## Police Aviation News

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## LAW ENFORCEMENT

## BULGARIA

**BORDER POLICE:** AgustaWestland has delivered a AW109 Power light twin helicopter during an official ceremony held at Sofia Airport late last month. This helicopter will provide an air surveillance capability on the outer EU borders, Bulgaria is expected to be a Schengen Zone Member starting from March 2011.

The AW109 Power is equipped with a range of state-of-the-art avionics and missiondedicated role equipment including a NVG-compatible cockpit, moving map display, weather radar, searchlight, external loudspeaker, provision for FLIR, digital video downlink, video recorder and mission console. The manufacturer did not supply details of these.

An additional two AW109 Powers, recently ordered by the Ministries of Finance and Interior of Bulgaria, for the Bulgarian Border Police will follow, further expanding the helicopter fleet of the service. The Bulgarian Border Police also bought an AW139 medium twin helicopter in late 2009. [AW]



#### April 2010

## **CAYMAN ISLANDS**

On March 4 the long-awaited RCIPS Eurocopter EC135T1 helicopter landed at Owen Roberts International Airport following a two-day flight from storage in Louisiana, USA.

The helicopter set off from Louisiana, stayed overnight at Miami, and flew through Cuba to Cayman. There were some potentially difficult moments resolving authorisation to take a fully role equipped police helicopter, including FLIR, through Cuba. This is probably the first time a police helicopter from the 'western' world



has touched down in Varadero, Cuba, then cross country (only one refuel needed) to Cayman. It flew the 1,700 miles without any issue.

The pilot was James McAlpine, who is now based in the Bahamas. James has a background of work with a number of UK units where he acted as a relief pilot. With him was Steve Fitzgerald the Air Operations Unit Manager, previously in the islands as an independent project consultant. After all the paperwork is completed it can be expected that his designation will be confirmed. Fitzgerald was formerly the Lancashire Police UEO and later a consultant for digital radio with the NPIA.

Type training the officers who will operate the aircraft in the RCIPS Air Operations Unit has begun and as these words appear the aircraft could be operational from its base at the Owen Roberts International Airport.

After the training reaches a satisfactory level the police will approach the Cayman Islands CAA to request the issue of a Police Air Operations Certificate [PAOC]. The helicopter will greatly enhance the capabilities of the RCIPS officers to undertake a police aviation role. Although it does not represent the most up-to-date specification for a role equipped helicopter in 2010 it does bring to RCIPS a major boost in capability over the AS350 they have been using hitherto.

The EC135 helicopter is fitted with a highly capable camera system offering daylight and thermal imaging sensors, recording facility for evidence; downlink, police radios; a Nightsun searchlight and 'Sky shout' public address system.

The long term solution of pilotage and engineering remain to be resolved. In the meantime James McAlpine will act as a temporary pilot and engineering support will be undertaken under a temporary arrangement.

The Commissioner of Police was joined at Owen Roberts Airport by the Deputy Premier, the Hon. Juliana O'Connor-Connolly; Deputy Governor Donovan Ebanks; and Mr Richard Smith, Director-General of the Cayman Islands Civil Aviation Authority, to see the aircraft touch down for the first time on Cayman soil.

A first visit to the sister islands coincided with the reopening of Cayman Brac police station, was part of the ongoing training programme. The trip was successful, with the crew meeting the airport staff and fire officers at both locations.

Steve Fitzgerald, RCIPS Air Operations Unit manager, who was part of the crew, said "Whilst this trip was routine in respect of air operations, I do realise that it was an important milestone in the overall helicopter project. The helicopter will serve all the communities of the Cayman Islands, and I was encouraged by the welcome we received from all those people we met."[RCIPS]

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## CONGO

In what is believed to be a first in that country the police in the Congo have taken delivery of three former East German police helicopters to start up an air support wing.

The three, two Mil Mi-2 and one PZL built Mi-2 were formerly in service with the East German police, transferred to the police in the unified Germany in the early 1990s and subsequently put in storage. They were noted being erected in Congo late last year. The trio must be around 35 years old but are unlikely to have high airframe hours.

No details of operational status or equipment level are available. [ABN]

## MEXICO

Some 400 aircraft have been confiscated from drug runners in Mexico in the past five years. Much of the mixed fleet - bigger than the Mexican air force – has been stored at Culiacan Airport awaiting disposal.



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The seized fleet represents a broad swathe of aircraft – virtually everything that was ever designed. Some are basic ultralights that can skim across the US border others are far larger but the actual types vary, reflecting a reaction to the countermeasures being set against them by the authorities.

In the past twin-engine planes could fly drugs directly from the fields of Colombia to northern Mexico for delivery across the border via couriers but these long-range flights now quickly raise suspicions of radar operators.

In the current scenario cocaine shipments arrive in Guatemala and are taken into Mexico by land or boat. From there very small planes move the drugs northward to avoid the army checkpoints on Mexico's highways. With over 2,000 unregistered airfields dismantled in the last four years the drug pilots have to land in increasingly difficult terrain and tend to choose high wing types as a result. The majority of the Culiacan airport airframes are single-engine Cessna's that can haul a lot of weight and have high wings ideal for landing on dirt roads or areas of desert. Some are modified to improve STOL capability and to protect the airframe and engine from the debris thrown up when operating in and out of unprepared landing grounds.

One of the seized aircraft was a home build design with folding wings painted to look like a Mexican federal police aircraft, complete with blue-and-white markings and the Mexican government crest on the sides.

The USA has pledged millions of dollars to help Mexico better track drug flights as part of an anti-drug package. Mexico's Cessna Citation chase planes are getting better sensors, four CASA 235 patrol planes are going to the Mexican navy, and around sixteen additional helicopters will find their way to the army and police.

A growing sector in drug running aviation is the development of flights to Europe. Smugglers from South America are crossing the Atlantic Ocean to West Africa and moving cocaine into Europe from there. The market for cocaine in Europe has been expanding at the same time that cocaine use in the United States has declined from its peak in the 1980s. As was illustrated by the Air France airliner loss in June 2009 Radar coverage of the ocean gap is sparse and flights are virtually undetectable. In November the burned-out hulk of a Boeing 727 was found in the sand in Mali. It is believed to have been used for drug running. [USA Today]

## THAILAND

**ARMY:** The recent acquisition of a blimp by the military has drawn a great deal of criticism. Many see the large craft as a sitting target for terror groups but there are other aspects that are causing disquiet.

The Royal Thai Army has been defending its purchase of the single seat blimp and says that it is a perfect platform for seeking out terrorists. At the same time an Arlington, Virginiabased company, Aria International, is defending its harshly criticized \$9.7M sale of the cam-



era equipped blimp to the Thai military. The deal, which included a significant support structure, was done just under a year ago in April 2009 and the infrastructure building commence last July

Criticism of the California-built Sky Dragon blimp and its cameras has been published repeatedly in Thailand's media during recent weeks, and taken up by politicians who doubt its abilities in fighting a low-intensity guerrilla war where Muslim rebels hide in hilly jungles.

The single-pilot, 46.6-metre long Sky Dragon uses a three-blade propeller for a maximum flight speed of 82 kmh. The blimp's maximum altitude is about 3,048 metres and critics claim that its low altitude and low speed place it in severe danger from ground fire but other complaints tend to relate to problems relating to EMC issues - the interface of the sensor suite and the airframe - not a new experience with the type.

It has been stated that the remaining problem area is the long-range microwave system, from the airship to the receive site in the south of Thailand. All of the helicopter-mounted systems have passed all the tests, and the airship is able to transmit to all the local sites.

The sensors fitted to the craft include two of five Axsys Technologies V-14MSII digital cameras, approved by the US for release to the Thai army last May.

The Aria contract covers training, continuing maintenance tasks, construction of an airship hangar, and construction of a 12-room hotel for the Aria staff working at the Army base near the southern town of Pattani.

Because of adverse comments and some pretty near the mark cartoons, reporters were banned from the March 5 official hand-over to Thailand's 15<sup>th</sup> Infantry Regiment in the southern province of Pattani. Helping the feeding frenzy it was later stated that the ceremony was a partial hand-over pending the resolution of the microwave downlink issues.

Ed: An Internet search by the Asia Sentinel, one of the original reporting newspapers,

On behalf of the Devon and Cornwall Police, UK

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S/N 7511, approx 8,600 hours Fully police-role equipped PBH on airframe and engines with Eurocopter All enquiries to Huxley Cowen Tel: +44 (0)1865 768888 Email: Huxley@hcaviation.com mei, one of the original reporting newspapers, turned up no instance where a Sky Dragon

blimp was being used for counterinsurgency operations anywhere else in the world but missed the brief instance in the Caribbean prior to 2007. The Trinidad & Tobago Government had to get rid of a similar Sky Dragon machine after it failed to work. T&T bought a significantly larger Skyship for \$15M after leasing and proving a similar one.

The Skyship was purchased from Skyship Management, a company which supplied the leased example that was costing \$100,000 a month. In that case the T&T Government was able to negotiate with Skyship to take possession of the Sky Dragon, after they had spent an alleged \$27M on it. The Sky Dragon craft patrolled the skies for just seven months, before officials from the Special Anti Crime Unit (SAUTT) admitted that the sensors aboard were affecting its operation but it seems from T&T Government papers it was wider than this.

The AEROS 40B Sky Dragon was not tested in local atmospheric conditions prior to its acquisition, as this airship did not have the particular range to fly to Trinidad and Tobago under its own power from its place of manufacture in California. Additionally, transporting it to Trinidad and Tobago for pre-testing would have entailed significant logistical challenges and additional expense including disassembly, freighting, reassembly and testing. A process which would have had to be repeated when the airship was returned to its home base in California.

The Skyship 600 was given an extensive trial period prior to its purchase. This was possible because the Government of Trinidad and Tobago initially leased this airship for a period of six (6) months, which was a suitable time period to appraise the platform's performance. The leased Skyship 600 demonstrated that the airship did not suffer any adverse effects from operating within local atmospheric conditions and was deemed to be suitable to the requirements of the SAUTT. A new Skyship 600 was purchased based on the results of the trial period.

