Mation Research

Number 127 October 2006

IPAR

SAN DIEGO AS350B3 DELVERIES START

Cal Meeke

PAN – <u>POLICE AVIATION NEWS</u> is published monthly by INTERNATIONAL POLICE AVIATION RESEARCH 7 Windmill Close, Honey Lane, Waltham Abbey, Essex EN9 3BQ UK +44 1992 714162 Editor Bryn Elliott

Bob Crowe Digital Downlink L3 Wescam Power in a box Turning the blades Airborne Law Enforcement Association European Law Enforcement Association Sindacato Personale Aeronavigante Della Polizia Bundesvereinigung fliegendes Personal der Polizei (BfPP) www.bobcroweaircraft.com www.bms-inc.com www.wescam.com www.powervamp.com www.turbomeca.com www.alea.org www.pacenet.info www.uppolizia.it www.bfpp.de



Recently delivered South Australia Police Eurocopter EC130B4 undertakes a mix of law enforcement and ambulance/SAR flights. [SAP]

LAW ENFORCEMENT

AUSTRALIA

NORTHERN TERRITORY: Customs has called for tenders for the supply of a multiengine helicopter, crew and engineering support to be based at Gove on the Gulf of Carpentaria to respond to illegal boat landings. The Gulf of Carpentaria is a large, shallow sea enclosed on three sides by northern Australia and in the north by the Arafura Sea - the body of water that lies between Australia and New Guinea. The \$25M appropriation, part of the Rapid Response Helicopter Service the Australian Customs Service plans to launch in January, will cover staff and a helicopter.

In an associated move the tender document from Customs includes the need for an ability to fire weapons from a hovering helicopter.

So far officials have ruled out following the example of US Customs, which uses sharpshooters in helicopters to disable the engines of illegal vessels, instead the initial capability is expected to be restricted to an ability to fire at feral animals such as cats, dogs and pigs that had come onto the mainland from illegal fishing vessels. A quarantine risk capability. The helicopter would be on standby at Gove and capable of launch within 60 minutes of notification to respond. The helicopter would carry up to six Customs officials and would cover the area between Darwin and Weipa in far north Queensland.

The Community and Public Sector Union appears to have had no prior knowledge of the arming plan and considers the proposed new use of force initiatives for Customs a matter for concern.

WESTERN AUSTRALIA: Two new Pilatus PC-12 planes joined the Police Airwing early last month. Their arrival is intended to improve Western Australia's SAR, and counter-terrorism capability. The single PT6 powered aircraft were customised in Adelaide before being transported to Perth.

One of the planes, call-sign VH-WPE c/n 704, will be based at Jandakot and used predominantly for staff deployment around the southern half of the state. The other, call-sign VH-WPY c/n 720, will be based in Karratha and will provide a similar service to the northern area. This aircraft also has a fitted in-flight opening door to enable the dropping of supplies during both SAR and natural disaster relief operations. Both aircraft have an unqualified counter-terrorist role.

The PC-12's have a 4,740 kg maximum take-off weight, maximum speed of 500 km/hr and the capacity to convey six staff and baggage to Karratha from Perth, with holding fuel for 60 minutes upon arrival if need be.

The aircraft do not carry special police markings but the scheme does have some stylized police features, off white under surfaces with a thin dark blue cheat line widening towards the rear of the aircraft and extending up the tail. The upper surface is silver with a large dark blue stylised swan emblem on the rear fuselage, with dark blue chequers lightening towards the rear.

The Western Australia Police Air Support Unit operates one helicopter and three fixed-wing aircraft. Until last month the aircraft the unit operated were a Kawasaki BK117 twin-engine helicopter, two PA31 Navajo twin engine fixed-wing and a Cessna 182 single engine fixed-wing aircraft. It appears the PC-12s replace the Navajo's.

AUSTRIA

The Secretary of the Interior presented a Eurocopter AS350 police helicopter wearing a new silver blue and red colour scheme. It reflects the style already evident on police cars. To come shortly are tenders for eight new helicopters to start entering service from 2008 to replace an existing fleet that includes machines up to 28 years old.

According to official statistics the helicopters have been involved in some 4,821 operations in 'catastrophes' - evacuations from natural disasters etc. – since 2000 and it is with this level of use that the new tender is framed. IBMI



POLICE AVIATION I4-15 November 2006 Olympia Conference Centre. London, UK

October 2006

CARRIBBEAN

The British Royal Fleet Auxiliary [RFA] vessel Wave Ruler arrived in the Turks and Caicos Islands (TCI) to assist the Governor, the Immigration Department and the Royal Turks and Caicos Islands Police (RTCIPF) in combating illegal migration and illegal drug trafficking.

In early September, following a visit to Curacao in the Netherlands Antilles RFA Wave Ruler sailed under the command of Capt Bill Tait RFA to undertake counter-Narcotics patrol in the central Caribbean area.

On September 14 Wave Ruler swooped on a Caribbean drug smuggling boat – in a major interdiction operation.

The tanker, supported by a Royal Navy Lynx helicopter, stopped up to five tonnes of cocaine - with an estimated street value of £500M - reaching the illicit market. The Caribbean drug runners scuppered their small fishing boat and set fire to their cargo North East of the Barbados coast after a night-time chase. Even so ten suspected smugglers were arrested by US Coastguard officers embarked on the Wave Ruler.

The drama unfolded in the early hours of Sunday morning, September 10th, when RFA Wave Ruler reacted to a tip-off.

At around 01.30 local time, the ship's bridge team spotted a small, unlit vessel matching the position and behaviour of a drug runner. The ship immediately slipped into covert mode, shutting down all her lights to reduce the chances of early detection as Wave Ruler closed the vessel. Finally she broke her covert stance and illuminated the fishing vessel. Almost immediately, the fishing vessel's crew set fire to their boat and within minutes the whole vessel was ablaze. Much of the cargo was destroyed but cocaine with a street value of £65M was recovered from the sea when it floated to the surface.





The International Exhibition for General & Sport Aviation June 8-10, 2007 Wycombe Air Park, UK







Complete Air to Ground Microwave Systems to Suit your Needs
The Downlink Experts

Tel: +1-858-391-3050 • Fax: +1-858-391-3049 Email • dept500@bms-inc.com • Broadcast Microwave Services

CHINA

A leading coal mine operator in Shanxi in the west of North China has sponsored the local police to the tune of 8 million Yuan (US\$1M) to buy them a Bell 212 helicopter.

The Bell reportedly cost the police 30M Yuan [under \$4M] in total. The helicopter is to be called Xingwang after the name of the donating mine.

The report now claims that Shanxi is China's second province to own a police helicopter. Although the aircraft is flying it seems its quite young project in that the 'new flight team' was only established on the day of the official launch.

Yang Anhe, the director of the Shangxi Public Security Department, has stated that there is an intention to buy another two police helicopters to serve the province by the end of 2007.

The twin-engine Bell 212 helicopter is capable of holding 15 people—one pilot and 14 passengers. With a range of 640 km and a maximum speed of 270 km. Shanxi covers an area of 156,300sq.km [97,120 miles].

Ed: Papers get it wrong, but the prices quoted for what must be a venerable Bell 212 in this item appear high.

There have been suggestions that unsuitable aircraft are being supplied into the Chinese LE arena - a new market staffed by people unfamiliar with aviation their actual needs.

EUROPE

FRONTEX: Patrol boats, planes and helicopters from Spain, Italy, Portugal and Finland are continuing to operate off the shores of Cape Verde, Mauritania and Senegal in a bid to stop the immigration at source via Operation Hera II is the first of its kind for the European agency Frontex, led by the Spanish Guardia Civil [Civil Guard].

The Guardia Civil Commander at the Frontex HQ in Santa Cruz de Tenerife says that in the three months that they have been operating off Mauritania, boats containing a total of 1,243

October 2006

people have been intercepted and returned to shore. If found outside that zone, the boats are escorted the extra 2,300km or so to the Canary Islands.

Tenerife has seen more than 16,404 people arrive in more than 239 Cayucos since 1 January. The Cayucos, Senegalese fishing boats, are often well equipped with two or three 40 horsepower engines and carry additional fuel for the extended journey in barrels of diesel loaded below the makeshift wooden decks.



Navigation by the usually scratch trained 'crew' is often dependent upon a cheap hand-held GPS and safety on a few lifejackets.

Between 70 and 150 people crammed side by side and protected by little more than a tarpaulin make the journey on minimal food and water, as they are taken off the boat the survivors leave behind an often rotting scatter of gas cookers, pots, rice, onions and biscuits. Based on finding nine bodies in boats this year Spanish authorities suggest the between 1,000 and 2,000 might have been lost at sea.

FRANCE

GENDARMERIE: At the end of August France's Defence Ministry announced that it is buying seven additional Eurocopter EC145 helicopters for the Gendarmerie Nationale. The €65M contract was awarded after a European-tender. The aircraft will be additional to the eight similar helicopters already in service. Delivery of the helicopters is expected to take place in 2007 and 2008. [ECD]

Ed: Not so many weeks ago there were rumours that the aircraft type was giving grounds for concern in some quarters after a couple of accidents in the Alpine regions of France. The operator was Securite Civile. For a short while there were restrictions on flying. The removal of those restrictions and this order clearly tell another more positive tale about the capabilities of the EC145/BK117C2.



October 2006

Beyond this announcement a major new helicopter order for the Gendarmerie is expected shortly. The other major outstanding order for Gendarmerie aviation re-equipment is that for the selection of a sensor turret. Although they have used daylight/flir sensor turrets in the past these have all been leased in, usually for special occasions.

