers.

RSG installed a KY196A Transceiver and GNS-430W GPS/NAV/Comm WAAS with Cyclic Switching between the Transceiver and GN, installed a GMA340 Audio Panel with InterMusic, Language Switching and 6 Station Intercom, an MP3 Player, GTX-330 Transponder, Attitude Indicator, Directional Gyro, Turn & Bank Indicator, ELT, MS Plug, Avionics Master Switch Bussing, Air Conditioner solution located in the Right Hand Baggage Compartment, Air Filter System, Pulsed Landing Light, High Back Seats, Aft Baggage Door Hinge Mod, Oil Filter, Loncoin Flooring, LED Position Strobe Lights, Camera Mount and Nose Bubble and complied with all Retorques through 30 Hours on both helicopters.

For more information regarding RSG completions, avionics integration and service capabilities contact Bruce Gullingsrud, VP of Sales at: bruce@rotorcraftservices.com

According to a report issued last month a series of errors led to the crash of an unmanned drone aircraft in December in a remote area north of **Las Vegas**. The report states that the pilot didn't properly execute a preflight checklist before taking control of the drone, which stalled and crashed in Douglas County near Mount Irish. Nobody was injured in the crash, but the financial loss of the MQ-9 Reaper unmanned craft was estimated at \$9.6M. [Fox]

Meanwhile the **US Navy** now has a 'Death Ray' weapon and has demonstrated an ability to destroy a target without having to fire a gun. Mind you the world has not yet come to an end for the oppressive UAV – the target was fairly flimsy and obediently flew straight and level before succumbing to the laser weapon. The equipment on board ship is substantial and apparently as large as a 5 inch gun but without the flexibility or the clout.

Powervamp, long known for both their ground power options and supporting major air shows will be providing their ground power units to support the Static Display Aircraft at the upcoming AeroExpo UK event at Sywell, UK.

A large selection of 28v DC continuous power supplies and battery start units will be available to all aircraft at the show. Allowing demonstrations of all the aircrafts features to be displayed without draining the aircrafts on board battery.

Powervamp Ltd has been supplying 28v DC and 400Hz AC ground power systems to the aviation industry since the mid-1990s, and is a recognised world leader in the market. A large number of Powervamp-built GPUs and power supply units are in use with both military and civilian aircraft and airport operators worldwide.

The company first started out supporting the humble bus fleets of the UK and now also supplies a range of related equipment including wiring harnesses, connectors, trolleys for handling multiple units, aircraft landing lights and has a division supplying rental GPUs and coolers to major air shows world-wide. www.powervamp.com

ATTRACTIVE OPTIONS

Latest edition available worldwide on-line Downloadable PDF in handy size no need to read on -line

Easy crew room print-outs
Full 12 months archives at the click of a mouse
Research data files freely available on-line







Back in February the **Airborne Technologies** Tecnam MMA received the Supplemental Type Certification (STC) from the Civil Aviation Administration China (CAAC).

Wolfgang Grumeth, CEO of Airborne Technologies, said: "With the validation in China our TECNAM MMA is now available in the most important markets. The scope of airborne data acquisition work in China is tremendous and starts from police applications up to multisensor operations in the field of geodetical and geophysical exploration. This growing market will benefit a lot from the new possibilities of this economic and multifuel twin engine platform.

Airborne Technologies is being represented in China by Amy Wang, from Shuang Yue Long Xiang Aviation Equipment (Beijing) Co. Ltd.

So far the STC for the Tecnam MMA has been validated by Russia, Brazil and accepted by Australia.

Bell Helicopter has now earned Indonesian Directorate General of Civil Aviation (DGCA) approval to fly the Bell 429 at an increased maximum gross weight of 7,500 lbs. Indonesia marks the seventeenth country to approve the increased maximum gross weight. The DGCA's approval is based on Transport Canada's certification and allows the aircraft to carry an additional 500 lbs. of fuel and/or payload.

To date, the Bell 429 increased gross weight has now been approved by Argentina, Australia, Brazil, Canada, Chile, China, Ecuador, India, Indonesia, Israel, Malaysia, Mexico, New Zealand, Nigeria, Thailand, Venezuela and Vietnam.

Ed: When the Bell 429 appeared at the 2010 PAvCon hosted by the air show at Pribram in the Czech Republic it attracted a great deal of interest. This year Bell hope to spare the aircraft for at least one day in its busy display schedule for an appearance at PAvCon 2013 Wiener Nuestadt, Austria later this month.