The performance of the Sky Dragon was inadequate as the local humidity of the country affected the fly by wire system, which is an integral part of the airship's avionics.

Since the initial reports relating to the real and supposed problems with the Sky Dragon Aria has announced that it has completed and demonstrated the integration of the Axsys cameras and Troll downlink installed on Royal Thai Army (RTA) helicopters. Two Bell 212 and a single Bell UH-1H "Huey" form an integral component in the airborne surveillance system being designed and delivered to the RTA. The first phase of this state-of-the-art surveillance system utilizes the Axsys V-14 MSII cameras mounted on three RTA helicopters along with advanced long-range down link systems manufactured by Troll Systems.



#### April 2010

## UNITED KINGDOM

**NATIONAL:** A three-month public consultation into road pursuit issues has been launched, David Hanson the Policing, Crime and Counter-Terrorism Minister has announced.

The National Policing Improvement Agency (NPIA) will be responsible for leading the consultation on a draft code of practice, which had been drawn up following a series of discussions with organisations including Association of Chief Police Officers (ACPO) and the Independent Police Complaints Commission (IPCC).

Up to 40 people are killed every year during pursuits and public safety had to be balanced with the prevention of crime. IPCC research recommended the publication of a statutory code on pursuit issues, covering areas such as promulgation of good practice and the need to treat any issues relating to a pursuit with openness.

The NPIA is sending copies of the draft code directly to police forces, but it is also available on the Home Office website. A final draft will be put to MPs by the end of the year. [Oracle]

**DEVON & CORNWALL:** On March 5<sup>th</sup> the Devon & Cornwall Police took delivery of a new EC145 helicopter from Eurocopter UK in Oxford.

This EC145 was ordered in September 2007, after the police aviation specialists had assessed all the competition, as the finest helicopter available to serve the public of Devon and Cornwall. It replaces another Eurocopter helicopter, the earlier BK117C1 which has seen sterling service for over 12 years. The Devon and Cornwall Police are pioneers of police aviation in the UK and have operated helicopters in support of police activities for more than 25 years. The introduction into service of this new EC145 by the Devon & Cornwall Constabulary, due to its increased load carrying capacity, represents a further major development of the use of Eurocopter prod-



ucts as a cost-effective and flexible application of helicopters in support of future police ground operations and strategy. It is capable of 2 crew operation, a pilot and an observer who can operate either out of the cockpit or in the cabin of the helicopter.

**TRANSPORT POLICE:** The limited helicopter requirements of British Transport Police the national body responsible for policing rail networks appear to be in jeopardy following the decision of its principal provider to enter into administration.

Jarvis, the railway maintenance contractor, has gone into administration after "very considerable reductions" in rail and plant hire volumes, putting 2,000 jobs at risk.

The York-based company said that its long-term viability had depended on the continued support of its lenders and of Network Rail, which reduced its track-renewal programme by 30 per cent last year in the wake of some adverse publicity relating to accidents.

Jarvis, which was once the UK's biggest construction company and which is chaired by Steven Norris, the former Conservative minister, has tried to reduce its dependence on Network Rail, and in January said that it had secured a £55 million contract with Chiltern Railways.

In the past the British Transport Police had based the bulk of its air support on the helicopter primarily used by Jarvis in engineering survey work over the railways. [Times/PAR]

## **UNITED STATES**

**CALIFORNIA:** The San Diego County Board of Supervisors has approved \$1.1M funding for the refurbishment of a sheriff's MD500E helicopter that has been grounded since October 2009. The funds for a refurbishment are a more economic option to purchasing a new aircraft which is assessed to cost \$2.5M.

The MD500E model will be upgraded to MD530FF standard, zero timed and return to join two other two MD530FFs in the San Diego County Sheriff's Department fleet. The conversion will enable the helicopter to fly for an additional 12,000 hours, or about 20 years.

The sheriff's department operates eight helicopters through its Aerial Support to Regional Enforcement Agencies, or ASTREA, unit, according to the division's Web site.

The operator also has one MD500D model which was refurbished in-house and is expected to serve the unit for another 3,500 hours. The long term fleet plan is to have just one model aircraft, simplifying maintenance and performance differences. [ASTREA]

**CALIFORNIA:** Due to budget cuts, Huntington Beach has decreased its flight time to 40 hours from 60, saving about \$108,000. Two pilots are to be returned to street duties undertaking regular patrol Anaheim has cut their hours to 45 from 60, reducing costs by \$311,000, and the Sheriff's Department slashed its air time in half – from five hours a day to two and a half, saving \$700,000. A.B.L.E. decreased its training budget by about \$80,000. Over in Orange County they have cut their patrol time in half to two and a half hours a day, saving the department about \$700,000.

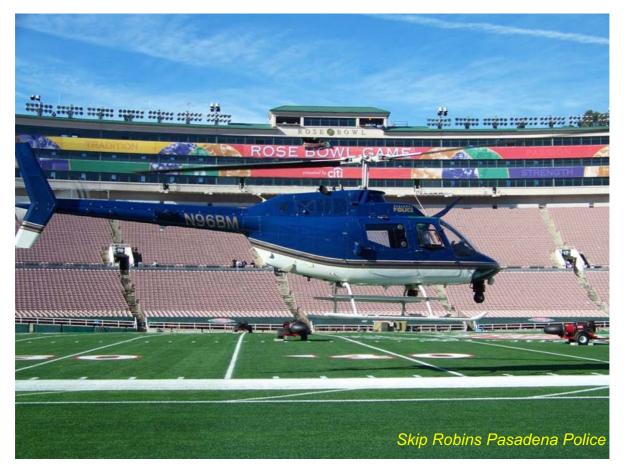


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#### April 2010



**CALIFORNIA:** Where there are cuts in one section of the state others are increasing operations. Executives from MD presented a key to Pasadena Mayor Bill Bogaard during a brief ceremony marking the delivery of a new helicopter to the police department. A new MD500E N501RM [c/n 598E] was added to a mixed fleet operated by the department.

Pasadena Police Department based at Benedict Heliport has been operating for around 40 years and have moved from operating Enstrom F-28s to a mix of DoD surplus Bell's and the MD500 alongside a newer Enstrom 480 they look after for L.A. IMPACT.

Van Horn Aviation [VHA] based in Tempe, Arizona received FAA Supplemental Type Certification (STC) for its 206L series composite tail rotor blade on February 8, 2010. The 206L certification amends the STC that VHA received for its 206B tail rotor blade in September 2009. Pasadena Police operate a DoD surplus 1972 Bell OH-58 Kiowa N96BM with the new tail rotor.

VHA's 206 tail rotor blade takes advantage of high-tech materials, a more efficient airfoil design, and advanced construction techniques to deliver great performance at double the life of current blades on the market. The composite tail rotor blade features a carbon fibre spar and skins, titanium root fitting, and a nickel abrasion strip, resulting in a lighter but stronger rotor blade.

- 5,000-hour life (double the life of the OEM blade)
- New, more efficient airfoil design and profile
- No modification to tail rotor hub needed for installation
- Nickel abrasion strip reduces leading edge wear
- Corrosion-resistant composite blade with carbon fibre spar and skin, and titanium root fitting
- New pitch bearing design
- 40% reduction in noise



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VHA designed and conducted fatigue testing on the 206 tail rotor blade. VHA's customdesigned fatigue test fixture pulled, pushed and twisted the blades to simulate thousands of ground-air-ground cycles.

Similarly VHA's UH-1H Huey tail rotor blade takes advantage of high-tech materials, a more efficient airfoil design, and advanced construction techniques to deliver great performance at double the life of the current blades on the market. The composite tail rotor blade features carbon fibre spar and skins, fibreglass root fittings, and a stainless steel abrasion strip, resulting in a lighter but stronger rotor blade. Although VHA's UH-1H tail rotor blade is nearly one-inch wider than the OEM blade, no modification to the tail rotor hub is required for installation. This blade has a life of 2,400 hours, double that of the OEM version and costs just \$11,000 in the domestic market.

**CALIFORNIA:** The Lake County District Attorney's Office and county counsel will separately investigate whether a former Sheriff's Office lieutenant misused public funds and if he or anyone is liable for criminal or civil charges.

Dave Garzoli, who is now a Lake County Sheriff's Office sergeant, allegedly used Drug Enforcement Administration grant money for helicopter pilot training rather than the approved marijuana reconnaissance and eradication. Board members previously attempted to get this matter investigated by the California Attorney General but they refused citing a lack of resources.

At the centre of the investigation is whether flying training sorties fits in with the drug eradication budget. The defence may be that pilots need training to fly all sorties but the contra view then states as marijuana reconnaissance is a daylight operation night flights would not figure.

The matter only came to notice after Garzoli was involved in a crash whilst flying a training sortie in a commercial Robinson R44 of Cutting Edge Helicopters on June 25 last year. [Record-Bee]

**COLORADO:** Colorado Springs police have raised almost \$350,000 after selling their two helicopters at an online auction to help with budget cuts.

The police auctioned off the second police helicopter March 11 for \$179,000, nearly \$20,000 more than the starting bid price. The winning bidder, a man from Fullerton, N.D., will have to pay to have the helicopter delivered or pick it up himself. The first helicopter was sold to a Wyoming man in February for \$170,000.

The police department got the two OH-58C helicopters from the Department of Defense in 1995 and used them for missions including responding to wildfires, surveillance and public safety.



**FLORIDA:** In October 2009 it was announced that the Pasco County (FL) Sheriff's Office Aviation Unit will return to service this year. Commissioners agreed to set aside \$145,000 in the budget to restore the grounded helicopter to action.

The Pasco County Sheriff's Office Pasco Sheriff Bob White's plan to build a new helicopter hangar at the Land O'Lakes Jail hit complications. The proposed site near the inmates' farming operation would require a new, short road, driving up the price from the \$145,000 mentioned in the summer to around \$340,000.

There was some wrangling over where the final site would be and how big the budget would be but in the end commissioners agreed to give him the money if he stuck to the original site near the farming operation. Inmates will build the hangar.