IRELAND



GARDA: The Irish Government has signed for a new EC135T2 helicopter for delivery to the Garda in 2007. The airframe c/n 478, above, is currently at Oxford awaiting completion.

ITALY

BUDGETS: In recent weeks there have been rumours that each of the Italian law enforcement air services has been facing severe restrictions on their air operations.

Apparently supporting the rumour the Italian Interior Minister Giuliano Amato was quoted in a Rome based newspaper as bemoaning the current age of the helicopter fleet and asking whether they should be flying 'obsolete' helicopters.



Amato has stated that there would be no cuts in security but that there is a clear acknowledgement of financial problems. A need for more efficiency in the air fleet.

The existing police air fleet is acknowledged as often 'old and deteriorated' and that includes cars and helicopters. Until recently there was a nominal five year limit as security threshold for helicopters but this was extended to six and a half years. Minister Amato has asked 'would you fly on an obsolete helicopter?'

The interior minister also talked about wider issues including having too many training schools for the real level of demand and a suggestion that an over abundance of military infrastructure [buildings] was a severe drain on resources. Some €500M is spent annually just on rents for building, many of which are empty. Rationalisation is in the wind but it is seen as a sensitive issue. [agi]



Ed: The comment about the age of the aircraft in use does not sit well with actuality. The helicopter fleets in use with each of the air services include a large proportion of 20 years old helicopters [for instance the Agusta A109A] – way beyond the quoted $6\frac{1}{2}$ years. Whether this is poor briefing or translation is unclear.

There is though a perceived problem in re-equipping the vast air fleets in Italy. Having been based on military practice the fleets are over-large and relatively inefficient in individual air-frame utilisation for modern European tastes. From the rhetoric it may be that Minister Amato is opening the war of words preparatory to downsizing the fleets and modernising the infrastructure.

Add to the volatile mix potential problems to be faced in meeting the requirement for open tendering in the EU. Flying Agusta may well be the preferred economic option but the EU rules will not allow that.

UNITED KINGDOM

WEST MIDLANDS: With details pretty well known within the industry for some time it was not until last month that the contract was finally signed for their new Eurocopter EC135P2 G-WMAO by the police authority – thus releasing into the public domain a pretty significant change in UK police buying practice.

The new machine, c/n 501, is already at the McAlpine Helicopters [Eurocopter UK] at Oxford Airport awaiting completion but delivery is not expected before next year, meanwhile the service continues using the MD900 Explorer – which will be retained as a second aircraft.



Ed: After eight years of exclusively selling their engines into every Eurocopter EC135 into the UK police and EMS market Turbomeca has lost forever its pretty significant marketing edge. West Midlands police has selected the first ever UK police EC135 powered by the Pratt and Whitney Canada 207 engine and another is due.

On the face of it the two engines are pretty well matched. They produce pretty much the



same power and sfc so the selling points boil down to customer service, customer service and customer service. West Midlands were already operating a particularly unreliable PWC powered MD900 Explorer and so had a very good appreciation of PWC's customer service and reliability within that negative reliability scenario. Knowledge of Turbomeca will have been received by talking to existing EC135 operators. The fact that they still chose PWC power therefore represents a significant lesson for all parties.



UNITED STATES

FEDERAL - Since the beginning of Operation Jump Start, US Customs and Border Protection Border Patrol has credited the National Guard with assisting in the apprehension of 10,479 aliens, and the seizure of 37,288 pounds of marijuana and 1,738 pounds of cocaine with an estimated value of more than \$85.4 million.

In June, National Guard troops began arriving at the border in California, Arizona, New Mexico and Texas to support CBP Border Patrol in their mission of securing the border. Some of the duties performed by the National Guard include camera operators, repairing vehicles and firearms training, infrastructure maintenance as well as construction. In some cases, Border Patrol agents were performing these duties prior to the National Guard's arrival.

The National Guard has had no direct law enforcement role in any apprehension, custodial care or security of those who are detained. Skill-sets aiding in these successes are entry identification teams, camera operators, remote video surveillance system monitoring, vehicle repairs, and the construction of tactical infrastructure, which enables more Border Patrol agents to concentrate on border enforcement.

 \vec{Ed} : The above is the positive spin of the official story – one of the USBP showering the helpers with multiple praises. Beyond that there are rumours of BP Agents being a little unhappy at having to 'baby-sit' the largely untrained National Guard. The truth probably lies somewhere in the middle.

FEDERAL: It has been confirmed that the US Customs and Border Protection intends to restart UAV operations this month with the delivery of its second General Atomics Predator B. The first UAV was lost in April due to operator error. [Flight]

CALIFORNIA: The Los Angeles Police Department (LAPD) Air Support Division has selected the SAGEM Avionics, Inc. Integrated Cockpit Display System, ICDS-8, as an avionics upgrade for their fleet of AS 350B2 helicopters. The new modifications will include two sideby-side, 8.4-inch active matrix liquid crystal display screens along with a digital attitude heading reference system (AHRS).

The new glass cockpit will provide LAPD pilots and observers with enhanced systems presentations for primary flight instruments, navigation, and engine and aircraft systems monitoring. In particular, the Engine Management System (EMS) provides a digital replacement for all factory-installed engine and aircraft system indicators. The EMS consists of four pilotselectable pages that present a combination of engine and systems information, along with a moving terrain map with global positioning system interface, and look ahead terrain warning. The first helicopter to receive the new modifications has already been inducted into the Van Nuys repair facility operated by Fleet Services, a division of the Department of General Services for the City of Los Angeles.

Ed: The current fleet of AS350B2 helicopters with the LAPD dates from 2000.

CALIFORNIA: Placer County Sheriff's Office is seeking funding for a new helicopter to replace their existing Bell OH-58 and currently waits funding.

They have been flying the same helicopter, a 1971 Bell OH-58 [believed to be N1851S c/n 41365 71-20504] for the last 11 years, its current maintenance requirement is high. They would like to upgrade to a machine with more sophisticated equipment and high altitude capabilities not available with the Kiowa.

To this end the support services division commander has been researching and recommending a new helicopter for the last five years.

No significant moves on meeting this need can be expected this year. The county office is conducting a feasibility study to be completed by mid-December, with the results presented to the Placer County Board of Supervisors after that.

On a more positive note it is reported that the board has already ring-fenced \$1.5M to move ahead with the project if approved.

CALIFORNIA: The Sacramento County Sheriff's Department (SCSD) has taken delivery of a new Eurocopter EC120. It is the 400th EC120 to be received by a customer since the first EC120 was delivered in 1998.

The registration of the SCSD's new 'Star 8' helicopter – 288JK – is a living tribute the Department's fallen officers, SCSD Deputies Joseph Kievernagel and Kevin Blount killed in an earlier accident with the EC120 N266SD – this was subsequently attributed to an engine manufacturing fault.



'Normally, we register our aircraft in sequence, so that Star 5 was registered as 255SD – "SD' for 'Sheriff's Department' -- Star 6 was 266SD, and so forth,' said Lt. Links. 'However, we asked and received permission to register our new Star 8 as 288JK; JK standing for Joe and Kevin. It allows us to say that Joe and Kevin are onboard for every flight.'

The SCSD now has four helicopters in its roster, including the three remaining EC120s.

CALIFORNIA: In retrospect some have hailed it as the birth of modern police aviation – others are not so sure. What is clear is that forty years ago for some it was a turning point. When Sky Knight first came online in Lakewood California in 1966 as the first aerial patrol programme in the USA it was noticed by the police officers it helped and the criminals it effectively suppressed.

News of crime dropping in Lakewood within the first two years effectively silenced sceptics

Patrol Operation is Optimized



at a time when crime was generally on the rise throughout the county. The 18-month experiment four decades ago has been lauded ever since.

In its 40 years, it is claimed that Sky Knight has pursued criminals, rescued victims and responded to disasters. It spawned dozens of aerial patrols worldwide including at least two in England.

Neighbouring cities soon saw Sky Knight's successes and offered to pay for the resource to help offset costs, a partnership that remains today. Currently, Artesia, Bellflower, Cerritos and Paramount share in the \$860,000 expense of operating and maintaining Sky Knight's three Schweizer 300C helicopters. The operation started on the Hughes 300 and still flies them today. To date Sky Knight has recorded more than 107,000 flight hours. [Press Telegram]

Hughes promotional leaflet ing employed the first female law enforcement pilot in the US during 1980, a distinction honoured

by the Smithsonian Institution. Notwithstanding the potential contribution made, I dispute that as a potential disservice of the part played in the development of law enforcement by such as Cora Sterling in Seattle and Bobby Trout in California thirty years earlier.

CALIFORNIA: Jet Source, Inc. has completed the first of four American Eurocopter AS350B-3 helicopters for the San Diego Police Department. The package is entirely NVG (Night Vision Goggle) capable, and includes a thermal imaging system, Avalex Moving Map, and a custom designed radio command suite. To meet San Diego Police Department's mission specifications, Jet Source designed and fabricated a custom panel, console and racks in addition to all necessary engineering, installation and interfacing.

For Dallas Avionics the Jet Source completion marked the finalising of an STC and the installation of a Power Sonix PA system in a US AS350 airframe. Dallas is the sole US distributor of the Power Sonix liquid cooled speaker array capable of a blistering output from its 600w amplifier.



Image taken on the USS Midway in San Diego harbour. A private dinner on the main deck put on by Eurocopter to unveil the first of the four AS350B3's for San Diego Police. [Meeker Aviation – who have their Nightsun and flir mounts, isolation collar and gen II dovetail installed].