Eurocopter in the UK based at Oxford has a new EC145 registered to it. The helicopter G-JESP c/n 9570 replaces the similar 9488 in the company demonstrator fleet. The latter was delivered to the Police Service in Northern Ireland recently to fill an urgent need to bolster available aircraft before next month's G8 meeting.

GippsAero, the aircraft manufacturing arm of Mahindra Aerospace, has signed an agreement appointing Global Aviation + Piper Parts in Germany, as a GippsAero authorised spares dealer for Europe. The company, a part of Piper Germany Group, will provide local spares support for the GippsAero GA8 Airvan, giving faster turn-around of spare parts and a one stop shop for Airvan operators in the region. Their contact details for parts requests are: Global Aviation + Piper Parts GmbH. Flughafen Kassel, 34379 Calden. Germany parts@globalaviationparts.de www.globalaviationparts.de +49 5674 704 0 Fax: +49 5674 704 44 or Piper Parts, Premier House, Shoreham Airport, Shoreham-by-Sea BN43 5FF UK. parts@globalaviationparts.co.uk www.globalaviationparts.co.uk +44 1273 467 444 Fax: +44 1273 467 466





Enstrom Helicopter Corporation recently announced plans for expansion of its Menominee Michigan plant. The company has chosen Moyle Construction out of Houghton, Michigan to be the design-builder for the project. Enstrom's expansion will double the current size of the facility, adding over 77,000 sq. ft.

The expansion plans include installing new paint, gel coat, and sand blast booths for component parts, as well as expanded manufacturing and flight line areas. The parking lots will be paved as well. The building will expand to the north and the west. A second floor mezzanine will be built to house the engineering department.

The expansion will help make Enstrom Helicopter more efficient in the manufacturing and assembly of the helicopters. Enstrom has 32 helicopters planned for 2013, and 45 for 2014. Sales are projected to increase to 100 per year within the next several years, and the space is needed for these rates, as well as the additional employees.

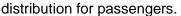
The company plans to have a ground-breaking ceremony this month, with construction to begin shortly after. www.enstromhelicopter.com.

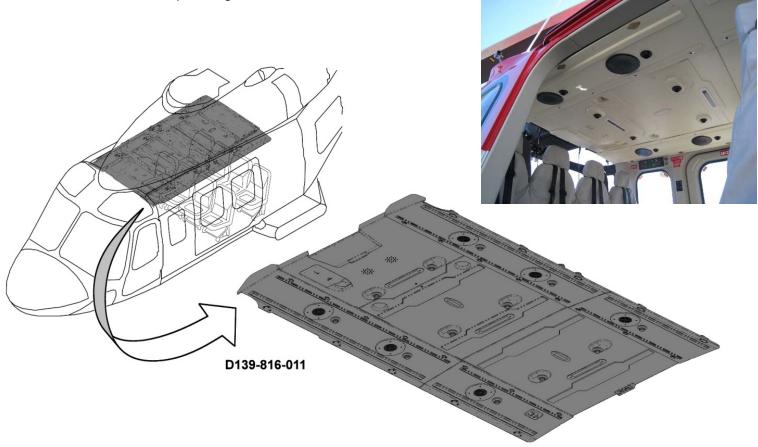




Dart Aerospace has announced the launch of its new Lightweight Interior Ceiling Panels for the AW139 aircraft. This new member of the interior accessories product family is another one of DART's cost-effective, weight-saving solutions designed specifically to reduce weight by 45lbs over conventional OEM panels. These lightweight panels provide operators with increased flexibility to carry extra payload. The Lightweight Interior Ceiling Panels received approvals from Transport Canada and FAA. EASA approval is expected shortly.

The panel is designed to replace the existing OEM ceiling panels and is manufactured with quality, engineered aerospace grade material. Dart's design is composed of three removable panels and two side panels which are hinged and drop down for easy maintenance access. The streamlined construction provides more headroom and improves the air flow





The only international magazine covering technology and services for police and national security.

Get your copy of the current issue [April/May] at this year's **PAvCon Police Aviation Conference.**

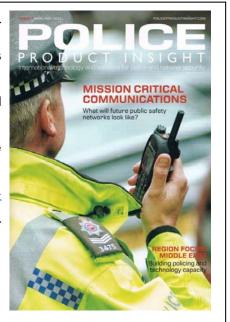
Features in the issue: Detection Technology, Communications and Aircraft/UAV

Contact us now to book your advertising in the next great value issue of Police Product Insight magazine

Kelly Morris on +44 1737 648990 email ppi-adverts@policeoracle.com To submit editorial for the editor's consideration email ppinews@policeoracle.com

Please register at www.policeproductinsight.com to receive regular copies of the magazine.