The sheriff has been leasing hangar space at Hidden Lake Airport, New Port Richey for years. Pasco has been operating various DoD surplus types since 1975 but recently lost flight status in funding issues. The aircraft last operated were Bell OH-58s obtained over a decade ago.

**MARYLAND:** The *Baltimore Sun* believes that news coming out about budget cuts grounding the Baltimore PD Eurocopter EC120 helicopter 'Foxtrot' are not likely to happen. Police are defending their \$4M a year expenditure on a helicopter that provides a near 24/7 service to officers on the ground.

The Sun believe that the operation is safe – it is too high profile to cut, and might just be included on a list of likely budget targets as a scare-tactic. [BS]

**NEW YORK:** The second of two MD902 Explorer helicopters formerly owned and operated by the Suffolk County PD has been sold on through the UK based sales agent for MD Eastern Atlantic in Shoreham. The Explorer c/n 84 [N902PD] with just over 2,700 hours flight time has been sold on to an EMS operator in Switzerland. The other helicopter formerly operated by Suffolk County [N3PD c/n 0085] was sold to EMS operations in the Gulf Region.

The Explorer was delivered new to the police operator in 2001 and was in the centre of the then MD support issues as the police operator broke ranks and complained of poor support for the type. In the wake of the row Suffolk County has returned to operating an all Eurocopter fleet of AS350 and EC145 helicopters.

**TEXAS:** The Texas Department of Public Safety (DPS) has ordered two AS350 B3-2B1 helicopters expanding mission capabilities to the department by adding a more powerful version of the AS350B3 coupled with the benefit of the Turbomeca Arriel 2B1 Full-Authority-Digital-Engine-Control (FADEC). These helicopters will join the DPS fleet that already includes 13 AS350 AS-tars and one multi-mission EC145.

The Texas DPS is a long-time operator of AS350 AStars, the first of which entered into service in 1984. These helicopters form the bulk of the fleet that supports the department from the air in its mission to provide public safety services to the people in the state of Texas. [AEC]



**TEXAS:** Just weeks after losing two of its aircraft orders the Houston Police Department [HPD] is now threatened with a major rethink on its manning. Police officers could be removed from the helicopter patrols that have long provided the eye in the sky for HPD officers on the ground, depending on the outcome of a study now commissioned by Houston's new mayor.

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Right from the start HPD has used a crew composition that involves two sworn officers up on patrol now there are moves to at least consider employing commercial pilots in place of training up police officers.

Mayor Annise Parker, who took office in January, has directed her acting police chief Charles McClelland to study putting civilian pilots in place of the officers. In addition the whole make-up of the fleet is under scrutiny.

The evaluation includes whether they have an appropriate helicopter fleet, the size of the fleet, civilianizing the pilots and outsourcing maintenance. If there are no pilots to be trained they could get rid of at least the fleet of S300 trainers – a type they have had for decades and they were recently praised by Sikorsky helicopters for operating.

Already the maintenance and mechanical work on aircraft is handled by civilian HPD employees who are trained aircraft mechanics based at the HPD Heliport, located at Hobby Airport.

The city is looking at how much money could be saved by farming out that maintenance and mechanical work, instead of keeping a full-time aircraft mechanic staff. Private firms might bid on handling those duties.

The current pilots are a mix of former military trained to be sworn cops but never really street duty officers, and trained cops who then went on to be trained to fly all or part of the course. Some held suitable licences before they apply others did not. The city paid to train them to become pilots and some put in decades of service without ever moving to any other duties within HPD.

If this study results in officers being removed from the police choppers, some officers would certainly retire while others would be transferred to other jobs within the department.

Civilian pilots might be cheaper than police officers, but the true cost of cutting officers may be more complicated than that. Finding civilian pilots at the right price in the open market

## POLICE AVIATION CONFERENCE Pribram Airfield

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may be difficult and might lead to inflation in costs when there is a shortage. Equally a current dearth of helicopter pilot jobs means that rates can be depressed, but that might not last.

There have been a number of arguments against the use of civilian crews, including whether they would 'think' the right way and whether they could deploy a gun to the scene on the rare occasion it is called for if they land, but all of these have counter arguments.

As it is the HPD faces a dwindling budget and hundreds of retirements in the coming year, the argument could also be made that putting non-police in the choppers will allow more officers to patrol the ground where there is a proven need for officers with guns every day. No timetable has been set for completing this study. [Examiner]

**UTAH:** In the wake of talk about standing down one of their two AS350 helicopters the Utah Highway Patrol [UHP] is employing military technology to help conduct crash investi-

gations more thoroughly and wrap them up more quickly.

UHP is using a small fleet of remote-controlled rotary craft to take photos above accident scenes. Investigators later turn to the photos and special software to reconstruct the accident, allowing them to spend less time investigating at the site.

UHP Sgt. Brad Horne is currently the only UHP official in Utah who operates the craft. He is dispatched all over the state. It took several months of formal out-of-state training and on-the-job experience for Horne to learn to fly the aircraft.

The aircraft aren't used on most crash scenes, but that should change later this year as a fleet of five is built up and that will allow about 30 troopers across Utah to use them without undergoing extensive training.

The craft are made of carbon fibre and weigh 37 pounds. Their 10-horsepower engines can travel up to about 80 mph, and the craft can fly about 400 feet off the ground, even in wind, heavy rain or snow. They are manufactured by Leptron, based in Morgan, Utah, and when equipped with autopilot and night vision, they can cost around \$50,000 each. www.leptron.co

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## **AIR AMBULANCE**

## UNITED KINGDOM

**GREAT NORTH:** After a period of much reduced aircraft availability the promised new aircraft are coming on stream to serve the region which covers a swathe of northern England from the Irish Sea to the North Sea and butting up to the Scottish border to the north. The charity's new life-saving helicopter, in its official GNAAS livery and fitted with state-of-the-art life-saving equipment was launched March 26th. It will go by the name of 'Guardian of the North'.

The helicopter, a Eurocopter AS 365N2 Dauphin, belonged to Multiflight's fleet of charter helicopters. Multiflight, which specialises in the purchase and sale of aircraft, maintained and operated the helicopter under its Air Operators Certificate for a private individual.

Grahame Pickering, Chief Executive of GNAAS, said: "We are very grateful to Multiflight for supporting the charity through the difficult process of purchasing two helicopters. The charity believes that buying its own aircraft, rather than leasing as it has done in the past, will be more cost-effective in the long term." www.greatnorthairambulance.co.uk



**NORTHERN IRELAND:** Northern Ireland's first air ambulance service is set to take to the sky with a helping hand from Westfield Health.

The yet to operate Ireland Air Ambulance will have a full-time doctor on board, as well as two paramedics and a fully trained trauma surgeon, to provide critical care to people with life-threatening injuries or illnesses. The service is the first of its kind in the region and will have the operational capacity to reach any part of Northern Ireland within 30 minutes of receiving a 999 call.

Westfield Health contributed £1,000 to the service, helping to secure the clinical governance required to get the Air Ambulance flying in recognition of the significant support they get from Northern Ireland organisations and individuals. The service relies almost entirely on donations and will cost an estimated £1.5M to run each year. www.westfieldhealth.co

**SCOTLAND:** A pilot scheme in the West of Scotland has seen emergency medicine consultants being sent out on air missions with the Scottish Ambulance Service. It will now be rolled out across the whole of the country, costing about £2M a year, after being deemed a huge success.

Meanwhile an earlier request for proposals for the future by prospective consultants issued a few months ago has now been let to the selected professionals.

The Service operates two helicopters: one based in Glasgow and one in Inverness. In addition, there are two fixed wing aircraft: one based in Aberdeen Airport and one at Glasgow Airport. These aircraft have been purpose built to a specification developed by the Scottish Ambulance Service.

When Civil Aviation Authority restrictions prevent the use of Service aircraft, Search and Rescue aircraft provide support. Air Ambulances are mainly used for taking patients to or



from hospital from remote, rural and island communities. This accounts for 75% of demand. The remaining 25% comprise transfers between major hospitals and responses to 999 calls. The aircraft currently operated [helicopters and fixed wing] do not belong to the Service but are owned and operated by a private company on a contractual basis. The Scottish Ambulance Service have started the tender process for this contract, which expires on 31 March 2013.

As part of this process they are seeking the views of patients, the public and healthcare partners on the Air Ambulance Service.

## **UNITED STATES**

**ARIZONA:** Seven air ambulance companies operating throughout Arizona have agreed to major changes in how pilots will communicate with each other as they approach Flagstaff Medical Center.

The changes include well-defined approach paths laid out miles before the hospital and a schedule for radio broadcasts on an assigned frequency intended for other pilots operating in the area to announce their exact location, estimated time of arrival and route being used.

The new protocols come slightly less than 20 months after the June 2008 mid-air collision of two medical helicopters that killed seven over the skies of Flagstaff.

Federal findings on the possible causes of the crash centred on communications protocols that either were not followed by dispatchers and pilots or that did not provide an adequate safety margin when two aircraft were approaching the hospital at roughly the same time.

**CAROLINA:** American Eurocopter has announced that three new EC135s have entered service with the MedCenter Air Program at Carolinas Medical Center. The aircraft, which were purchased in late 2009, were completed by Metro Aviation and include state-of-the-art cockpit technology as well as the latest medical equipment. In addition to accommodating one or two litters, the EC135s are equipped with a neo-natal sled, balloon pump and liquid oxygen.



MedCenter Air has three bases that serve parts of North and South Carolina. The



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helicopter fleet of four EC135s flies around 2,000 hours annually, both in on-the-scene missions and inter-facility transport. Its fleet also includes four fixed-wing aircraft and critical care ground ambulances. The organization has won several air ambulance awards and has been CAMTS accredited since 1997.

## **SEARCH & RESCUE**

## MALAYSIA

**KUCHING:** The Fire and Rescue Department is in need of more men and women, about 1,450 nationwide, in line with its restructuring and expansion which began in 2006.

The department will have the newly acquired Agusta AW139 which will be delivered in three months time. With its arrival the department will have a total of eight rotorcraft including four Mil Mi17 and two AgustaWestland A109.