MISSISSIPPI: Coyt Bailey the owner of Mercury Aviation Inc. a company based in Flowood has offered to provide a Robinson R44 Raven II helicopter to a number of local law enforcement agencies. The offer assumes that a number of agencies will accept the offer and pay varying amounts for an air support service. If one of the counties chooses to participate it would have to pay \$25,000 a year. Smaller municipalities would be required to pay \$10,000 for the police role equipped machine.

Among the agencies interested are Jackson Police Dept. and Hinds County Sheriff but so far Madison County Sheriff has indicated that they do not need frequent access to a helicopter.

In a later report it was suggested that Ridgeland and Madison Police departments could be considering joining the programme after all. [Herald]

TEXAS: Through its US arm, UK-headquartered Sapphire International Inc. is developing a customised application for the Houston Police Department's Helicopter Patrol. The programme will allow the division to better track its patrol, administrative, maintenance, inventory, budget, systems administration and training flight-management components.

Sapphire won an \$87,850 contract for the project, which should be completed by the end of this year. The work involves the conversion of an existing DOS-based system to a state-of-the-art, Windows-based system.

Houston PD operates eight helicopters and one fixed-wing aircraft, using thirty-one pilots,

five observers and ten support personnel over a 15-county area that is home to 7M people.

The upgraded maintenance support system will help ensure pilot safety by logging support and signalling alerts for maintenance utilising efficient information retrieval and transfer.

HPD kept handwritten records before 1993, when a switch was made to the early computerised format,

Sapphire International Inc are based in Romford east of London [+44 1708 333800 info@sapphiregroup.com] but the HPD contract was handled by their Trumbull, Connecticut office. [Connecticut Post]

Project Manager Chris Gadsby (the one wearing glasses) who is working with Naeem Ullah to manage the FoxFlight project. Beside him stands Officer Richard Justice of Houston Police Helicopter Patrol.



Ed: Although applied to the aviation unit this was not primarily an aerospace product. A City Hall (Strategic Purchasing Department) project to let a contract across the board it includes the upgrade and rewriting of the computer software used to track flight activities, including maintenance, rather than use aviation specific products already on the market. It was based on the aviation unit specification but other than that it was pretty much 'hands-off,' although Sapphire did visit the unit. Contrary to the news story Houston's air unit actually first computerised records in 1986, with the last upgrade taking place in 1993).

UAE

DUBAI: Dubai Police's air wing has increased its helicopter routes to eight.

Colonel Pilot Anas Al Matroushi, Director of Dubai Police's Air Wing Department, said the helicopter routes have been increased from six to cover the new land and sea areas, like Dubai bypass, Dubailand and the new islands projects.

He said the department carried out 81 air missions last month, of which 33 were air missions, 19 were transferring accident victims and four were land search missions. The department also carried out two air shooting missions as well as 15 official missions.

The helicopters cover large areas in Dubai on their daily missions and carry out security and emergency missions, monitor roads and beaches and inform the Control and Command Department on important observations. [Gulf News]



October 2006



AR AMBULANCE

AUSTRALIA: The Westpac Life Saver Rescue Helicopter base at Lismore has flown its 5,000th mission.

A single vehicle motor accident had just occurred on the Woodford Dale Road (near Lawrence Ferry), and the helicopter was tasked to retrieve a patient from the accident scene. The service commenced in Ballina in 1982, with a single piston-engine Hillier 12E helicopter. Since that time the aero-medical emergency rescue service has developed into a so-

phisticated operation using Dauphin helicopters providing a 24/7 response capability.

AUSTRIA

The 500th EC135 helicopter built at Eurocopter's German production facility in Donauwörth was delivered to the Austrian Motorist and Touring Club (ÖAMTC) at the end of August. This is the 25th EC135 for ÖAMTC, one of the largest private operators of this helicopter type in the world.

This delivery also marked the delivery of the 2,000th Turbomeca Arrius engine. This 25th helicopter is the first of five aircraft destined to carry out EMS missions in Hungary. Three EC 135 are already delivered, and two more will come in 2007.

To date, the ÖAMTC has clocked up 60,000 flight hours for its entire fleet, which is deployed over 16 bases in the summer and 22 in the winter. Since the beginning, 150,000 missions have been accomplished. These missions, EMS type, have very important operational constraints, as the helicopters availability or the high mountain environment. The fleet is 100% powered by Turbomeca engines – all of them having commonality in the 2B engine.

First manufactured in 1981, the Arrius family has logged a total of more than two million flight hours from 430 customers in 60 different countries. 25 years after the creation of this engine family, new variants are under development and production and sales are constantly increasing.

In Spain the INAER Group has chosen the Turbomeca Arrius 2B2 as the engine of choice on its upcoming purchase of four EC 135 helicopters for EMS missions [see last month].

BELIZE

US based Astrum Helicopters are to introduce helicopter services in Belize using Bell 206



helicopters, the first commercial helicopter company to offer services in Belize. Astrum are offering helicopter tours and charters but will also offer specialist services including SAR medevac and evacuation services.

ITALY

The Caiolo-Sondrio HEMS base (the oldest HEMS base in Italy) has recently changed helicopter operator. Previously the service was operated by Elilario using a AB-412 [see story by Dino Marcellino in the March 2005 issue of PAN] but now it has transferred to Elilombardia and they have introduced the Agusta-Westland AW-139 as the second HEMS base to introduce the new model [the first being Piedmont during Olympic Winter Games, also reported in PAN].

The Caiolo HEMS fly an annual average of 550 flying hours, and with new helicopter they are planning to evaluate the possibility of night operations. [DM]



Air Green has added a second AW-139 to its fleet. The first I-ASAR entered in service just in time for the Olympic Winter Games last January 2006 providing the HEMS service in mountain resorts deployed in Aosta valley to cover civil protection and HEMS service locally. The new machine I-GREE appear for the first time to the Gran Prix F1 Monza in identical paint scheme. [DM]

Air Green AW139 first appearance at the Formula 1 Monza Grand Prix

On September 17 Elisoccorso Como [Como HEMS and SAR] in the Lombardia Region, north of Milan celebrate its 20th year of operations. The milestone coincided with the introduction in service of a new AW-139 helicopter operated by Elilario.

Elisoccorso Como flew their first mission in an Agusta A109 on August 2, 1986 and have built up more than 7,000 flight-hours and 13,000 rescue missions using a variety of aircraft including an AB212 and the AB412 (I-MAGM) now replaced by the new AW-139 (I-ROCS).

The new helicopter will allow night missions and increase safety standards. Elisoccorso Como claim that they are the only HEMS-SAR unit in Italy not to suffer a significant accident over a 20 year period.

The celebratory events resulted in the presence of others organisations operating in the Lombardia Region for Civil Protection, the Guardia di Finanza brought along an AB412 from Venegono, and from Milan-Malpensa the Vigili del Fuoco brought an A109 Power and the police an AB206. Also attending were a Canadair CL412, a new AgustaWestland Grand, and others. [DM]



SWITZERLAND

Turning around what appeared to be a coup for Eurocopter in selling the EC145 to Swiss Air-Rescue, REGA, in replacement for the existing fleet of A109K2s; AgustaWestland has now been able to announce the sale of eight A109 Grand helicopters to them.

To equip the REGA mountain rescue bases located throughout Switzerland the Grand has been selected as the best helicopter capable of carrying out high altitude and high temperature rescue missions, following a rigorous evaluation process including test flight activities undertaken by REGA experts. The Grand will also carry out missions such as the rapid transfer of severe injured patients from hospital to hospital providing them with specialised medical treatment in flight.

The selection of the Grand fits into the legacy established in 1989 when REGA selected the model A109K2 to perform its demanding missions. REGA is acknowledge as one of the most experienced air-rescue organisation worldwide and its choice provides further testimony of the continued attractiveness of the 109's performance, versatility and competitiveness in the SAR/EMS role. [AW]

UNITED KINGDOM

AACT: Nine months after it was the launched, the Association of Air Ambulance Charities is now ready to flex its muscles and make its mark in the world of pre-hospital critical care.

Representing all 16 of the country's independent air ambulance charities, this self financing Association is committed to seeing the role of Air Ambulances continue to grow as more and more District General Hospitals either close or down-grade A & E services.

Speaking on behalf of the AAAC, Chairman David Philpott said:

'There will be an inevitable need for patients to be airlifted in future, since the distances to specialist hospitals and emergency departments will certainly be greater, much too far for land ambulances to cover efficiently. Add to this the over- demand in some Intensive Care Units, and suddenly air ambulances become indispensable for the rapid movement of critically ill patients. As such, it's about time that we were taken more seriously"

Air Ambulances were once the periphery of health



care provision, funded by the few odd coppers people dropped into collection tins. Now the charities generate a staggering £25M a year in donations. Since the first air ambulance was launched in Cornwall in the late 1980's over 18,000 missions have been flown in England and Wales – with an emergency air ambulance taking off on average every 10 minutes.

The Royal College of Surgeons and The British Orthopaedic Association calculated 6 years ago that each road fatality in the UK cost the nation almost £1M, in terms of direct medical expenditure, loss of economic activity and the human aspects of grief. The same report, "Better Care for the Severely Injured" estimates that there are as many as 770 preventable deaths in the UK each year, at a cost to the country of £770M. Such a sum could build at least five hospitals.