L-3 Wescam has completed flight demonstrations for several new weapon systems at the US Army's Yuma Proving Ground in Arizona, using MD500 helicopters

The flight tests demonstrated L-3 Wescam's MX series designator systems, including the MX-10D, MX-15D, MX-25D and MX-RSTA. The company funded the demonstrations as part of a risk-reduction effort in response to constrained defense budgets of potential users worldwide.

Flight tests featured an MD540 with the MX-10 system firing an FN HMP 400 .50 cal machine gun and an MD500E using the MX-10D to fire an M134 mini-gun. The MX-10D, MX-15D and MX-25D were integrated and tested two weapon control systems from an MD500E and a Cessna 208 Caravan.

Diamond Airborne Sensing finalised the design of its maritime surveillance platform based on the DA42 Guardian and concluded successfully the operational tests over Mediterranean waters under adverse weather conditions.

The maritime surveillance platform features Telephonics'RDR-1700B Maritime Surveillance Radar, the Flir 350 electro /optical camera, an AIS receiving system and the EnerlinksIII line of sight downlink from Viasat.

This maritime surveillance platform will serve many countries struggling with the challenges of illegal migration, trafficking, fishery protection or piracy and fulfil the needs of search and rescue as well as naval traffic monitoring.

The Telephonics' RDR-1700 B is a multi-mission, multi mode surveillance radar offering SAR/ISAR imaging, weather avoidance and Automatic Identification System (AIS) which can track up to 200 targets simultaneously and

display specific vessel information on an operator's screen. The long-range surveillance, short range search and small target detection capabilities make the RDR-1700B highly effective in severe maritime environments.

For further target identification and under adverse weather conditions, targets will be analysed in the Radar ISAR mode and the electro optical day/night Flir 350 HD camera, allowing for close up unnoticed observation of suspicious boats or ships. Life video HD streams can be sent via line of sight downlink to a command centre in a range of up to 200 km. Diamond Airborne Sensing will offer the maritime surveillance system as a turn key solution,

including ground station and training.

The DA42-VI, already certified for bad weather conditions, is now available with a fully integrated and EASA approved Garmin GWX 68 weather radar.

Diamond Aircraft succeeded in developing a production method which allows installing the weather radar in the aircraft's nose without changing the shape of it. Furthermore this special nose protects the radar and the aircraft's avionics from interferences.

The GWX 68 detects storm tops, gradients and cell build-up activity at various altitudes, clearly displayed on the G1000

Multi Funcional Display (MFD) in the cockpit. This is the most precise technique to avoid bad weather and therefore standard in every airliner.

An additional GSR 56 Satellite Data Receiver gives the pilot safety-enhancing benefits of on-demand satellite weather including text and voice communications through the Iridium satellite network.

With the new weather radar, Diamond Aircraft responded to a long-time customer request and helps to provide a safe and comfortable flight for pilot and passengers.







Eurocopter's ability to integrate unmanned flight capabilities into its helicopter family has been validated by an optionally piloted vehicle (OPV) demonstration programme, which used an EC145 to fly routes that included deployment of an external sling load and a representative observation mission.

The programme was revealed late last month at a demonstration undertaken at the French Air Force base in Istres, France. With this capability fully validated, **Eurocopter** is now positioned to pursue OPV flight capabilities for its product line of light, medium and heavy-lift helicopters – enabling these rotorcraft to be flown by pilots or in an unmanned mode.

The demonstrator is a Eurocopter testbed helicopter with an enhanced dual-duplex four-axis automatic flight control system (AFCS) and the latest navigation systems. In addition, the helicopter is fitted with the "plug-in" OPV avionics rack in its cabin behind the pilot seats, which contains the data link subsystems.

Safran has reached an agreement with Rolls-Royce to acquire Rolls-Royce's 50% share in their joint RTM322 helicopter engine programme.

Upon closing, **Turbomeca** (Safran's world leading helicopter engine business) will assume global responsibility for the design, production, product support and services for the RTM322 engine, a 2,100-2,600 shp engine family equipping the Apache, EH101 and NH90 helicopters.

Rolls-Royce will provide full support during a transition phase enabling progressive transfer of all their activities to Turbomeca under this programme.