The operation currently employs 13 pilots but more are required. [New Straits Times]

#### IRELAND

The Department of Transport has confirmed that a preferred bidder has been nominated to supply the Coast Guards search and rescue (SAR) helicopter contract service.

There will be no change in the existing 24 hour service from 4 centres until the new contract enters on a phased basis in 2012-2013. Thereafter, it is expected that the existing bases will continue in operation, with Waterford on a 12 hour basis, subject to review.

The Department of Transport does not propose to comment further on the contract until the tender process is completed. [UDOT]

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## INDUSTRY

**Helinet Technologies** has just been brought in by the Special Anti-Crime Unit of Trinidad and Tobago (SAUTT) to assist the agency in implementing a full time, high definition aerial surveillance capability. The assignment represents a continuation of Helinet's work with SAUTT providing HD image gathering and live broadcast capabilities and will encompass infrastructure design and build-out, technology integration and training.

As one of the first firms to deploy a live HD aerial surveillance capability for its law enforcement and government clients, Helinet has deep expertise in implementing and managing comprehensive HD surveillance operations across a wide range of environments. Benefits of an HD solution include an improvement in image quality in terms of the level of detail and the ability to obtain high quality images from greater standoff distances.

Helinet provided SAUTT with the entire aerial surveillance capability for two, large-scale international gatherings hosted by Trinidad and Tobago in 2009: The 34-nation Summit of the Americas and the 53-nation Commonwealth Heads of Government Meeting. Beginning with the design of a nationwide network of broadcast receive sites, the firm worked with SAUTT to develop a comprehensive security system that delivered a continuous live feed from above the events to commanders on the ground. The assignments also included assisting with staffing of air crews, securing all necessary physical assets and delivering the live feed to SAUTT's command centre where it could be immediately shared with the security services of attending nations.

The new work will upgrade their aerial platform to a full HD surveillance capability.

In addition to its work with SAUTT, Helinet's international footprint enables it to quickly create and deploy aerial surveillance packages to organizations across the globe with services ranging from basic equipment sales to fully outsourced surveillance solutions, including providing training, ongoing support, pilots and aircraft.

Helinet Aviation Services, founded in 1987 is based in Van Nuys, California. The company serves clients in the broadcasting, government, law enforcement, medical, motion picture and transportation industries.

The **Diamond** DA42 Multi Purpose Platform New Generation twin-engine aircraft with a standard installed new Austro Engine (a Diamond subsidiary) diesel engine (AE 300) running on Jet A1. The plane is designed for carrying multi-functional aerial sensor equipment, like large format digital aerial cameras (e.g. Vexcel UltraCamXP), EO/IR gimbals for surveil-lance and reconnaissance missions or *RIEGL* airborne laser scanners.

After years of successful cooperation, the two leading manufacturers Diamond and RIEGL decided to equip the new DA42 MPP NG with RIEGL's latest generation of airborne laser

scanners, the new *RIEGL* LMS-Q680i. It is providing an unmatched laser pulse repetition rate of 400 kHz resulting in an effective measurement rate of up to 266.000 coordinates per second. A high scan rate of up to 200 lines per second at a constant 60 degrees field of view provides an evenly distributed point pattern of highest resolution.

The LMS-Q680i offers the industryleading echo digitization for in-depth full waveform analysis, now smoothly combined with multiple-time-around signal processing. This combination allows the user to benefit from the high pulse rate



also from high flight altitudes and thus to achieve high measurement densities on the ground, ideal for various applications like city modelling, power line monitoring, and large area and flood plain mapping.

Equipped with the Noise-Reduction-Kit, the Diamond DA42 MPP NG is the first survey aircraft that is verifiably operating under a noise threshold of 60dB at 500ft AGL. The fact that the MPP is operating below an average city noise level increases fields of operations tremendously.

Diamond Airborne Sensing's and *RIEGL*'s new survey aircraft will reach market maturity by this year. Customers can expect a state-of-the-art turnkey aircraft system suitable for a variety of applications, which enables 3D data acquisition of high point density through low- and high-level-flights from day one. www.diamond-sensing.co www.riegl.co

**NIVISYS Industries,** *LLC* has a system that can make thermal vision economical. Full thermal optical systems can be expensive, very expensive in many cases with some systems running well over \$25,000 (NIVISYS has lower priced highly-effective systems). However, for organizations equipped with standard night vision gear the NIVISYS TACS (Thermal Acquisition Clip-On System) may be an incredibly economical item to consider.

When the TACS is added onto a standard light intensifier it provides the operator with a long wave infrared optical overlay image. This thermal image can extend engagement capabilities through obscurants and light cover. Not only lower in price than a full thermal system the TACS provides the operator with a choice of two "night eyes;" normal night vision or thermal enhanced night vision.

Low power consumption with optimal sensor technology is a huge advantage to the operator. The TACS unit would be ideal for budget busted and cash strapped police departments needing thermal capabilities but having only light intensifier scopes. To that end the unit (shown here on a NIVISYS MUM-14 night vision scope) will allow detection of targets at 300 meters, recognition at 260 meters and identification at 130 meters, all well within the huge majority of urban night operational limits.

Now the use of established night vision scopes may benefit from the added thermal capabilities of the NIVISYS TACS to observe suspects of interest through smoke, fog, bushes and other obscurants. This new NIVISYS unit provides a powerful affordable improved tactical advantage and option over standard night vision optics.



It has been heralded as China's first independently developed civilian helicopter since it made its first flight in Jingdezhen, Jiangxi Province last month. But despite the claims the AC313 looks remarkably like a French military design, the Sud Super Frelon, that the Chinese started copying decades ago as the Z-8.

Designed and manufactured by Aviation Industry Corporation of China (AVIC),

the AC313 has a maximum takeoff weight of 13.8 tons and can carry 27 passengers or in the case of rescue efforts, 15 wounded.

In taking the Super Frelon from military to civilian use the AC313 is nonetheless the country's first domestically developed large helicopter for a variety of uses, including search and rescue, fighting forest and urban fires, passenger and freight transport.

#### April 2010

Early last month **Eurocopter** at the 2<sup>nd</sup> India Aviation 2010 event organised by the Indian Ministry of Civil Aviation presented its range of commercial helicopters and latest technology.

Eurocopter currently has a fleet of 72 civil helicopters flying in India, covering about 50% of the oil & gas segment, with a majority of its aircraft being in service with Pawan Hans and Indocopters but now they are pressuring to go further.

Eurocopter expects the commercial sector around corporate and VIP transport to grow rapidly in India. The second area of visible growth in India will be the Oil & Gas industry, which will create a need for medium range helicopters like the EC155 and AS365N3 or longerrange like the EC225. The field of Emergency Medical Services (EMS) as operated by helicopters will also emerge in a short time span. With more than 60% of the world EMS helicopter fleet, Eurocopter is committed to invest in the Indian market and to share its experience.

There may be a recession on but a recent treatise on **L3 Wescam** by The Burlington Spectator claims that their local EO/IR manufacturer L3 Wescam is doing well.

Company President John Dehne has a rare problem in that he is creating jobs in his high-tech firm faster than he can fill them.

Continuing a process that has been the same since 2007 in the coming year L-3 Wescam is going to fill more than 130 positions with engineers, programmers, programme managers, customer service reps, technical writers and system analysts.

L-3 Wescam's optical and thermal imaging equipment mounted in aircraft of all types remain in demand. In an era obsessed with security, Wescam systems have become major tools in border surveillance, drug interception, maritime patrols and other military uses. The defence and homeland security business is burgeoning with sales and interest ahead of forecast.

L-3 Wescam's history goes back to 1974, when Westinghouse split off its defence division and allowed managers of the unit working on a stabilised camera system to go off on their own with a company they then called IS-TECH. By 1994, the company was Wescam and in September 2002, it was taken over by U.S. defence contractor L-3 Communications.

From a workforce of 350 at the time of the American takeover, employment grew to 604 at the end of last year and stands at 620 today, with more positions to fill. www.thespec.co



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6th GPEC<sup>®</sup> takes place 4 - 6 May 2010 in Leipzig, Germany





DART Helicopter Services has announced that affiliate **Tyler Technologies** Inc. has received FAA and Transport Canada Approval of their Power Bench for the MD 369/A/D/E/F/ FF/H/HE//HM/HS/500N model of helicopters.

Already seeing a ready acceptance in the US law enforcement market Tyler has modified its Special Operations Platform (TSOP) for the special needs of power companies. By lowering and extending the standard support frame, lineman can now perform maintenance from a working platform independent of the aircraft landing gear. The power bench can be installed in 30 minutes with no modifications to the helicopter. The support framework is constructed of 4130 Chrome Molly Steel and the benches of 6061-T6 aluminium. Both right and left side benches can be ordered or just one bench accompanied by a counter balance boom & weight box mounted on the opposing side. The Power Bench has been EPRI High Voltage Tested and IBEW Approved. Tyler Power Benches are made to fit the customer's particular needs. System weight will vary depending on customers design requirements.

A vital factor in preventing a terrorist attack is identifying terrorists as they prepare for it, and the application of behavioural and social science is crucial to this.

This branch of science can explain why individuals and groups behave as they do, and anticipate certain behaviour. For example, advances in our understanding of the signs of suspicious behaviour are directly impacting on how we secure our national infrastructure through better training and guidance of security personnel.

The UK government has launched the Science and Technology Strategy as part of its counter-terrorism strategy **CONTEST** to set out objectives for using developments in these industries to protect the UK. The second in a series of brochures under the scheme which aims to encourage participation and ideas from academia and industry has been published.

It is targeted at experts in social and behavioural science in particular, asking them to think about how they can play a role in helping the counter-terrorism community tackle the security challenges we face.

The Counter-terrorism Science and Technology Strategy can be found at: http:// security.homeoffice.gov.uk/counter-terrorism-strategy

Last month **Turbomeca** inaugurated a new facility, Turbomeca Australasia, in Bankstown Airport (NSW), close to Sydney. The new 2,500 square metre site encompasses, additional workshops, a new repair hall for MTR390 and RTM 322 engines, as well as a RTM322 engine new production line.