The sixteen charities receive no NHS or National lottery funding and depend entirely on the generosity of the public. Described by many as the Lifeboats of the 21st Century, most of the charities prefer this arms-length relationship with government because it means they can champion the patients cause, without fear of recrimination. <u>www.airambulancecharities.co.uk</u>

EAST ANGLIA: The East Anglian Air Ambulance operated BK117 helicopter has relocated to a military base, RAF Honington in Suffolk. The airbase ceased flying operations in 1994 and it has since become the HQs for the RAF Regiment.

The move has placed the emergency helicopter and its crew in a more central position for Norfolk, Suffolk, and Cambridgeshire. The primary base over the last 12 years Thetford has now closed.

Plans to move the headquarters and maintenance operations from their current location at Norwich International airport are being considered.

The air ambulance, a back-up BO105DBS5 helicopter, and maintenance crew currently exist with Sterling Aviation at Norwich airport. The aircraft overnights there and then moves to Honington for a 10-hour daily shift. [EAAA]

ESSEX: An estimated 4,000 bikers took part in the Counties biggest motorcycle run organised by the Essex Air Ambulance to raise funds for the emergency helicopter.

Sponsored by ProBike Training the run has smashed the amount raised last year by more than £5,000 as early indications show that in all the event raised £25,000. Record numbers attended both the run which started at Ford Dunton Technical Centre (Basildon) and the Harwich Family Festival on Sunday.

Essex glamour model, Jodie Marsh, a keen biker and supporter of the Essex Air Ambulance took part and led the bikers out of the Ford site. Once at Harwich she was kept busy signing autographs and posing for photographs and of course she made time to introduce her brothers band 'The Jordan Marsh Sections' onto the main stage. She also signed a Harley Davidson leather jacket which was donated and then auctioned at the end of day raising another £240 for the charity!

KENT/SURREY/SUSSEX:

Following a successful fundraising appeal by the Kent Air Ambulance Trust in the neighbouring counties of Surrey and Sussex, the charity is now ready to start the process for procuring its second helicopter.



The Management Team is inviting Expressions of Interest from capable HEMS Operators for the provision of a New Generation helicopter and associated package of maintenance and pilotage. The successful provider will need to operate under their own AOC and will supply a suitable aircraft fully equipped for HEMS operations. The projected start date is 1st April 2007 or as soon thereafter as possible. It is planned to

The projected start date is 1st April 2007 or as soon thereafter as possible. It is planned to locate the aircraft at Dunsfold in Surrey in the short term and subsequently at a purpose built airbase on a site to be agreed on the Surrey/West Sussex border. KAAT believe it unlikely that a new airframe will be available at such short notice.

The charity expects the new agreement to run until December 20, 2009 at which time their current contract on an existing MD900 G-KAAT is due for renewal or termination. In 2009 KAAT will be able to negotiate a single new contract for the two aircraft operation. [KAAT]

SCOTLAND: It is being suggested that the local council has wasted £2M on a new airstrip that has proved too short for air ambulances to land. The Scottish Air Ambulance service used Colonsay's grass runway for 50 years without problems but Argyll and Bute Council decided to install a concrete runway to facilitate the operation of a feeder liner service with the mainland. The chosen length turned out to be too short for the new fixed-wing planes being introduced by the Air Ambulance service.

Locals are worried that the new Beech King Air planes, which were announced in January 2005, will not be able to come to Colonsay. They require a runway of about 2,600 feet but the new runway is only about 1,600 feet long.

The Air Ambulance service has stated that the service would be unaffected as they will use the helicopter option if the runway facilities are inadequate. [Record]

WALES: The summer season mid-Wales air ambulance was planned to be a high season operation lasting just three months. The relatively high use of the helicopter - it carried out 100 missions over the first two months – has led to an extension of the service until the end of October, as additional funds have become available.

The helicopter, which flies mainly from Welshpool Airport but can also be based in Newtown, has been a remarkable success in the three months that it has been stationed in Powys. It has already flown more than 130 missions.

YORKSHIRE: Safety fears have led to the closure of Bradford Royal Infirmary's helicopter landing pad; as a result patients are being transferred to other hospitals in the region. The enforcement of new CAA rules and regulations has forced bosses at the air ambulance to take the decision reluctantly. Yorkshire Air Ambulance has stated that it was a 'difficult decision' but in fact there was no decision except perhaps on the exact date of introduction. Bradford's pad has always been a very tight congested site surrounded on three sides by high buildings. The helipad was introduced in May 2004 after a previous landing site was lost to building works. [Newsquest]

On a far more positive note, last month the Yorkshire Air Ambulance received a massive 'one time' boost to its new aircraft fund by undertaking a single high profile patient pick-up. The existing Explorer was called in to whisk popular BBC television presenter called Richard Hammond hospital following a near fatal high speed dragster crash. Grateful fans of the popular motoring correspondent quickly raised large sums of money for the object of his salvation. This was further boosted when the family asked that fans sending in flowers and other gifts redirect their efforts into cash for the helicopter. By the end of last month around $\pounds140,000$ (\$252,000) had rolled in – most of it donated over the first week. Although some of the gloss was taken off the windfall by a hoaxer promising an illusory $\pounds50,000$ the boost to finances was real enough.

Hammond is now already much improved but the money continues to flow into the coffers of a number of air ambulance charities as a direct result of the publicity surrounding the accident.







SPAIN

The General Confederation of Workers has demanded more security for those dedicated to put out fires. They have highlighted the need to address the need for enhanced safety measures associated with the transportation of fire workers and have specifically requested that no aircraft used are over 20 years old.

The moves are in response to the number of accidents suffered in the fire fighting transportation role in Spain.

UNITED STATES

CALIFORNIA: Keystone Helicopter has announced the completion and delivery of two new, state-of-the-art, multi-mission Bell 412-EP helicopters for the Los Angeles County Fire Department's Air Operations Section.

CALIFORNIA: The San Diego Fire-Rescue Department recently acquired an AeroComputers UltiChart LE-5000 tactical mapping computer system, a major enhancement to the department's arsenal of fire fighting equipment. In addition, the department also purchased the X-cubed digital video recorder (DVR).

The new equipment will allow the department's Bell 212 helicopters to assess the extent of fires from the air in real time, affording quicker deployment of ground resources.

AeroComputers, Inc., based in Oxnard, California, has been designing, building and marketing computer systems that manage tactical operations for airborne applications since 1993. Currently employed by over 100 law enforcement, fire and other public safety agencies worldwide. For more information about AeroComputers, please visit <u>www.aerocomputers.com</u>.

FOREST SERVICE: NASA and the US Forest Service are testing space agencydeveloped technologies to improve wildfire imaging and mapping capabilities.

From the end of August until September 19, NASA performed flight tests of its unmanned, remotely piloted aircraft. These tests were designed to demonstrate the mobility, imaging and real-time communications capabilities of NASA's unmanned aerial systems. Results of the tests will also be used to validate data from NASA's Aqua satellite.

An Altair unmanned aerial system flew a series of missions over the Western United States. The system is built and operated by General Atomics Aeronautical Systems Inc., San Diego. The Altair will collect detailed thermal-infrared imagery of wildfires. These tests will demonstrate the ability of unmanned aerial systems to continuously collect data for 20 to 24 hours.

The Altair is commanded and controlled through satellite communications. The satellite link will allow real-time data transfer of fire imagery to virtually anywhere on Earth. Mission data will be sent from the unmanned aerial system to the National Interagency Fire Center in Boise, Idaho, and then distributed immediately to deployed fire fighters.

A NASA sensor system will fly on the Altair for the first time. This sensor was built to observe fires and other high-temperature sources. It can discriminate temperature differences from less than one-half to approximately 1000 degrees Fahrenheit. These temperaturediscrimination capabilities are important to improving fire mapping.

Another new technology application being tested during the flights is the Collaborative Decision Environment, originally developed by NASA for the Mars Exploration Rover. It is an interactive tool that will allow sharing vast amounts of mission information during flights. The multitude of tools this technology provides can be shared and visualized by members of the mission team for effective planning and acquisition of imagery over critical fire events.



SEARCH AND RESCUE

NIGERIA: AgustaWestland has announced the sale of four AW139 helicopters configured for corporate transport and Search and Rescue (SAR) missions to the Nigerian Government. The helicopters will be operated by the Nigerian State House, the Government of River States and the Nigerian Navy. This contract brings the number of firm orders for the AW139 to almost 200, making it the best selling medium twin helicopter today.

PACIFIC: Chinese navy vessels, the destroyer Qingdao and the refuelling tanker Hongzehu conducted military SAR drills with the US navy on September 18 before the Chinese ships docked in San Diego.

The Chinese naval delegation finished its four-day visit to Pearl Harbor, Hawaii, on September 10, where they successful completed marine communication and mobile exercises with a US missile cruiser. They will now partake in offshore search and rescue drills. The exercises are part of a joint anti-terrorism operation.

Chinese navy ships visited San Diego for the first time in 1997. [People's Daily]

UNITED KINGDOM

COASTGUARD: Coastguard rescue helicopter `India Juliet' [Sikorsky S61N G-BDIJ] completed her four thousandth SAR flight last month.

The rescue of two canoeists took place in the central Solent after the canoeists were seen to be in difficulties from the shore by a member of the public earlier this afternoon. The alarm was raised by telephone to Solent Coastguard who sent the well known helicopter to the scene.

The helicopter arrived on scene within four minutes and winched the two teenage boys out of the water and transported them to the helicopter base where they were medically assessed and found to be fit. The boys were then handed into the care of the Police.

G-BDIJ is due to retire in 2007 when the Bristow contract expires; the replacement helicopter will be the lighter and faster AgustaWestland AW139 medium twin engine machine.