Apart from Rolls-Royce's 50% share in the RTM322 programme, the transaction also includes the intellectual property rights (IPR) related to this programme as well as Rolls-Royce's 50% share in the RRTM (Rolls-Royce-Turbomeca) joint-venture. The Adour engine programme cooperation between Rolls-Royce and Turbomeca, which powers the Hawk and Jaguar aircraft, is unaffected by this transaction, as are the other helicopter engine programmes that Rolls-Royce and Turbomeca manage independently.

The transaction, which is expected to close before year end, is subject to regulatory approvals and satisfaction of other customary closing conditions.



Aviation Specialties Unlimited, (ASU) has completed its 700th FAA approved night vision cockpit modification. This modification was completed on an EC135 at Metro Aviation in Shreveport, Louisiana for MED TRANS Air Medical Services.

The first civil operation modification performed by ASU was on an EC135 for Metro Aviation in 2003. Of the 700 night vision modifications, ASU has completed a total of 178 for Metro Aviation.

ASU have also completed their 100th Night Vision cockpit modification on BK 117 Aircraft. he BK 117 was completed for Flight For Life Transport System, which is operated by Air Methods. ASU has also worked on other aircraft types for Helicopter Specialties and has completed more than 12 aircraft for them with the first modification on a BK 117 C2 (EC145). Helicopter Specialties has been given the FAA Diamond and Gold awards for excellence in maintenance training, has more than 200 years of combined experience and is known for their custom completions.

ACCIDENTS & INCIDENTS

- **19 March 2013 Cessna Citation Encore N911UM**. Air ambulance of University of Michigan Survival Flight, Ann Arbor, Michigan operated by Pentastar Aviation Charter Inc. On descent into Willow Run Airport from 12,000 ft. a Thrust Reverser Unlocked was indicated. While addressing the problem an additional warning for a Failed #2 AC Inverter illuminated. An emergency was declared and the aircraft continued to Willow Run Airport. An uneventful approach and landing was completed. [Concern]
- 19 March 2013 Pilatus N399AM. Air ambulance of AirMed University of Utah, Salt Lake City, Utah. Operated by Air Methods. The AirMed Rock Springs fixed wing team was tasked with transporting a patient from Lander Wyoming to Salt Lake City Utah. The team landed in Lander, WY without incident and preformed a post flight walk around. Approximately 35 minutes after landing the medical crew returned with the patient. The aircraft was noted to not be in the location where it was parked. The aircraft had rolled back into the chain link fence. The aircraft rudder and internal spar were crushed by the top cross pole of the chain link fence making the aircraft un-airworthy. It was found that although the pilot applied the wheel brakes not enough pressure was used to fully set the brakes allowing the aircraft to roll. There were no wheel chocks and the fleet has now been equipped with them. [Concern]
- 31 March 2013 Eurocopter AS350B3 N911AA. Alaska State Trooper helicopter carrying a trooper, a pilot for the agency and a rescued snowmobiler crashed in the south-central part of the state, leaving all three aboard dead. Wreckage of the helicopter burned, but it was not known how the fire started or how long it lasted. The trooper helicopter was on a mission to pick up a snowmobiler stranded near Larson Lake 7 miles east of Talkeetna in the Matanuska-Susitna Borough. The helicopter picked up a trooper and began a search, spotting the snowmobile and picking up the snowmobiler for transport to Talkeetna but did not arrive. It crashed in hilly, tree-covered terrain in a period of precipitation in the form of rain or snow. The crash killed troopers pilot Mel Nading, 55, trooper Tage Toll, 40, and injured snowmachiner Carl Ober, 56 [Media/ADN]
- **5 April 2013 Eurocopter BK117 D-****** Air ambulance of ADAC operating as Christoph 1. Helicopter cut telephone line on approach to site landing to pick up patient injured in equine accident near Parsdorf, Germany. [Helihub]
- **12 April 2013 Eurocopter EC135T2 G-HBOB.** Air ambulance of Thames Valley and Chiltern Air Ambulance was grounded following an incident reported to be a rotor strike in Ascot after landing in sports fields to treat a patient. There was concern that the helicopter's main

rotor blade had made contact with cable at the Charters School sports field to attend a sporting injury. The helicopter was flown back to its base at RAF Benson, South Oxfordshire where safety checks were carried out. [Media]