In the new facility Turbomeca Australasia will be able to assemble, test and then to support the 92 RTM 322 and 46 MTR390 engines, respectively powering the MRH90 and Tiger helicopters.

Currently the building also supports the Microturbo Auxiliary Power Unit (APU) and Air Turbine Starter (ATS) for the Hawk Lead-in Fighter and soon will also support the Sapphire 100



Turbomeca Australasia is 15 years old and serves also as a major repair centre for Arriel 1 series engines and a Maintenance Centre for the Arrius, Arriel and Makila engines. It has 125 employees who provide support to more than 150 operators and 400 engines distributed throughout Australia, New-Zealand and all the surrounding islands. *www.turbomeca.co*  The US President may not be having a new helicopter for a while but with a great deal less fuss than the Presidential Programme **AgustaWestland** are now able to point to the recent Indian Air Force signing of a contract for 12 similar AW101 VIP helicopters.

**Apical Industries** has received approval of their A109E/S Emergency Float Systems in the Republic of Indonesia.

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Both the Emergency Float and the Emergency Float with Life rafts Systems offer A109E/S operators increased safety for their crew, passengers and aircraft in the event of an emergency water landing. The 2 fwd and 2 aft cylindrical floats are inflated electrically when the float deployment switch is activated. After a water landing, the two optional integrated 6-man life rafts are electrically inflated by operating either the centre console mounted guarded switch or the overhead mounted switch.

**Helicopter Association International** (HAI) has released a new, online aviation wire strike safety awareness video. "Surviving the Wires Environment" is posted as a streaming video on the HAI Web site www.rotor.co, and can be viewed for free by HAI members and non-members. The video was produced in cooperation with Southern California Edison (SCE) and AEGIS Insurance Services, Inc.

According to the Federal Aviation Administration, wire and obstruction strikes are the top operational cause for fatal rotorcraft accidents. Over the last decade there has been an average of one aviation obstruction strike every five days in the US. Nearly 30% of all collisions are fatal and the number nearly doubles when the aircraft is operating in or around instrument meteorological conditions or at night.

The safety video identifies the key hazards and issues every pilot needs to know and understand to be safer when operating in low-level flight operations. The story is told through interviews with pilots who have survived obstruction collisions, and features comments from some of the leading experts in aviation collision avoidance. The video explores the intricacies of pilot vision and reviews the key components of a comprehensive utility pilot/ground crew safety training aid.

The Boeing Company has begun offering a new, compact, energy-efficient camera that provides three-dimensional images for military and commercial applications.

Boeing Directed Energy Systems and wholly owned Boeing subsidiary **Spectrolab** have jointly developed the camera using their own research and development funding, and successfully tested it over the past two years by attaching it to mobile ground platforms and a Boeing AH-6 Little Bird helicopter. Equipped with advanced sensors that were developed by the Massachusetts Institute of Technology's Lincoln Laboratory and transferred to Boeing under a teaming arrangement, the cube-shaped camera is one-third the size and uses one-tenth the power of most comparable 3-D imaging cameras.

Boeing is currently integrating the camera into compact 3-D imaging payloads on unmanned aerial vehicles and will be testing that capability this spring. The team will also add 3-D video capability to the camera soon to complement its existing still-image capability.



#### Police Aviation News

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**Geneva Aviation** has received FAA, ANAC, Transport Canada and EASA approval for their P174 27 Amp, 28 to 12 volt DC to DC power converter for the AS350/AS355, Bell 206 & 407, BO-105 series helicopters.

The Geneva Power Converter provides 12 to 14 VDC (Adjustable) to a variety of loads. The P174 provides clean regulated power to accessories without the potential for causing squelch issues in VHF Communications radios. It is designed to drive all loads including processor based systems.

The P174 has an extremely low radiated noise floor allowing the use of multiple units without EMI emission levels that can cause squelch break symptoms in VHF communication radios. The unit's output voltage is adjustable by a control that is located on the side of the unit instead of inside the unit or in a place that requires the unit to be removed from the airframe for adjustment.



With a 100 millisecond turn on rise time, the power converter is specifically designed to work with processor based equipment that utilise switch mode type power supplies, thereby reducing false start ups and shortened lifespan in the power supplies of these types of equipment

**Sikorsky Aircraft** and PZL Mielec in Poland, have completed final assembly on the first S-70i<sup>™</sup> international variant of the Black Hawk helicopter. This is the first Black Hawk helicopter assembled in Europe using a global supply chain. The helicopter, a new aircraft in the Sikorsky product line, also is the first rotor wing aircraft to be produced at PZL Mielec, a long-time fixed wing manufacturer in Poland.

The aircraft, fully assembled at PZL Mielec, will be tested and qualified at Sikorsky's Development Flight Center in West Palm Beach, Florida. Production flight tests are planned at PZL Mielec later this year as that facility continues to undergo modernization.

At a March 8 ceremony **Goodrich Corporation's Sensors and Integrated Systems** business in Vergennes, Vermont. marked the delivery of its 2,000th helicopter health and usage management system (HUMS).

Goodrich Sensors and Integrated Systems vice president Gary Loftus described how a US Army Black Hawk helicopter unit, fully equipped with HUMS, recently set a new record for numbers of hours flown in a 12-month period and saved taxpayers \$45M in maintenance costs.

Goodrich's HUMS give mechanics feedback on a helicopter's engine performance, structural performance and rotor performance - allowing a helicopter to be serviced before major system failures. Before the use of HUMS units, helicopters were routinely taken out of service for unnecessary preventative maintenance. The units are onboard a variety of military and commercial helicopters including the US Army's UH-60 Black Hawk and CH-47 Chi-

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nook, the US Marine Corps' CH-53E Super Stallion, and Sikorsky's commercial S-76D and S-92 aircraft. [Goodrich]

Operators of King Air 90s may significantly increase aircraft performance and cost savings by installing newly certified Winglet Systems from **BLR Aerospace**. The company received Federal Aviation Administration (FAA) certification for the performance-enhancing Winglet Systems last month, and deliveries will begin immediately.

The initial certification will apply to all King Air C90As, C90GTs and C90GTis. Follow-on certifications will expand coverage to earlier C90s and C90Es.

Already certified and installed on King Air 200s, 200GTs, and 300s, Winglet Systems deliver impressive improvements in stability, cruise speed, and rate of climb. Some 200 Systems have been delivered to date. Additionally, Hawker Beechcraft Services (HBS) offers a Beechcraft King Air 90x upgrade package, including BLR Aerospace winglets, to enhance handling and performance for King Air C90GTi aircraft. The HBS upgrade package also includes a gross weight increase to 10,485 pounds.

In terms of performance, Winglets deliver increased range, cruise fuel savings of approximately 5% and time to climb reduction to flight level 250 in excess of 10%. Additional benefits include reduced drag and improved handling qualities. The performance improvements are a direct result of an increase in effective wingspan and associated increase in aspect ratio combined with the beneficial impact of the Winglet acting as a physical pressure barrier, conserving valuable lift. www.blraerospace.co

The 100th delivery of the **UH-72A** Lakota light utility helicopter was celebrated at a rollout ceremony at the American Eurocopter facility on March 11.

For operators regularly involved in off base operations the GL3 **Portable Approach Path Indicator** may present an operational solution.

The GL3 is a very effective portable path indicator for aircraft, omitting the correct visible lights at a slope angle of 8 degrees for an aircraft or helicopter to approach an unknown area by simply staying on a designated light positioned by ground forces.

A single weatherproof unit houses 2 single colour projectors, synchronised to produce 3 indications which are visible to approaching aircraft : HIGH, CORRECT and LOW signals relative to the chosen glide slope.

The GL3 is a low voltage/battery powered portable approach path indicator, designed for rapid field deployment from improvised landing sites. Minimal training



is required for setup and the unit is ideal for Home Defence and Disaster Management. The device is housed in a 6mm. thick aluminium case which is sealed for life and is capable of accepting very rough treatment. The lens aperture is thoroughly shielded to prevent physical damage and prevents rain, snow or mist from settling on the glass. The operating switches are fully recessed and protected from damage. Water/dust proofing is to IP67.

Although rugged, the GL3 is a precision instrument that does not compromise portability for accuracy.

No calibration or maintenance is required except for scheduled checks and the unit contains no user serviceable parts. Lamps have a service life of over 10000 hours. An on-board heater and drier prevents misting on the lens surface. Long term storage in normal indoor conditions will have no adverse effects. All bearings are lubricant free. The sight glass does not require special treatment & can be cleaned with water and a clean cloth. www.bauertech.org

Absolute Fire Solutions (AFS) of Calgary, Canada, and **Thermo Technologies** of Bismark, North Dakota have joined forces to offer an innovative new way to increase fire fighting effectiveness. The FAST Gel Initial Attack bucket injection system eliminates the need to wait for large tankers and reservoirs, enabling fire agencies to apply the highly effective Thermo-Gel retardant much earlier in the fire suppression cycle.

Expanding on its reputation for introducing new technologies and capabilities in helicopter bucket technology, AFS developed the gel injection system as a result of fire agency input.

The injection system is designed for use in a FAST Bucket with FAST Fill internal pump capabilities. AFS designed the injection system to ensure quick and simple FAST Bucket cleanup, using a reservoir similar to the FAST Foam bag. As a result, operators may choose Thermo-Gel, water, or conventional foam retardant, depending on their fire fighting need.

Thermo-Gel is an environmentally friendly polymer approved by the US Forest Service for use in fire suppression and property protection. Thermo-Gel is being used extensively in Western Canada, United States and Australia by federal, state, provincial, county and city fire authorities. For more information visit www.thermo-gel.co

**Sky BOOKS**, Inc., an affiliate of Bell Helicopter, is offering free trial subscriptions to their Electronic Record Keeping Program for ALEA members. ALEA members that qualify for the Sky BOOKS Electronic Record Keeping Program limited-time offer will receive:

- v Flight Operations and Pilot Currency Tracking
- v Maintenance Tracking and Reporting
- v Inventory Management
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Sky BOOKS Inc., based in Jacksonville, Fla., is a Textron Aviation Management Solution Software-as-a-Service provider. It provides analyst-supported, Web-based aviation solutions to corporate and government flight operations to users around the world via its own highly-secure Tier 4 data center. Sky BOOKS manages the information processing requirements for any size rotary- and fixed-wing business aviation operation over the internet on a subscription basis. More information is available at www.SkyBOOKS.com or email us at sales@skybooks.co.