In the ongoing Lee-on-Solent pipe bomb saga the Maritime and Coastguard Agency [MCA] has been reassuring seafarers that it will be `business as usual during the forthcoming removal programme.

During the operation to remove the pipe bombs by Army bomb disposal experts, areas of Lee-on Solent will be evacuated to ensure a safety zone.

The Coastguard rescue helicopter India Juliet, its backup aircraft `Victor Alpha and the buildings housing the Solent Coastguard Maritime Rescue Coordination Centre (MRCC) and the Hillhead Coastguard Rescue Team base are normally based within that zone.

In a variation on last months information about a move to Fleetlands it now seems that G-BDIJ will relocate to join its fellow helicopter Whiskey Bravo at Portland near Weymouth. Coastguard Watch keeping staff working at Solent will relocate to Portland Coastguard Station and from there; they will coordinate SAR for the Solent district.

The MCA purchased part of Lee-on-Solent, the ex-HMS Daedalus site from Defence Estates in March 2006 to maintain an airfield locally for its SAR aircraft and with the intention of redeveloping part of it for a new helicopter facility.

The rest of the site was purchased by South East Development Agency (SEEDA). The continued existence of the WWII pipe bombs became known only after the purchase and during initial works on the site.



FLIR Systems, Inc. has received an order from the US Navy for long range multisensor imaging systems valued at \$12.9M. The system, known as High Performance Mobility FLIR, is based on the SeaFLIR(R) III imaging system and includes a laser rangefinder, a choice of mid or large format thermal imager, an image intensified TV and laser pointer coupled with navigational inputs to provide precise geo-locating capability.

The German Army's EC135 training helicopter fleet at the German Army Air Corps School in Bückeburg reached the 30,000-hour mark at the end of August 2006. The German Army has been operating 14 EC135 state-of-the-art training helicopters since 2000 and has a customer maintenance and service contract with **Eurocopter** Deutschland GmbH to ensure smooth operation. These helicopters are used for advanced flight training for all parts of the German military.

The Spanish Government has approved the acquisition of two more helicopters for **fishery** patrol operations.

After an intensive 4-month evaluation process, **FlyingTV** has been awarded a 3-year contract to provide the BBC with aerial filming services. In the first ever pan-BBC procurement for aerial work, FlyingTV's two dedicated tv helicopters have proved themselves to be capable of delivering the customers needs.

The Robinson R44 aircraft operated by the company [G-PIXX right] remain available to a range of customers including law enforcement agencies.



Dart Helicopter Services and its affiliated company, Apical Industries, have added yet another EASA approval to their list of certifications. The Tri-Bag Emergency Flotation System with optional Rafts has received EASA approval and is now available for European operators of Bell 412 models.

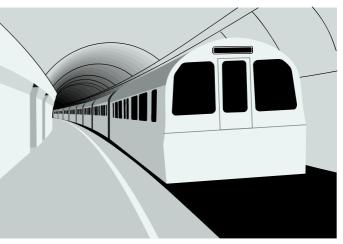


The Apical Industries Tri-Bag Emergency Float Systems optionally integrates two 10man reversible life rafts into the mid bag floats; an advantage over alternate systems that require storage of rafts within the cabin space.

UK based **Oxley Developments** [a company probably better known for its night vision aircraft lighting] has secured a production order to supply LED Displays for use in rail side electronics equipment on the London Underground transit system.

The high intensity LEDs have been customised for use in illuminated control boxes known as Mimic Panels which identify the schematic outline of the underground railway tracks.

The LEDs will be supplied to a contractor of the London Underground



who builds and maintains the railway tracks. The order follows an initial requirement for prototypes which successfully passed a qualification programme and have now been granted approved for manufacture into the panels.

October 2006

The single chip displays are a customised variant from the Oxley OXL/CLH mid-range of LEDs. They include many features of robust, quality, high specification military devices but these are lower in price rendering them cost effective for design into industrial applications.

Skyquest Aviation, the UK based supplier of specialist airborne mission equipment has been awarded a contract to supply multi-function mission displays and RDR1500 radar converters to the Swedish military.



Through their Scandinavian representative, Scandinavian Aerospace, Skyquest will supply multiple displays each capable of displaying several sources of video including FLIR and radar from the existing RDR1500 SAR radar.

Skyquest completed development of the RDR1500 radar signal converter in late 2005 and the system is now being retrofitted to several aircraft worldwide to replace the ageing CRT technology originally supplied with the radar. By using Skyquest's new converter technology users can now use the radar

display for additional functionality such as displaying FLIR or colour video images, moving map images and computer generated graphics.

Scandinavian Aerospace, based in Sweden, was appointed as Skyquest's official Scandinavian representative earlier in 2006 and has been successful in building business for Skyquest throughout the region.

Hans Sandstrom, founder of Scandinavian Aerospace, stated that 'there are many aircraft in the region needing retrofit of their airborne surveillance equipment in order to keep up with the latest technology' and went on to say that 'Skyquest are well placed to supply mission displays and aircraft video recorders as their range is now so comprehensive'.

Skyquest are also reporting the delivery of HD (High Definition) ready multi-function mission displays for aircraft.

Using the latest video processing technology, Skyquest have engineered multiple digital video inputs into several of their existing displays ranging from 10.4" through to 20.1". The larger displays now offer digital resolution of 1600 x 1200 pixels – essentially more than doubling the existing resolution of most mission displays.

Airborne observers will see increased levels of information in video images and if recorded to HD record-



ers images will offer far superior post-mission analysis – especially useful for recognizing individuals or analyzing crime scenes.

High Definition sensors are being introduced by most of the leading airborne sensor manufacturers and several UK police forces are paving the way opting for HD camera systems. This first delivery of HD ready displays is designed for use with FLIR Systems STAR SAFIRE HD multi-sensor camera system being installed on a UK MD900 Police Helicopter later this year. [Skyquest]

Ed: Industry sources suggest that the customer is probably Humberside for the mid-life upgrade of their aircraft G-HPOL. The delivery may well have been made but the timescale of the aircraft upgrade will undoubtedly mean that the in-service date will slip to 2007.

Acrohelipro Global Services Inc., a subsidiary of Vector Aerospace Corporation, officially opened a new satellite facility in Van Nuys California on September 7. With approvals now obtained from Rolls-Royce and the FAA, our new shop in Van Nuys will be the only factory and FAA authorized 250 engine support facility in Southern California. The facility can be found at Unit 7 – 7625 Hayvenhurst Avenue, Van Nuys, CA and contacted on +1 818 442-9908 or +1 604 276-7600

In the future the company is scheduled to open an additional facility in Dallas, Texas.

Acrohelipro Global Services Inc. provides full service support, including Maintenance, Logistics and Engineering services, for a wide variety of helicopter types. Vector Aerospace Corporation is an independent provider of aviation repairs and overhaul services. Through facilities in Canada, the United States and the United Kingdom it provides services to commercial and military customers for various types of gas turbine engines, components and helicopter airframes. It also provides information technology solutions to an international customer base. [Acro]

The UK representative for **L3 Wescam**, HeliMedia, have relocated their operation from a aged prefabricated facility on the airport at Staverton, Gloucestershire to the Aerotech Business Park a new build office and workshop overlooking the airport.

The new address for the company is Bamfurlong Lane, Cheltenham, Gloucestershire GL51 6TU. The telephone numbers remain unaltered as +44 1452 857155 fax 857115 www.helimedia.co.uk



A new Civil Protection organization has been launched in Turin, Italy. The Civil Air Guardian or **CIARG** is volunteer based and operates out of Turin-Aeritalia airport [LIMA] using civil pilots and crews.

The President of CIARG, Mr. Franco Crescini (a qualified pilot), has stated the goals of the organization are service to the community and State Civil Protection Organization (Police, Fire Brigade) drawing upon professionalism and knowledge of the local territory in Piedmont Region. Surveillance, reconnaissance or SAR during emergencies such as flooding or forest fire.

The new group is seeking sponsors to defray some of the costs currently born by individual members. [Dino Marcellino]

Tactical Aerospace Group announced the initiation of it's global UAV dealer network at the AUVSI show in Orlando, Florida last month.

The new dealers will be full service operations and are required to maintain demonstration aircraft, factory certified service and training, and a full spare parts inventory sufficient to support their customer base.

The key elements to supporting the TAG dealer network is a totally automated computer data system to manage maintenance, inventory, parts tracing, certifications, manufacturing

processes and notices for the entire global enterprise.

TAG will be announcing the first awards of dealership status in various countries over a period of months. The initial dealerships will likely be in the UK, Spain, Turkey, UAE, Australia, Argentina, Israel, Mexico and Brazil.

TAG believes this is an important step towards the distribution and support of commercial UAV operations. In addition to TAG aircraft, several other UAV systems and payload vendors have expressed interest in having their products marketed and supported through the same network and sales channels. [TAG]

It has not been a particularly uplifting month for the promotion of UAV's. Although the US Government confirmed that another Predator was being acquired to restart operations with the Customs and Border Patrol in Arizona another military example went 'missing' and the EADS programme lost a **Barracuda** test specimen from its programme; 'ditched' off the Spanish coast. [Media]

In late August the **INAER** group, European leader for on-shore helicopter operations, signed an agreement with Eurocopter España for the acquisition of nine helicopters, which will be integrated into the group's fleet between June 2007 and January 2009. The helicopters are destined for fire fighting, civil protection and emergency medical services (EMS).

Three different models of helicopter were selected by INAER - four EC135 and two EC145 to be used for EMS operations and which will be the first used for this type of mission in Spain, two AS350B3 a AS355NP the latest version of the twin.