- **12 April 2013 Eurocopter EC145 N909SH**. Air ambulance of Sanford Intensive Air of Sioux Falls, South Dakota. Called to Brookings,SD for an inter-facility transport. After departing the Sanford helipad TRAUMA 1 was just north of Joe Foss Field when the pilot observed the left transmission oil indication below normal limits. The pilot elected to make a precautionary landing at the nearest safe open area and shut the aircraft down. The transmission oil pressure transmitter was replaced. [Concern]
- **13 April 2013 LearJet 60 N**. Air ambulance of Angel Medflight. Made a successful emergency landing at Melbourne International Airport in Florida after reporting problems with a door opening in flight. The pilot reported no pressurization problems upon approach, however the airplane had an indication that the door had become unlatched in flight. The flight originated at Norfolk Virginia earlier in today. [Concern]
- **April 2013 Helicopter.** Air ambulance of LifeFlight. An unspecified mechanical failure that forced a medical helicopter crew to make an hard emergency landing in a field in Cumberland, Maine. No one was injured. [Media]
- **23 April 2013 Hughes OH-6A N473SD.** Citrus County Sheriff's helicopter made a hard landing on US 19 in Crystal River after the engine malfunctioned while it was on routine patrol in Citrus County. The 1968 OH-6 helicopter landed about a half mile south of the airport. The pilot was treated for minor injuries at the scene. The co-pilot was not injured. **[Miami Herald]**
- **25 April 2013 Eurocopter EC135 09*312** Rescue helicopter of the Guardia Civile undertaking a mission in mountains of Sierra de Gredos, Spain suffered rotor strike and was stranded. [Pprune].

FLIGHT SAFETY

In Eire the AAIU have published Final Report No. 2013-004 on www.aaiu.ie concerning an Accident which occurred to a EC135P2+, helicopter 270 near Borrisoleigh, Co. Tipperary, on 19 June 2012. View the Report Here http://www.aaiu.ie/node/574

The EC135P2+ call-sign 'Ambulance 270', an air ambulance equipped Air Corps helicopter, was tasked by the National Aeromedical Co-ordination Centre (NACC) to collect a patient from a Health Service Executive (HSE) road ambulance near Borrisoleigh, Co Tipperary, and transfer him to Limerick Regional Hospital for treatment.

The weather en route from its base, Custume Barracks Athlone, to the intended pick up point was good. On approach to landing in a field and shortly before touchdown, the helicopter's main rotor blades struck ESB2 20 kV overhead wires and severed them. This wire impact caused severe airframe vibration and a momentary oscillation of the helicopter, forcing the Pilot to carry out an immediate forced landing, which was heavy. He shut down the engines and the crew exited safely and uninjured. As there was substantial damage evident to the helicopter, the patient was transferred to hospital by road.

PEOPLE

Bell Helicopter has announced that C.M. Hwang will assume the role of managing director of Commercial Sales, Asia Pacific. In this position, Hwang is responsible for all marketing and sales activities within Asia-Pacific as Bell Helicopter continues to expand its presence

in the region.

Hwang has more than 20 years of experience in the aviation industry with 18 years of service at Bell Helicopter. Prior to his role as director, Hwang held the position of commercial business development manager for Australia, Indonesia, New Zealand, Papua New Guinea and Singapore. Before joining Bell Helicopter in 1995, Hwang served in the Republic of Singapore Air Force and subsequently joined DHP Aviation, a maintenance, repair and overhaul facility and Bell Helicopter customer service center in Singapore. At DHP Aviation, Hwang began as a planning assistant and was then promoted to commercial manager. Hwang holds a Bachelor's Degree in Aerospace Engineering from Northrop University in Los Angeles, Calif. and a Master of Business Administration degree from the University of Chicago's Booth School of Business.

Friends and colleagues will be sad to hear that **Carl Cochrane**, MD of AV8 Helicopters at Rochester, and commercial helicopter pilot, died peacefully on April 22. Carl had fought bravely against cancer, diagnosed at the end of last July. Despite great courage and optimism, a pro-active medical team, and the support of his family and his many friends, he was finally overcome by the disease.

Carl began helicopter flying when invalided out of the Police Service, having contracted a kidney disease; after obtaining his PPL he built his hours and took his CPL exams. But in the midst of this he lost his flying medical. This he regained as a Class 1 (UK only) after a kidney transplant and stabilisation of his regime...but by then 7 years had expired, and he set himself to the task of again slogging through the CPL exams, and completed his modular CPL flight training within a month of getting his pass results.