Eurocopter and its **Helicópteros do Brasil-Helibras** affiliate company commenced construction of a new rotary-wing centre of excellence in Itajuba, Brazil, last month. Helibras will produce, assemble and maintain EC725 helicopters being acquired by the Brazilian armed forces at the site.

Production of the EC725 at Itajuba will result in a doubling of production capability for Helibras – which currently assembles Eurocopter AS350 Ecureuil light helicopters for police and other operators, as well as a doubling of its staff, which stands at approximately 300 employees today.

The new 11,000-square-metre facility will accommodate areas for the EC725 assembly line and manufacturing areas, administrative offices, along with a design office for customization, production support and program management.

Construction of the new facility is to be completed by the end of 2011, with assembly of EC725s to begin in early 2012 and deliveries from the end of that year.

At the recent HAI Heli-Expo there were a number of exhibitors displaying simple fixed camera vision systems designed to improve pilot awareness in marginal weather conditions and available for both fixed wing and helicopter use.

Where the budget allows police response aircraft tend to carry a sophisticated role suite including a multi-sensor camera able to traverse through 360 degrees to follow a suspect but other emergency services aircraft, including police airframes dedicated to transport and most ambulances, have less need for that level of sophistication and can operate with a fixed camera system primarily designed to enhance survivability upon encountering poor weather conditions on the approach.

Elbit Systems of America based in Merrimack, New Hampshire was displaying its Vision Based Cockpit<sup>™</sup> vision enhancement option incorporating their Enhanced Vision System (EVS II) and a General Aviation – Vision System (GAVIS<sup>™</sup>). EVS II improves an aircraft's capability to execute precision approaches and safely land in bad weather and reduced visibility conditions. GAVIS<sup>™</sup> is an infra-red-based vision system that mounts like an antenna for general aviation aircraft to provide greater situation awareness at night and in other low visibility conditions.

The simpler GA system features a single compact LRU weighing just 3.5 pounds. The faired external unit is typically placed on the nose of the aircraft and provides a fixed image of the view directly ahead with its vision enhancing image then being available to the pilot.



Mark your calendar: LAAD 2011 April 12-15, 2011 Riocentro – Rio de Janeiro Brazil The EVS II offers a greater range of options and capability and naturally weighs considerably more at 22 pounds - 12 of which is the FLIR unit.

Others at the show ranged from a off the shelf L3 Systems offering marketed as IRIS. The L-**3 Infrared Imaging System IRIS** provides enhanced visibility of almost any object, day or night. As the human eye detects variations in colour, the IRIS camera detects variations in heat. Originally developed for the military, this revolutionary flying system is now affordable for all types of aircraft. IRIS technology measures heat signatures and creates an electronic image of everything in view.

A real-time, black and white image of people, animals, aircraft and terrain is displayed on a variety of compatible cockpit display systems and electronic flight bags. Because the system detects heat and not light, bright oncoming light, solar glare or the darkness of night is not a problem for pilots flying an equipped aircraft. But if you as a customer/user would not want a ready to go, tried, tested and certified bit of kit at a price that reflects the company investment in developing the kit **Luminator** of Plano Texas are offering a potential customer a massive discount price – around \$20,000 – for any-



one wishing to take their similar Dual Mode Thermal Imaging Camera and IR LED Mil Spec Searchlight through the certification process. Whether that represents good value compared with the ready to go certified item is highly debatable.

**Flight Management Systems** has announced the introduction of "Lock and Forget" Technology for the FMS series of Moving Maps used in Law Enforcement Aviation.

This amazing accuracy is coupled with the ability of the FMS Moving Map to control the SX-16 and the Trakka Searchlights as well, effectively performing the function of a Search Light Slaving System.

These enhancements build on Flight Management Systems global reputation of quality and innovation, directed by customer needs. With over 10 years in an active Law Enforcement unit, 5 years in EMS and 37 total years in Aviation.



Incidents involving laser illuminations of civilian and military have raised concerns within the aviation community across the globe for more than a decade. Pilots and law enforcement personnel are increasingly exposed to red and green lasers that cause an immediate distraction. This illumination may result from an outdoor laser show as well as, more recently, illuminations have been the result of deliberate action, either because the perpetrator has a lack of understanding of the consequences, or of more concern, the perpetrator understands the hazards of lasers and illuminates aircraft with the intent of doing harm. The problem has become more pronounced with the easy availability of powerful lasers, often purchased via the internet.

Temporary vision loss is one of the commonest effects of lasers. It can be associated with glare, flash blindness, blind spots or after-images. Glare is considered to be a temporary disruption in vision caused by the presence of a bright light within an individual's field of vision and it lasts as long as the light exposure. In flash blindness, the temporary loss of vision persists after the source of illumination has been removed. Blind spots are similar to flash blindness, but only part of the visual field is affected. After-image is an image that remains in the visual field after an exposure to a bright light.

In the US, the FAA has conducted a simulator study about the effects of laser illumination during final approach. Using lasers of varying power, the illumination by a legally available 5 mW laser pointer in a cockpit could be established at a range of distances (Figures 1 and 2). A 5mW laser can easily cause glare and distract pilots up to 3,700ft and a FAA safe distance is considered to be 11,700 ft (<0,05 $\mu$ W/cm2) for such a laser beam.

Since 1968, when they introduced the first laser visors for the US Air Force, Sperian Protection have been the world leader in laser eyewear and avionic light management solutions and, after working with key law-enforcement and military organizations in several major countries, Sperian Protection has brought to market their patent pending Laser Guard Sunglasses<sup>™</sup> (LGS).

Laser Guard Sunglasses<sup>™</sup> (LGS) significantly reduce the threat posed by powerful green and red lasers and laser pointers, while simultaneously providing the UV and glare protection offered by high quality sunglasses. By combining narrow band notch laser dyes and proprietary know-how, Sperian Protection have produced the ultimate in safety eyewear designed specifically for pilots exposed to red and green laser pointers.

Available in a choice of frame styles that feature multiple adjustments and form fitting features, these patented lenses are available in two versions to ensure that pilots are protected around the clock –

Soothing bronze colored sunglass tint for the day

Unique salmon colored lens that provides excellent night time vision

Laser Guard Sunglasses<sup>™</sup> combine laser protection with traffic signal colour-recognition and unparalleled comfort, making it possible for pilots to do their job safely and effectively.

To learn more about these new patented laser protecting sunglasses, please contact Laser Physics at info@laserphysics.co.u or by calling on +44 1829 773155.





Nakagawara V B, Montgomery R W, Dillard A E, McLin L N and Connor C W: The Effects of Laser Illumination on Operational and Visual Performance of Pilots During FinalApproach. Federal Aviation Administration, Office of Aerospace Medicine. Report Number DOT/FAA/AM-04/9. June 2004.





Business Design Centre Islington, London Exhibition: 21 - 22 April 2010 Conference: 20 - 22 April 2010





#### Police Aviation News

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GPSs are increasingly more capable, yet more than half of General Aviation pilots surveyed said they have difficulty getting a GPS to do what they want. Top issues are using flight plans and finding infrequently used pages. Now the latest *Max Trescott GPS Guides* for the iPhone, introduced though a partnership with Hilton Software, help pilots use the popular Garmin 430, 430W and Aera GPSs. You can see a 1-minute demo video at: www.youtube.com/watch?v=cnsWDxR\_ID0

The *Max Trescott GPS Guides* work equally well as illustrated self-learning guides and as quick reference checklists. Organised by function, a menu tree structure makes it easy to drill down to find exactly what you need. Colour screen images let you see how the GPS looks at each step in the process. Since iPhone users always carry their phone, pilots are never without GPS information when they need it.

The *GPS Guides* provide detailed explanations and GPS screen shots, not just a list of steps. Tips are also included offering suggestions on how best to use the GPS.

You can have the most current information thanks to application updates covering new GPS features, and cut down on the bulk in flight bags, all of the Guides can be added without adding an ounce! Detailed explanations on accessing weather information are included for all XM Weather enabled GPSs. The *GPS Guides* save time—no more hunting through user manuals - instead get clear, concise answers to your GPS questions. Aera App Introductory iTunes Price: \$19.95 430/430W App iTunes Price: \$29.95 Visit the Apple iTunes Application Store and search for "Trescott" or "Garmin" for a complete list of Max Trescott iPhone Guides. Details at ww.glasscockpitbooks.com.



Eurocopter Chile and Eurocopter Cono Sur, subsidiaries of Eurocopter, announced during FIDAE 2010 the contract signatures for the purchase of 7 helicopters and the delivery of 5 aircraft to several para public and private operators from Argentina and Chile. In addition, Eurocopter's training centre for pilots and technical representatives from the South Cone was officially certified by the Aviation Authority of Chile (DGAC). This centre is the only Eurocopter approved training centre in the South Cone of Latin America.

Contracts were signed with several para public and private operators from Argentina : the Provincia de Córdoba for one EC135 for passengers transport and rescue missions and one AS350 B3, the Provincia de la Rioja for one AS350 B3 for rescue and fire fighting missions, the Policía Federal de Argentina (PFA) for 1 EC135 for law enforcement missions, the Provincia de Misiones for one EC130 B4 for rescue missions and four AS350B3 for border patrol and traffic control missions were delivered to the Gendarmería Nacional Argentina (GNA) and one EC135 for law enforcement missions to the PFA.

A new training centre was certified. Among the courses available for pilots at the training centre, there is initial and recurrent training on EC120, AS350 B3, AS355 NP, EC130 B4 helicopters as well as courses on emergency procedures. Technical representatives receive initial and recurrent training on EC120, AS350 B3, AS355 NP, EC130 B4, EC135, BK117 and BO105 helicopters. In 2009, 26 pilots and 58 technical representatives were trained in the centre.