Founded in 2003 from the merger of Grupo Helisureste and Helicsa Helicópteros, the IN-AER group is the European leader in on-shore helicopter operations. The group has 75 fixed annual operating bases, employing a total of 650 individuals, and with a turnover of approximately 130 million euros. The company has invested more than €120M in its fleet in the last five years. In addition to its Spanish operations, the INAER group develops operations in Italy, Portugal, North Africa and Chile.

MD Helicopters, Inc. (MDHI) has announced its fleet of NOTAR helicopters have clocked



more than 670,000 flight hours since the anti-torque technology was introduced in 1991. Currently the MD 520N®, MD 600N® and MD Explorer® helicopters utilise this technology.

MD has also announced it has reduced AOGs aircraft (Aircraft-On-Ground) by 90% since the company's July 2005 acquisition by Patriarch Partners, LLC.

MDHI has reached another significant milestone in that it now able to provide both routine and higher priority parts on the same day the order is received in over 80 percent of the cases. The company has also been able to fill 90 percent of customer AOG orders in less than 72 hours.

As previously predicted MD has made the move to shift production of its 500 and 600 airframes to its automotive plant outside Monterrey, Mexico. Manager George Bullis is quoted as stating the move was made after the existing manufacturer [Kaman] had declined to restart production. The factory currently has 42 employees but another 12 are expected to join them. The current workforce at the main MD plant in Mesa, AZ is said to number 325. [KOLDTV]

Chelton Flight Systems, a Cobham Avionics and Surveillance company has been chosen to supply the Electronic Flight Instrument System (EFIS) for MD Helicopters' light singles program.

From late next year MD light helicopters will be available from the factory with two Chelton EFIS displays, a solid-state strap-down gyro AHRS (Attitude/Heading Reference Systems), an air data computer and a GPS/WAAS (Wide Area Augmentation System) receiver. The system also features a synthetic vision primary flight display, dual integrated head-up FMS, Class-B or -A helicopter TAWS (Terrain Awareness and Warning System), a master caution

voice warning system, HITS (Highway-In-The-Sky navigation), a digital flight recorder, and Chelton's unique hover vector display. The system is NVG (Night Vision Goggle) friendly.

Chelton Flight Systems, in conjunction with Heritage Aviation in Grand Prairie Texas is beginning the STC process to certify Chelton EFIS retrofits on all existing MD light singles (MD 520N, MD 500E, MD 530F and the MD 600N). The twin-engine MD Explorer is currently flying with a four screen Chelton EFIS and MDHI will offer it in VFR or IFR kit configurations.

Concerns about the structural health of US public use firefighting aircraft have led to the development of a new certification programme to educate emergency response personnel about the critical factors involved in aircraft health management, as well as the decisionmaking processes and communication skills and technology required for coordination and cooperation during emergency response situations.

The **University of California**, Davis College of Engineering has devised an certificated programme designed to provide students with a firm foundation in aviation safety principles and practices underlying emergency response aviation. Through the values of leadership, teamwork and ethics students will learn current and emerging aviation safety management principles and technologies.

The benefits might be best appreciated by aviation safety officers, emergency services pilots, aviators involved in forest fire fighting, border patrol, medical-air transport, law enforcement and homeland security as well as aviation services contracting officers, specialists, consultants and those involved with the retrofitting, operation and maintenance of ageing aircraft

This is a seven-course certificate focussing on providing students with a firm foundation in aviation safety principles and practices underlying emergency response aviation. Students will also learn the practical application of advanced methods for inspection, maintenance, repair and overhaul of emergency response aircraft. Utilising leading technologies, participants will learn to extend the operational service life of aircraft as well as methods and techniques for successful emergency response situations.

UC Davis Extension draws on an Advisory Board including luminaries drawn from such as the Aerial Firefighting Association, US Forest Service and NASA Ames Research Center and instructors formerly in the USCG and law enforcement the programme encompasses 155 hours of training leading to Certification in Emergency Response Aviation Safety Management.

They are offering the five weeks of classes in two sessions, one of three weeks in the Fall (October 31 – November 17), and an 8-day session in the Winter Quarter (January 30 – February 8, 2007). Courses utilising case studies, videos, the aerial simulator, lecture and group exercises, and emphasise team work, leadership and ethics, can be taken in any sequence, and can be completed in up to five years.

Call Jim Smith on +1 530 754 6487 or cell +1 530 219 3938 or e-mail: jsmith@unexmail.ucdavis.edu for more details. www.extension.ucdavis.edu

The first flight of a high performance variant of the **AgustaWestland** EH101 fitted with new technology British Experimental Rotor Programme (BERP) IV main rotor blades, more powerful CT7-8E engines and a new integrated cockpit display system took place at AgustaWestland's Yeovil facility last month.

The event brings together the technology that will give the next variants of the EH101 even greater mission performance. The additional capability these improvements will bring, especially increased payload in demanding hot and high environments, will be of great benefit to our customers who are experiencing ever increasing operational demands.

Bell Helicopter have issued a statement apparently distancing themselves from the FAA issued Supplemental Type Certificate [STC] to Boundary Layer Research [BLR] permitting the installation of tail boom strakes on the Bell 206.

Bell state they have no knowledge regarding the designing and testing of these strakes but they are now stating that the monocoque tail boom structure employed on the 206A/B and 206L series helicopters was not engineered to accommodate the attachment of 'extraneous'

items like these strakes, nor for the additional loads these strakes may impose on the structure.

Bell notes that since the aircraft was not designed for such a use, operation with these strakes is outside the operational flight envelope tested for and developed by Bell. As a result, there is, at least as to Bell, a lack of fatigue data, and maintenance or overhaul schedules for any mission other than that for which the aircraft was designed and delivered. Operating the aircraft with these strakes in place could result in unknown and undefined maintenance and inspection requirements and, additionally, render the procedures, retirement lives, etc., contained in the Bell manuals inapplicable.

Ed: The use of strakes to improve aerodynamics is not new either as a retrofit or on new airframes. Bell do not appear to have made an issue of earlier BLR efforts on its aircraft types. The difference may be that the earlier projects [each widely adopted] applied to models akin to the Huey [UH-1/205/215/412] that have a substantial tail boom structure. In contrast the tail boom of the 206 is a great deal smaller and it might be that the manufacturer is calling time on the potential for structural failure.

Air Methods Corporation [AMC] has signed a Memorandum of Understanding (MOU) with American Eurocopter to purchase ten AS350 B2/B3 "AStar" helicopters annually, on an indefinite basis. The AStar's will join the current fleet of approximately 200 rotary and fixedwing aircraft, which includes Eurocopter, Bell, MD and Sikorsky helicopters. AMC like the A-Star because of the open cabin, the economical cost of operation and commonality within the existing fleet.

EFW Inc. (EFW), an Elbit Systems of America company, has been awarded multiple contracts to supply the US Coast Guard (USCG) with an Aviator's Night Vision Imaging System/ Head Up Display, also known as ANVIS/HUD. The systems extend the border patrol, vessel identification and search and rescue capabilities of the USCG's HH-65 and HH-60J helicopters. These initial contracts are valued at \$815,000.

The ANVIS/HUD system provides a significant increase in situational awareness and safety by allowing the pilot to fly head out of the cockpit during night operations and by projecting critical flight information into the night vision goggles' view.

Polytech (<u>www.polytech.se</u>), a Cedip Infrared Systems company, has announced the PIXEL 275 II - a new high performance 4-axis gyrostabilised video system optimised for a wide range of airborne applications including electronic news gathering, documentation and mapping.

Equipped with a Sony DSR-PD170 video camera with 12x optical zoom the PIXEL 275 II delivers superb image quality making it ideal even for the most demanding applications.



The Federal Aviation Administration (FAA) has granted a Supplemental Type Certificate (STC) for the 10"Cockpit/IP[™] Flat Panel Display System in the Pilatus PC-12.

The Cockpit/IP Flat Panel Display System from **Innovative Solutions & Support**, Inc. Headquartered in Exton, PA., improves flight safety and security, streamlines vital in-flight information, and offers PC-12 pilots, passengers, and owners 'Part 25' performance capabilities at less than 'Part 23' costs. Installation of the 10" state-of-the-art displays is available through IS&S partners, Western Aircraft and Epps Aviation, who specialize in Pilatus aircraft avionics modifications and maintenance.

US aerial camera manufacturer **Cineflex** is embarking on a tour to show off its multi-sensor, high-definition, gyro-stabilised turret to law enforcement agencies and their completion centres in Italy, Spain and the UK. New business development director Andrew Healey says that, while the V-14 system is well known in the USA, where it flies for numerous TV stations and the Los Angeles PD, it has not yet figured on the radars of law enforcement deci-

sion-makers elsewhere in Europe.

"Cineflex cameras are known for delivering unprecedented image quality and stability within the European broadcast community," Healey told Police Aviation News, "but we know it will be a challenge to convince law enforcement officers that those benefits are worth putting their faith in a relatively unknown supplier.

"Although we deliver evidential-quality material from a smaller, lighter and more reliable package, we also know that product support is key. Having already appointed partners in several European states, we will be expanding these to establish service centres that can back-up our industry-leading warranty packages."

Just over a year ago, a helicopter carrying a Cineflex HD camera was the only broadcast aircraft allowed into the New Orleans area after Hurricane Katrina. Its images were seen around the world and its crew were publicly recognised for the service they provided. Its cameraman (and reserve LAPD flight observer) "JT" Alpaugh was recently appointed Law Enforcement VP and will accompany the UK leg of the tour.