Carl set up AV8 in 2004, in partnership with a Kent building company which needed a helicopter to help move senior staff to meetings at commercial sites around UK and was an active supporter of the Kent Air Ambulance Service. Carl successfully negotiated the sale of the company to a new parent company, Oryx Jet, at Biggin Hill, in October 2012, and since then the company has been trading as AV8-Oryx.

EVENTS





It is almost too late for this one now but I guess there will be some late frantic phone calls in the coming days as some suddenly remember they have not yet booked or that they do have time to get there after all!

Even as the final threads of this edition were being drawn together it was clear that the event has continued to grow and this year should have a larger number of exhibits in the static park and a greater variety of inside exhibitors.

On the aircraft front you should see a couple of operational EC135s from the police and air ambulance in Austria added to a Bolkow 105 [or parts of one anyway], a Tecnam twin, a Pilatus PC-12, Cessna 208 and the chance of at least a fleeting visit from the European Bell 429 demonstrator. It is a busy week and not only PAvCon has a call on the Bell—for instance EBACE in Geneva runs concurrently. And not to be forgotten is that there is a line up of the whole range of Diamond Aircraft products to call upon for a backdrop to the static park, tours round the factory—Austro engines as well as Diamond—and a great line up of speakers.

If you go on-line to the event <u>websites</u> and check out the Police Aviation News <u>Facebook</u> pages you will find the latest line-up on who is attending, who is speaking and which aircraft actually made it on the day.

Better still come along!

Copyright Notice: The content of this publication includes items that are the copyright of others. The source of words and images will usually be indicated together with the source of additional information that seeks to enhance the original information.

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

HELITECH 2013

Since the launch of Helitech International, 44 new companies have booked their stand at the show including; Mecaer Aviation Group, Qbe Aviation, Northern Helicopters, Iridium, Aerosimulators, Spider Tracks & AeroOptical, to mention just a few.

Now the organisers report that 90% of the available space has been taken by industry.

DIARY

8-10 May 2013 Air Maestro User Conference 2013. The third Avinet Air Maestro User Conference, Adelaide, Australia. Directly inspired by customer feedback, the conference is a unique opportunity to interact with other Air Maestro® users and with Avinet developers, support and management personnel. Learn more about what Air Maestro® can do for your business whilst being part of its ongoing development. The agenda includes industry presentations from guest speakers, the latest developments from the Avinet team, new release demonstrations, discussion groups with open question and answer sessions and refresher training. www.avinet.com.au conference@avinet.com.au

9-11 May 2013 European Helicopter Show being held at Hradec Králové, 90km east of Prague. This new event is being set as a trade event and air show jointly organised by AviationExpo Europe & DSA a.s. [GA Buyer]. The initial format is as all things to all men including private and commercial flying, air medical, police and security, fire fighting forestry and unmanned aviation. The final format will reflect industry take-up. www.eurohelishow.com

13-16 May 2013 IFSEC International, NEC Birmingham, England. www.ifsec.co.uk

13-14 May 2013 Military MRO Asia, Jakarta, Indonesia. Contact the Organisers, Tangent Link +44 1628 660400 www.tangentlink.com

15-16 May 2013 Airborne Special Mission Asia Jakarta, Indonesia. Contact the Organisers, Tangent Link +44 1628 660400 www.tangentlink.com

16-18 May 2013 HeliRussia 2013 - VI International Helicopter Industry Exhibition HeliRussia - Crocus Expo International Exhibition Center, Moscow, Russia www.helirussia.ru/en

21-23 May 2013 American Helicopter Society (AHS) International 69th Annual Forum and Technology Display Phoenix Convention Center, Phoenix, Arizona, USA www.vtol.org/annual-forum

21-23 May 2013 EBACE, European Business Aviation Conference and Exhibition, Geneva Airport, Switzerland. EBACE, jointly hosted each year by the European Business Aviation Association (EBAA), the leading association for business aviation in Europe, and the National Business Aviation Association (NBAA), the leading voice for the business aviation industry in the United States, is the premier annual meeting place for the European business aviation community.

22-24 May IDET, Brno, Czech Republic. IDET, International Fair of Defence and Security Technology, is one of the biggest shows of defence technology in Central and Eastern Europe. Exhibitors from ca. 30 countries present their products to international military delegations and professionals from all over the world.

NEXT JANUARY

Is the Centenary of police aviation and although there is not a great deal of interest in the industry Police Aviation News will be marking it in its own small way.

A number of images have been commissioned of the Curtiss seaplane that undertook the mission off Miami and this is just one version of it.

Expect to see more in the coming months!