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The training centre is equipped with the latest available instruction tools such as the Interactive Software CAI and benefits from the expertise of well-qualified instructors for pilots and technical representatives. Customers are offered classes in facilities in Chile.

Henri Pesquidous, CEO of Eurocopter Chile and Eurocopter Cono Sur, declared on that occasion: "We are particularly proud to receive the official certification from the Dirección General de Aeronáutica Civil of Chile for our training centre. It demonstrates the trust placed by the DGAC in Eurocopter's ability to meet the needs of its customers in terms of training".

Alenia Aeronautica has delivered a second ATR 42MP (Maritime Patrol) to the Nigerian Air Force (NAF).

The delivery ceremony was held at Alenia Aeronautica's Training Centre at Turin-Caselle and will eventually lead to the aircraft being delivered for service at the Nigerian Base of Benin City, which is approximately 400 Km from Lagos.

The original contract, signed in March 2007 and worth around \$73M, envisaged the delivery

of the aircraft in the maritime patrol configuration; a provision for the necessary training for pilots and operators; as well as the delivery of ground equipment and spare parts.

The ATOS (Airborne Tactical Observation and Surveillance System) mission system that is installed onboard the aircraft was developed by SELEX Galileo and includes stations for mission operators, calculators and displays to control the mission, as well as main sensors, such as search radar and electro-optical devices.

The aircraft are being used by the Nigerian Air Force to accomplish the typical patrolling missions, such as reconnaissance, Exclusive Eco-

nomic Zone (EEZ) control, search and rescue (SAR).



**Eurocopter Canada** has sold three EC130 B4 single-engine helicopters to the Ontario Ministry of Natural Resources for forest fire management work and utility missions across Canada's second largest province.

With the delivery of the three new helicopters from the ECL facility in Fort Erie, the ministry will have a fleet of seven EC130 B4s available for the operating season.

The Ministry of Natural Resources has been using aircraft for forestry and forest fire management since the founding of the Ontario Provincial Air Service in 1924. On June 26, 1946, it gained the international distinction of being the first agency in North America to use a helicopter in forest fire control. Helicopters were added to the fleet in 1984.

Helicopters play an important role in helping the ministry carry out resource management activities, including delivery of forest fire crews and equipment for fire management activities, aerial animal surveys, wildlife darting work and worksite evaluations. They also provide rapid response times across a vast northern wilderness, which contains tens of thousands of lakes but very few roads.

The EC130 B4 supports the ministry's "one strike" concept (movement of personnel and equipment to the fire in one trip) as well as delivery of personal gear in the event that fire-fighters need to overnight at the fire. After setting the initial attack team on the ground with their water pumps and tools, the EC130 B4 pilot will often join the battle using a water bucket to hit the fire's "hot spots".

Along with the initial attack operations, the ministry utilises the EC130 B4 in support of other resource-related activities, including wildlife surveys, fish stocking, reconnaissance, compliance monitoring, enforcement missions, remote sensing and forest fire management. [EC]

**Pilatus Aircraft** has announced its partnership with PZL Swidnik S.A. for the assembly of PC-12 fuselage and wing cells.

Located in the Lublin region to the south-east of Warsaw, PZL Swidnik S.A. of Swidnik was recently acquired by AgustaWestland, the air transport Group. The contract between Pilatus and PZL Swidnik S.A. has been signed for a ten year period, and provides for delivery of the first complete PC-12 structures during the second half of 2011. Pilatus Aircraft Ltd will continue to produce detail parts in Stans, and these will be made available to PZL Swidnik S.A. for assembly

work.

## **ACCIDENTS & INCIDENTS**

**10 February 2010 Eurocopter BK117B2 N136AE**. Air ambulance of Air Methods Lexington, Kentucky. During normal shutdown after landing on a dolly at base upon completion of a flight, a main rotor blade made contact with the vertical stabilizers after the rotor brake had been applied. Gusting winds of 18 to 26 knots were prevalent at the time. [Concern]

**3 March 2010 MH-60T Jayhawk 6028**. United States Coast Guard. The helicopter crashed in remote Utah mountains whilst returning to its base North Carolina after providing security at the Winter Olympics in Canada. In blizzard conditions three people were airlifted to local hospitals. The Jayhawk helicopter was one of two [6028 and 6040] travelling through the area en route to home base in Elizabeth City. The helicopters made a refuelling stop in Salt Lake City and were headed to Leadville, Colorado when the crash occurred about 50 miles east of Salt Lake City in a remote, wooded area accessible only by snowmobile. Cdr. Patrick Shaw suffered internal injuries, Lt. Cmdr. Steven Cerveny had a broken leg and Petty Officer 2nd Class Gina Panuzzi also had internal injuries. Petty Officer Darren M. Hicks and Petty Officer Edward Sychra -- sustained minor injuries and were brought out with the help of snowmobiles. [USCG]

**5 March 2010 Bell 407 N518MT.** Air ambulance of Shannon AirMed 1 of San Angelo, Texas. Operated by Med-Trans Corporation. Bell experienced an engine chip light while on a patient transport from Concho County Hospital (CCH) -Eden, TX, enroute to Shannon Medical Center (SMC), San Angelo, TX. The pilot conducted an uneventful precautionary landing in a pasture near an unimproved road. [Concern]

**7 March 2010 Agusta A119 Koala 5X-MAC**. Uganda Police. The aircraft crashed into trees in the Bugiri District whilst making an emergency landing on a passenger flight. Some of those on board were injured but the airframe, although heavily damaged, remained upright and there was no fire. The main passenger Prime Minister Apolo Nsibambi was injured. The aircraft was flying to Kampala. Six other people who were travelling in the aircraft were injured they include the Permanent Secretary in Nsibambi's office, Mr Pius Bigirimana and three aides to the premier identified as Rose Oyella, Apollo Munghinda and Peter Isabirye. Pilots Emmanuel Busuulwa, and Elijah Matovu, were also injured.

Initial reports suggest the pilot, Emma Basulwa, said the helicopter developed an engine fault about 10 miles from Bugiri but the decision was made to carry on until an emergency was declared. [Media]

**11 March 2010 MD Helicopters MD520N N**. Prince George's County Police, Maryland. The helicopter made an emergency landing at a Southeast Washington elementary school due to a mechanical failure. No one was injured when Air 1 landed at Davis Elementary School. The helicopter was on a routine assignment taking photos. [Media]

**11 March 2010 Mil Mi-8.** Air ambulance. Eight people were killed when the helicopter crashed in eastern Kazakhstan. The wreckage of the helicopter was found in Urdzhar area. The eight people onboard included two local officials and two doctors. The Mil lost contact with the air control tower while on a rescue mission with another helicopter in East Kazakhstan province. Northern and eastern Kazakhstan have been hit by freezing weather and heavy snow.

**18 March 010 Eurocopter EC145 N919CM.** Air ambulance of Life Flight Eagle Kansas City, Missouri. Operated by PHI, Inc. Upon landing at the hospital helipad, the engine cowling opened, a portion of which struck the main rotor blades as the aircraft was shutting down. PHI, Inc., is completing a root cause analysis to determine causal factors. [Concern]

**19 March 2010 Eurocopter BK117 N**. Air ambulance of Aeromed, Tampa General Hospital operated by Air Methods. En route to Tampa General Hospital with a trauma patient, the crew experienced an unusual vibration. A precautionary landing was made without incident. Determined that the vibration was caused by worn bushes. [Concern]

**20-21 March Helicopter** A St. Louis-based medical helicopter is being repaired after a weekend bird strike. KMOX Radio reports that no one was hurt when a bird struck the right side of an ARCH Air Medical Service helicopter windshield. Spokesman Bob Abrams says bird strikes are not as common for helicopters as they are for airplanes. He says ARCH helicopters are involved in bird strikes about once in every 400 flights. ARCH is a critical care air ambulance service providing coverage mostly in Missouri and Illinois.

**24 March 2010 Eurocopter EC135 N.** Air ambulance. Made a run-on emergency landing at Blue Grass Airport, Lexington, Kentucky. The EC with a patient on board, skidded to a stop in a grassed area next to a runway after one engine lost power. There were no reports of injuries. [LEX18/]

**25 March 2010 Eurocopter AS350B3 N855HW.** Air ambulance of Memphis Hospital Wing. The helicopter crashed close to its operating base near Brownsville, 55 miles from Memphis, Tennessee, killing the crew of three. Bad weather, heavy rain, was reported at the time. A Hospital Wing official stated that they had just dropped off a patient at Jackson General Hospital and was returning to base www.hospitalwing.co

## **FLIGHT SAFETY**

Floor-mounted fuel controls on a helicopter that crashed in 2008 near Chickaloon, killing four people and injuring one, contributed to the accident, among other causes, according to a NTSB report released last month. The teenage passenger and sole survivor of the crash likely bumped a fuel control lever with his foot or backpack, according to the NTSB's probable cause report. But the board also noted in its report that the helicopter's design, along with inaction by the pilot and its operator, ERA Helicopters, contributed to the crash and the severity of injuries.

Three state telecommunications technicians and the pilot died, and the crash left then-14year-old Palmer resident Quinn Ellington wandering a ravine with serious head injuries and hypothermia.

The Eurocopter AS-350-B2 is the only helicopter operating in the US with floor-mounted fuel control levers on other types they are all overhead or on the collective hand control. If Ellington's backpack is to blame, the pilot failed to take measures to secure it.

## PEOPLE

The Department for Transport has announced the appointment of **Sir Alan Massey** as the new Chief Executive of the UK Maritime and Coastguard Agency. He will succeed Peter Cardy who leaves his post as Chief Executive of the Agency in April.

Alan Massey's appointment follows an open competition. He joins the Agency following a long naval career, spending the last two years as the Second Sea Lord and Commander-in-Chief of the Naval Home Command, bringing with him extensive leadership experience and knowledge of the maritime sector. [Department for Transport]



In my recent Heli-Expo edition I made mention of a 'nose to nose' spat between Tilton and the **Show Daily** writer over his lack of text in the day 2 show daily .... Well, lo and behold Patriarch Partners has just published the revised day 3 show daily text as a PDF on line... clearly the revised item did gain her ok!! http://www.patriarchpartners.com/news/LTarticle.pdf

Bell Helicopter didn't have to look far to find a new top salesman, just a few miles to the southeast in Grand Prairie. The company has announced the appointment of **Larry D. Roberts** as senior vice president, Commercial Business, responsible for the sales, marketing and programme development of Bell's line of proven, reliable, commercial helicopters.