Cineflex has also taken a stand at the London **Police Aviation Conference and Exhibition** in November. Contact Andy Healey on +441428 717722 or +447803 503606



10 August 2006 Beech King Air 200 N207LG. Air ambulance. Flight For Life Colorado based in Denver operated by Mayo Aviation. During taxi to runway for takeoff, the pilot noticed a sudden loss of braking action on the right side. Reverse prop thrust was used to slow the aircraft to an uneventful stop. Even though it rolled through the threshold lights at the end of the runway, not one was broken. Once the aircraft was shut down it was towed to the hangar for inspection.

After investigation, the same failure could not be reproduced. Two ideas have been generated to explain the loss of braking action on the right side:

1) The aircraft parking brake may not have been fully disengaged before taxi, resulting in a brake heating situation, primarily on the right side. When brakes were applied during taxi, the right side failed due to overheating.

2) Air conditioning for the King Air is supplied by the right hand engine. It's theorized that during the taxi, slightly more power was applied to the right engine to maintain minimum engine RPM in order to keep the air conditioner compressor engaged properly. The pilot may have unconsciously applied some slight right brake pressure to counter some of that additional thrust being generated on the right side, resulting in an overheated brake system. [Concern]

24 August 2006 Cessna Citation Bravo N10UH. Air ambulance. Critical Care Transport based at the University Hospital in Birmingham, Alabama by LifeGuard Transportation Serv. The aircraft suffered a bird strike on landing in Birmingham. Damage was found in the leading edge of wing [dented in with feathers and blood visible]. Out of service 4 days. [Concern]

27 August 2006 Eurocopter BK117-B1 N10UM. Air ambulance serving Staff for Life Helicopter Service in Columbia, Missouri provided by Air Methods Corporation. Operating at a scene located in a valley approximately four miles east of Ashland, MO. Wires were re-

ported on the sides of the LZ. On approach, the pilot was able to see wires but on departing the scene with the patient, at an altitude of approximately 60 feet, unseen wires were struck. Minimal damage was sustained to the aircraft. [Concern]

3 September 2006 Eurocopter BO105 N314MS. Air ambulance. Northwest MedStar at Spokane, Washington operated by Metro Aviation, Inc. Responding to a rural scene call, the initial landing zone (LZ) selection created an unacceptable dust hazard. The PIC requested the LZ be prepped by wetting down the LZ but the delay in accomplishing the requested wet down was determined to be unacceptable due to time on station constraints. The PIC sighted an open area adjacent to an old, unused logging road and radioed the EMS ground contact of his intent to land at the alternate site. The PIC performed a high reconnaissance and an initiated an approach to a high hover. A low-level reconnaissance was performed by the medical crew who provided hazard information to the PIC during the approach. The PIC landed the helicopter and felt what seemed to be the ground slope contacting the rear part of the skids. The PIC elected to relocate a few feet forward to a more level surface, which was populated with tall brush and grass. Post landing at the LZ failed to denote anything out of the ordinary. The patient was subsequently loaded and transported to the nearest hospital without incident. Post flight at the hospital revealed a puncture to the left rear bottom of the aircraft fuselage, just aft of the rear cross tube. Maintenance was contacted, who assessed the damage and the aircraft flown back to base. [Concern]

9 September 2006 Bell/Williams 205/UH-1 N458CC. Fire fighting provided by Evergreen Rotorcraft. The pilot made an emergency landing in the West Boulder River near Big Timber, Montana after the aircraft experienced engine problems whilst performing bucket work on a fire [FAA/Great Falls Tribune]

16 September 2006 Bell 222 N????. Air ambulance of Luke's One, Deluth, Minnessotta. Helicopter in flight suffered significant levels of vibration and landed in an open field. On investigation it was found that one rotor head damper weight was missing and that in departing from the rotor head it had caused significant damage to the rotor blades. [Concern]

21 September 2006 Helicopter. Air National Guard. The pilot and a Border Patrol agent passenger were slightly injured when the helicopter hit power lines and was forced to make an emergency landing east of Douglas, Arizona.

The Cochise County Sheriff's Department reported the helicopter burning when their units arrived on scene near State Route 80. The helicopter was operating as part of Operation Jump Start which provides observational aviation support to the Border Patrol in southern Arizona. [KVOA]

22 September 2006 Bell UH-1H. Colombia Police. Three police officers were killed when their helicopter crashed while providing armed cover for crop dusters on an anti-drug operation in southern Colombia. The helicopter was returning from a mission in Putumayo province when its engine failed just seven kilometers (4 miles) from the airport. [Media]

SAFETY

The National Transportation Safety Board recommends that the Federal Aviation Administration require operators of Cessna 206, 207, and 210 equipped with foam-filled elevator trailing edges and/or a foam-filled trim tab inspect those foam-filled components for corrosion, perform an elevator control surface balancing to ensure that the components are within the manufacturer's specified limits, and replace as necessary.

Military flight safety investigators are looking at human error as the likely cause of the fatal crash of a Cormorant search and rescue helicopter in waters off Nova Scotia in July.

An interim investigation report states that human factors will need further investigation, including the fact that the pilot at the controls was being trained when the helicopter noseddived into the ocean during a night exercise. At the time of the accident, the aircraft commander was seated in the jump seat behind the pilot.

PEOPLE

Retired Inspector **Randy Robert Hildebrandt** was killed (with two passengers) in a helicopter crash September 19, 2006 near Alice Arm north of Prince Rupert, British Columbia. He served from 1969 to 1996 in 'E' 'B' & 'HQ' retiring as OIC Helicopter Air Services for the RCMP and then became marketing manager for Bell Helicopters in Vancouver.

HAI is now accepting nominations for the **2006 Salute to Excellence Awards.** The Salute to Excellence Awards are for those individuals and organisations who have attained the highest achievements in the civil helicopter industry. HAI encourages both members and non-members to submit nominations for anyone they feel deserves honouring. HAI requires that nominees acknowledge in writing that they know they are being nominated, and if selected, they are willing to submit biographical information, and receive the award in person at the Salute to Excellence Awards banquet, held on March 2, 2007, in Orlando, Florida, during HELI-EXPO 2007. The deadline to send in nominations is October 3, 2006. For more information, visit www.rotor.com/salute.

Pratt & Whitney Canada Corp. (P&WC) announced the appointment of **John Saabas** as executive vice president and **Benoit Brossoit** as senior vice president, Service Centres and Operations, P&WC.

Rotorcraft industry veteran **David A. George** has joined Simplex Manufacturing as the company's director of Sales. Prior to joining Simplex in this newly created position, George served as vice president of rotorcraft at BLR Aerospace.

With a strong industry focus built over three decades, George has been active in the Helicopter Association International (HAI) and the American Helicopter Society (AHS), chairing and supporting various committees. He has served on the federal government's Interagency Committee for Aviation Policy (ICAP) and the committee responsible for aviation system planning in support of the Olympic Games in Atlanta, Georgia. He is a former senior Army Aviator with the US Army and a graduate of the Army Aviation Safety Center. He also holds Airline Transport and Instructor pilot ratings and has amassed more than 8,000 rotorcraft flight hours in 18 different models of aircraft. [Simplex]

LETTERS

Hello Bryn,,, just wanted to say how nice it was to see my old helicopter C-FMPG an AStarB3 based in Vancouver in the Sept PAN. The photo was taken at a mountain repeater site between Vancouver and Victoria, BC. As far as I know this was the first AStar B3 to be used as a police helicopter in the world. This aircraft and C-FMPN based in Kamloops, are sister ships and we started flying them back in 1998.

Not sure if you noticed, but someone had been at the pad and repainted it from a standard H pattern to a 70's peace sign. I had climbed part way up the tower to take the photos. Scott Healey

RCMP

AND...

The International Police Association [IPA] in the USA is publishing the diary of an air journey by two retired policemen from opposite sides of the Atlantic Ocean across part of the USA.

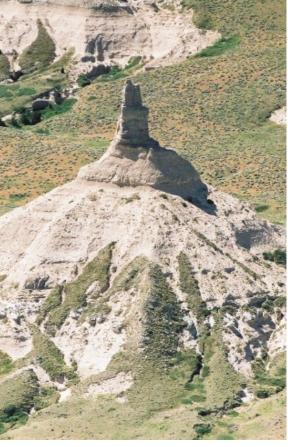
Derek Boorn a former colleague from the 1970s [Metropolitan Police 1958-85 then HM Coastguard 1989-98] flew with Charles (Bud) Lathrop who also has Coastguard connections with Derek travelling in the co-pilots seat of a small Cessna 172 aeroplane following the track of the Pioneers of the West in the 1840s.



It was during the coastguard employment that the pair became acquainted and discovered a mutual interest in Napoleonic history. During 2005 we had many conversations concerning the demise of the French and Spanish Fleets culminating in their total destruction at the Battle of Trafalgar. The discussion then moved on to the possible scenario of what would have happened to World history if the Royal Navy had been defeated. At this point Bud said that the Louisiana Purchase would probably never have taken place. This in turn led to the question that I had asked. 'What was the Louisiana Purchase?'

After expressing a particular interest in the California Trail of the 1840's, as this was a similar route followed by the 49'ers during the Gold Rush, the Pony Express and the first American Transcontinental Railway., Bud suggested they follow their trail, but instead of copying those early pioneers in slow covered wagons, behind smelly oxen at 2mph we would show due respect to mechanical progress and replicate the journey in his light aeroplane at slow speed and low altitude in relation to the ground that we would be flying over.

In June 2006 the adventure from Prescott to St. Joseph, Missouri (the start of the trail) to Sacramento, California (the end) and back to Prescott



took ten days and covered approximately 3000 nautical miles (3500 miles) and through Arizona, New Mexico, Texas, Kansas, Missouri, Nebraska, Oklahoma, Wyoming, Utah, Nevada and California.





NEW FACILITY IN THE NORTH WEST

The Fleetwood Offshore Survival Centre (FOSC) and EDM Limited held an open day event on Friday 8th September 2006, showcasing their new Helicopter Underwater Egress Trainer (HUET).

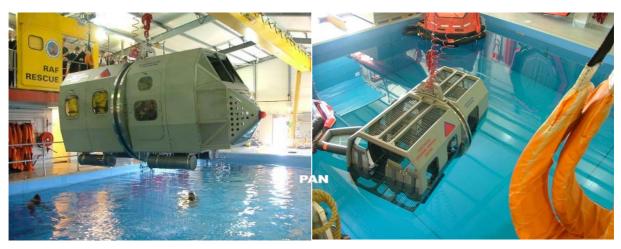
The recently completed HUET is housed within FOSC's state of the art 18m x16m x4m tank at their Nautical Campus on the outskirts of Fleetwood, Lancashire and was officially opened by local MP, Mrs Joan Humble. The training facility at FOSC offers the ideal environment for aircraft users to train for offshore survival situations and includes a wave machine capable of producing a metre swell wave of various patterns. Additionally, darkness and rainfall can be created to provide extreme abandonment conditions.

The HUET a new design specifically designed, certified and manufactured by Oldham based EDM Limited to train students on the methods of underwater escape when faced with water ditching from a rotary or fixed wing aircraft replaces an earlier less capable rig. The new trainer is designed to carry between two and ten personnel and the doors and windows can be interchanged to represent a wide range of aircraft. The seats are clamp fixed to the cabin floor, which allows them to be repositioned or removed to suit the training scenario. The addition of wing stubs on either side of the HUET also allows for exit over wing egress training – an opportunity already recently taken up by crew of the Nimrod MR aircraft. The unit is made using the most rigorous raw materials and manufacturing and design standards, is operated from a controllers console and has the capability to be inverted a full 180°.



The facility is open to such as medical, fire and police helicopter personnel, military users and SAR teams and the previous equipment featured in the training programme of a number of North West police air units.

Fleetwood Offshore Survival Centre is part of highly respected Blackpool and the Fylde College and possesses a comprehensively equipped training tank, a purpose built river launching facility as well as academic facilities encompassing fire fighting training and classroom learning. For further information on the product, EDM or FOSC, please call Paul Kain on +44 161 947 3500 or email on <u>pkain@edm.ltd.uk</u> www.blackpool.ac.uk/fosc



The EDM manufactured HUET at the pool facility of the Fleetwood Offshore Survival Centre.

NBAA: This month the 59th Annual Meeting of the NBAA will return to Orlando's Orange County Convention Center for three days of exhibits, networking and information sharing. The world's largest civil aviation trade show will get underway on October 17 with an Opening General Session hosted by NBAA President and CEO Ed Bolen. Highlights will include the Static Display Reception on October 17 at Orlando Executive Airport; NBAA Gala, a celebration of the business aviation industry on October 18; and Silent and Live Auctions benefiting NBAA Charities. More than 100 Informational Sessions, including Seminars and Maintenance & Operations Sessions, will be offered throughout the week. To register, make housing and travel plans, and review the program schedule, visit: http://www.nbaa.org/2006

Five weeks before the opening the exhibit floor was completely sold out, with close to 1,150 Exhibitors registered and 5,216 10-foot by 10-foot booth spaces sold. This year's event also will feature 11 fixed-wing aircraft and four helicopters at the Orange County Convention Center, the most aircraft ever shown on the exhibit floor. More than 100 additional business aircraft will be presented at the nearby Static Display on Orlando Executive Airport.

Dubai Helishow 2006: In two months time the helicopter industry will be looking towards this unique and exceptional event in the Middle East.

The biannual International Helicopter Technology & Operations Exhibition is all set to entice the Middle East with a formula designed to address the specific requirements from the civil, public, defence and paramilitary sectors. It will be held at East Hall, Dubai Airport Expo, from December 5th to 7th 2006.

Dubai Helishow is entirely focused on the helicopter industry and opens up lucrative business opportunities. The exhibition will include indoor exhibits, static craft display, and flight demonstrations. A large international audience from the Middle East, Arabian Gulf and across Europe and Asia including buyers/decision makers from government agencies/defense organisations, commercial customers, owners and users are expected to attend.

The maiden show, which was held in 2004, was an instant success with more than 2,500 industry visitors from around 20 different regions including global manufacturers visiting the show.

Along side the event, there will be a special one-day conference to be organised by Tangent Link. The conference will be designed to address the specific issues of the Middle East with speakers drawn from the international helicopter sector. The conference is expected to benefit the helicopter industry as well as the region as a whole since it will produce opinions and suggestions from experts on a variety of topics. Meanwhile, the exhibition will also provide a unique opportunity for delegates to see for themselves the latest products, technologies and services on offer.

Successfully positioning itself as the centre of aviation training in the Middle East, Emirates-CAE Flight Training (ECFT) has recently signed agreements with Dubai Air Wing and Elite Jets for type training on full-flight simulators at its Dubai-based facility.

The Air Ambulance Service of Abu Dhabi Police Air Wing, established in 1997, is a highly trained helicopter emergency medical service and rescue operation wing, which has seven Bell 412 helicopters and three Euro-copter BK 117's. By 2007, the fleet will have an additional 8 new AW139 helicopters.

UAE Air Force has recently ordered from AgustaWestland 8 AW139 medium-twin helicopters for about \$83M, and 20 AW139s from SEACOR Holdings. These are for SAR operations, and VIP transport.

Falcon Aviation Services of Abu Dhabi have signed a two year Search and Rescue (SAR) contract with the UAE Armed Forces. Falcon has selected Evergreen Helicopters, an experienced operator, as their subcontractor to support the SAR requirements. The program began in August, 2006.

For more details contact Ms. Julia Cuthbert, Mediac Communications & Exhibitions LLC – UK, +44 1293 823779, Fax: 825394 Cell: +44 7734 563324 E-mail: <u>cuthbert@mediaccom.com</u> www.mediaccom.com

OTHER EVENTS

- 10-12 October 2006 INTERGEO 2006 Munich, Germany <u>www.intergeo.de</u> In Hall 3 Booth C3.3058 Diamond Aiborne Sensing will be showing their DA42 MPP (Multi-Purpose Platform) specifically designed to carry airborne sensor equipment.
- 12-14 October 2006 NZAAA Conference. Millennium Hotel, Rotorua, New Zealand. Contact: Keith Mockett, AIA Head Office, Ph 0-4-472-2707. Fax 0-4-471-1314 Email: <u>keith.mockett@aia.org.nz</u>
- 14-15 October 2006. RotorFest 2006 Brandywine Municipal Airport, West Chester, PA. A new for 2006 event and a major new effort to promote the American helicopter industry, and highlight the capabilities and value of rotorcraft emergency response services in particular. <u>www.helicoptermuseum.org</u> <u>www.irotor.org</u>
- 14-18 October 2006 113th International Association of Chief of Police. Annual Conference: Law Enforcement Education and Technology Exposition Boston, MA. The IACP is the world's oldest and largest nonprofit membership organization of police executives, with over 19,000 members in over 100 different countries. The IACP Conference is a closed show which is open only to IACP members and their guests. Public Information IACP 800-THE-IACP ext. 209 (fax) 703-836-4543
- 17-19 October 2006 NBAA 59th Annual Meeting & Convention (NBAA2006) to be held in Orlando, Florida. As of late August 1,010 Exhibiting Companies have registered and 5,127 10-foot by 10-foot indoor booth spaces have been sold for the event, positioning this show to be NBAA's largest ever space-wise. The indoor booths will occupy nearly one million square feet of space in the North/South exhibit hall of the Orange County Convention Center, International Drive, Orlando, Florida. www.nbaa.org/2006
- 19 October 2006 5th Homeland Security Round Table, Salters' Hall, London Lord Toby Harris, Tarique Ghaffur QPM, Metropolitan Police, Andrew Trotter QPM, British Transport Police, Major General Tim Cross, MoD, Mr Richard Barnes AM, Chairman, 7 July Review Committee Report join expert panels on 'Challenges UK Would Face if Law, Order and Confidence Broke Down after a Particularly Serious Incident and 'How to Withstand Simultaneous Cyber and Kinetic Attacks' www.cityforum.co.uk
- 23-25 October, 2006 IDGA's 2006 Border Management Conference to Address Critical Border Security Issues at Ronald Reagan Building and International Trade Center in Washington, DC. The 2nd annual event addresses a wide scope of border security issues. For more information on speaking, attending or sponsoring the 2006 Border Management Summit contact Michael Gallo at <u>michael.gallo@idga.org</u> or visit <u>http://www.idga.org/</u>.
- 1-2 November 2006. Night Vision 2006, Olympia Conference Centre, London, UK. Shephard Conferences & Exhibitions rw@shephard.co.uk/www.shephard.co.uk/nightvision



With the elements of the industry repeatedly speculating about the progress of the return of the former London HEMS air ambulance to air ambulance service with Great North in Cumbria PDG Helicopters unexpectedly issued an image of the refurbished helicopter last month. The damaged tail is now repaired and most of the external work completed. It will enter service after the completion of the stretcher fit. [PDG]