Based in Fort Worth, Texas, Roberts will oversee Bell's international Sales and Marketing and Commercial organisation, which manages development of current, new and upgraded commercial helicopters. He joins Bell from American Eurocopter, where he served as vice president of Sales, Marketing and Customer Support. He simultaneously served as director of US Federal Law Enforcement Development for EADS North America, the parent of American Eurocopter.

Prior to joining that company in 1997, Roberts had served as captain of criminal investigations for the Citrus County, Florida Sheriff's Department from August 1996 to October 1997 and as patrolman and watch commander with the Gainesville Police Department for the preceding 13 years. He was a founding member of the Gainesville Police helicopter unit, which provided air support for ground operations of both agencies.

Roberts holds U.S. FAA licenses and ratings as a single- and twin-engine commercial pilot and rotorcraft instructor. He earned a Bachelor of Science degree in business administration from the University of Florida.

#### **EVENTS**

In recent months one of the books on the Editors shelf awaiting Review was Alan Bristow: Helicopter Pioneer – The Autobiography Alan Bristow with Patrick Malone. Pen & Sword Books. From the start that was a sure fire winner without any review and the book although read never did get its review space. The content was magic and I can recommend it. www.pen-and-sword.co.uk

In an associated event notice, on April 14, 2010 three people closely associated with Alan Bristow over the years will speak about the colourful legacy of a man who was undoubtedly a real pioneer in the global helicopter community.

**Patrick Malone** is a writer and a helicopter pilot. As a journalist he has worked on newspapers as diverse as the Sydney Sun, New York Post, Observer and Sunday Times, later working as a news desk executive on the Mail on Sunday and the Evening Standard. Co-author of Alan Bristow's autobiography, Pat will cover the early years of Bristow's life, military service, flying experience, business exploits and career achievements.

**Captain John Black** has over thirty years experience as managing Pilot and Head of Worldwide Flight Operations for Bristow Helicopters in Nigeria, Egypt, Iran and the UK. He will highlight the vision and leadership that built Bristow Helicopters into a leading international helicopter company.

**Stephen Bond**, one of Bristow's main competitors for many years, will reflect on the major part Alan Bristow played in laying the foundation of today's international commercial helicopter operations.

The event will take place at the Royal Aeronautical Society, No 4 Hamilton Place, London W1 and it will be free of charge. The nearest Underground Station is Hyde Park Corner. You do not have to be a member of the RAeS. www.raes.org.u

**Times:** Refreshments from 17:30, Lecture at 18:00, Post Lecture Reception (Sponsored by *Bristow Helicopters*)

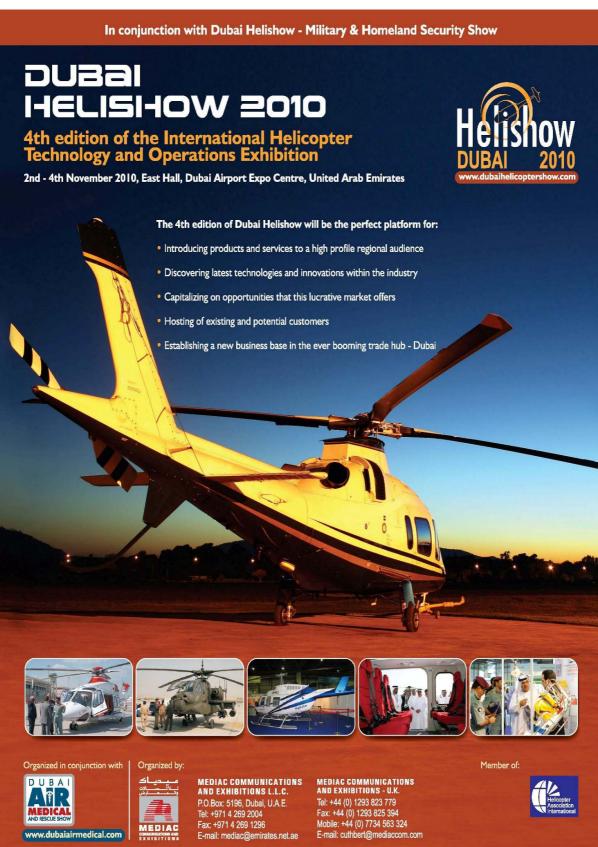
If you are going to the Counter Terror Expo in Olympia, one of its days matches that of the Bristow event... may be worth making a day of it! National Hall, Olympia London. www.counterterrorexpo.co

**Northrop Grumman** has a strong presence in the UK with a heritage spanning 100 years. The company operates from primary locations in London, Fareham, Chester, Coventry, New Malden, Peterborough, RAF Waddington and Solihull and provides avionics, communications, electronic warfare systems, marine navigation systems, unmanned ground vehicle systems, C4ISR solutions and mission planning, IT systems and software development and aircraft whole life support. Northrop Grumman Corporation is a leading global security company whose 120,000 employees provide innovative systems, products, and solutions in aerospace, electronics, information systems, shipbuilding and technical services to government and commercial customers worldwide.

CONTACT: Ken Beedle of Northrop Grumman Corporation, +44 (0) 207 747 1910, +44 (0) 7787 174092, Ken.beedle@euro.ngc.co

UK [September 27-29, 2011] events remain as scheduled.

The new edition of Helitech intended for an airing in Brazil, South America in May this year has been cancelled due to the poor market conditions. Currently the Helitech Portugal [October 5-7, 2010] and



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European Business Air News (EBAN) and Marshall Business Aviation have announced that the UK Business & General Aviation Day - BGAD10 - will take place at Marshall Cambridge Airport on Tuesday September 21st.

This will be the sixth time that the two companies have worked together to stage BGAD, the only dedicated business aviation exhibition in the UK. The successful formula of low cost all inclusive booths, excellent static aircraft display will be strengthened with more seminars, presenting hot topics of real interest to show visitors. Around 600 people attended the last BGAD day in 2009 which has developed into a 'must attend' event for many in UK business aviation.

To register interest in exhibiting at BGAD10, or for any other questions, please contact Mark Ranger on +44 (0) 1279 714509 email: mark@bgad.aer



#### **Police Aviation News**

**8-11 April 2010.** Aero 2010. Friedrichshafen, Germany. International aviation ambulance services are the main topic on the agenda of the First European Air Ambulance Meeting held in conjunction with AERO 2010. The international trade magazine 4RESCUE, which focuses on the topic of air rescue, is offering the global show for general aviation (April 8-11, 2010) in Friedrichshafen on Lake Constance a platform for exchanging information among organizations and specialists in the area of air rescue, including manufacturers and designers of all the medical equipment on board the aircraft and insurance companies. Details on the Air Ambulance Meeting and AERO 2010 are available at www.aero-expo.com

**14-15 April 2010 Counter Terror Expo 2010.** National Hall, Olympia London. +44 20 8542 9090 pcle@niche-events.co www.counterterrorexpo.co

**21-22 April 2010 BAPCO 2010** Conference and Exhibition at the Business Design Centre, Upper Street, Islington. Registration opened for the BAPCO 2010 Exhibition in December 2009.

The sell-out exhibition features over 100 suppliers offering expert advice on the use, implementation and management of communications equipment and information management technologies. PLUS exclusive previews on innovative technologies that will shape future operations. www.bapco.co.u

**21-22 April 2010 SAR2010**. To be held in the Aberdeen Convention Centre, Aberdeen, Scotland. www.shephard.co.u

**21-24 April 2010. ASIA PACIFIC CHINA POLICE 2010,** The 5<sup>th</sup> Asia Pacific Police Logistics & Equipment Trading Platform at Beijing Exhibition Centre, Beijing, China. Approved by the Ministry of Public Security and Organised by its key Bureaux & Research Institutes the Show is acknowledged as the premier event of its kind and attracts around 10,000 trade visitors from all over China and its provinces. The 2008 Show attracted 72 international and 252 national exhibitors, 40% of whom actually acquired orders at the Exhibition with many other deals being concluded in the following months. Arms; Ammunition; Police Cars, Motorcycles, Prisoner Vans, Armoured Carriers, Rubber & High-speed Boats, Helicopters, Vehicle Protection Equipment, Traffic Control related to the Transport Sector; Police Protective Equipment; Police Uniforms, Materials & Dress; Communication Systems; Electronic, Computing & Internet Security; Optics & Optronics; Forensic Products & Skills; Sports Events, Crowd Control; Accident Prevention & Rescue Equipment.

If you wish further details and the official brochure on this event, please contact CAROLYN WIL-DEN at Enterprise Associates International, 30 Pennyford Court, Henderson Drive, London NW8 8UF Tel: +44 20 7289 6982/+44 20 7266 0083 - E-mail: eai@btopenworld.co

**28-30 April, 2010 8<sup>th</sup> Annual Neonatal/Pedriatic Transport Conference 2010** Sheraton Hotel, Austin, Texas. USA +1 512 873 0033 www.int-bio.co

3 May 2010 Brooklands Emergency Services Day. Brooklands Museum, Surrey UK

**4-6 May 2010 GPEC 2010** 6th edition of the General Police Equipment Exhibition & Conference GPEC<sup>®</sup> Central Europe's leading exhibition for police and special equipment as interdepartmental platform for internal and external security takes place in Leipzig, Germany under the patronage of Dr. Wolfgang Schäuble, Federal Minister of the Interior. This is a closed specialised trade fair exclusively for members of authorities for the business with police equipment, security technology and services. www.police-exhibition.de www.gpec.de

28-29 May 2010 Pribram Airfield, Czech Republic. The 2nd PAvCon Police Aviation Conference in conjunction with AeroExpo Europe. Details from the Editor or Book on line at <u>www.pavcon.org</u>



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