# Police Aviation News

©Police Aviation Research

Number 144 April 2008

IPAR

## **SUSSEX POLICE** Step up for air ambulance funding **WALES AA** Decide it is to be three



A MITTER

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 **Main:** +44 1992 714162 **Cell:** +44 7778 296650 **Skype:** Bryn.Elliott Bryn Elliott **E-mail:** <u>editor@policeaviationnews.com</u>

Bob Crowe Digital Downlink L3 Wescam Innovative Downlink Solutions Power in a box Turning the blades Airborne Law Enforcement Association European Law Enforcement Association Sindacato Personale Aeronavigante Della Polizia www.bobcroweaircraft.com www.bms-inc.com www.wescam.com www.mrcsecurity.com www.powervamp.com www.powervamp.com www.turbomeca.com www.alea.org www.pacenet.info www.uppolizia.it



In a changing world last month's signing of an agreement between Sussex Police and the local air ambulance charity [KAAT] is a clear sign that some are embracing all means to ensure police air support remains viable.

Across the world there are a number of air operations that are providing a valuable public service but are poorly funded partly because those involved will not embrace all possible funding options. The new Sussex agreement potentially 'rescued' the police air operation from difficult times – and it is not the only south coast UK police air operation facing severe difficulties in the short term. Additional resources simply do not see the light of day because senior officers or politicians cannot get their heads around the principle that it is the funding that matters not necessarily getting your personal or department name up in lights.

Spreading costs between different funding bodies is the way forward. In the UK there is an identified desire – probably a need – for a larger police helicopter and a larger air ambulance for some operations and for an aerial fire craft but, like the new night operations EMS agreement in Sussex, no-one operation can provide a strong business case for a dedicated operation based on such a craft. You only need to look to the USA and Europe to see the fleets of larger craft including EC145/155 and Bell 412s they have parked up but available.

How often do we need to call on a fire-fighting helicopter? How often do the police actually need to insert large SWAT squads? The need is rare but it remains. So rather that talk about working in isolation about providing a regional police, regional ambulance and even starting a fire operation – each of which will need a pilot and crew that will largely be just sat around most of the time - why not start inserting larger machines into the infrastructure and make them available on a regional basis - on demand?

Bryn Elliott

Front cover image: Sikorsky S61N G-BDIJ bows out of SAR. The last appearance of the venerable S61 at the biannual UK version of the Shephard SAR Conference on the sea front at Bournemouth. The 25 years old Sikorsky flew in company with a lifeboat able to show a history stretching almost as far. The 47 feet long Tyne Class craft RNLB James Bibby 47-014 was previously at Barrow-in-Furness but has now travelled south to be in the Reserve Fleet at the RNLI HQ in Poole. [PAN]



Police Aviation News

April 2008

3

oolspool 29

Colspool 17



#### CANADA

**YORK REGIONAL:** On April 28-30 York Regional is to join with the Airborne Law Enforcement Association [ALEA] in running a Canadian Advanced Thermal Imagery Course. The event is being sponsored by FLIR Systems and hosted by York's Aviation Section at the Seneca King Residence & Conference Center, King City, Ontario, Canada www.residenceconferencecentre.com

The training session will cost ALEA Members US\$300 and for non-members will be charged \$375. The course is designed and presented by airborne thermal imagery experts, offering an in-depth study of thermal imagery use in the areas of tactics and technology. Police pilot Kevin Means, San Diego Police Department in California is the lead instructor.

This is an advanced course that covers everything the TFO and pilot need to know including technology, theory, tactics and officer safety. This special Canadian version has been modified slightly to address differences between Canadian and US laws relating to thermal imagery use and other legal issues. Maximum enrolment is 60. On-line registration is available for this course via the ALEA web site, <u>www.alea.org</u> under Events.

1 Coolspool 260

coolspool 260

#### **The latest 28.5 volt GPU range** Faster, cooler starts. Perfect for shaft or free

turbines. Essential for FADEC aircraft.

NEW Mini 17 A/Hr portable GPU. Built-in charger, digital voltmeter, protective padded jacket.

Massive performance, true portability, amazingly low weight.

Models from Mini 17 A/Hr to 260 A/Hr Ramp Cart

## *CALL NOW!* +**44 (0)1934 643000**

email: info@powervamp.com

Powervamp Ltd, Weston-Super-Mare, England WWW.powervamp.com

#### SPAIN

**DRUG BUST:** In Spain early last month agents of the National Police, in concert with the Civil Guard and Customs intercepted and arrested drug runners operating a former UK police aircraft. The group were flying hashish from Morocco into Spain and landed bales of the drug in the neighbourhood of Consuegra south east of Toledo and some 300km north of the Mediterranean coast.

Police held eight Spanish people, 1,300 kilograms of high-quality hashish, the aircraft, four GPS, five vehicles and some other equipment in Andalusia.

The law enforcement operation began after information was received by the Police Judiciaria in Portugal that in January a light aircraft had been intercepted in the locality of Amareleja, Portugal, possibly utilised for the traffic of narcotics. Two Spaniards involved in that incident were put under Portuguese police investigation and linked to the acquisition of a Britten Norman Islander aircraft recently acquired from England. The aircraft retained its British registration and markings that set it aside as being used by the United Kingdom police services. The Islander is believed to be a 1982 Lycoming powered BN2B-21 G-PASV, and was the last Islander operated by the commercial Police Aviation Services at Staverton, Gloucestershire. In the past it had seen use with a range of police operators as a spare airframe and had flown for a number of other British law enforcement agencies but it was not fully converted to the police role.

It seems the smugglers chose the Islander for its ability to fly a reasonable distance into the interior of Spain rather than just hop across the sea from Morocco. Operations were set up in the interior of Spain at Almansa (Albacete) with a rented safe house base in Tomelloso (Real City).

At five o'clock on Saturday, March 1, the Islander left the airfield of Almansa headed south with a police helicopter trailing it at a distance. A Guardia Civile helicopter based on the coast at Malaga and a Coast Guard (DAVA) helicopter based at Algeciras in Andalusia moved in to assist.

The Islander left Spain by the coast of Murcia and returned to Spanish territory, near the coast at Almería, some 9 hours later. It was then followed back to the vicinity of Toledo and landed in a recently tilled field at the remote Consuegra where other members of the group joined it to unload the contraband.



The Coast Guard helicopter swooped in to intercept the aircraft and four vehicles during the load transfer at which point the traffickers all made to leave. The Islander was unable to leave as one of its wheels had sunk into the soft land. The Spanish pilot was arrested.

An Audi off road vehicle was found 20km away hidden in a road tunnel on the route to Toledo with the three bales of drugs in its interior. Two Spanish occupants had abandoned it but were later found in the nearby hills. Another vehicle managed to travel around 40km towards Cordoba before it Spanish occupant was arrested. A third car, a Seat Leon, was located arriving at the safe house in Tomelloso. Its occupant was also taken into custody.

The safe house and a hotel in Almansa yielded up further arrests – again they were all identified as Spanish nationals. [Europa]

Ed: Because they sold G-PASV to a Spanish Company before Christmas and the aircraft left Police Aviation Services Ltd at Staverton in the hands of that customer they are unable to confirm that the aircraft is one and the same.

The aircraft was PAS' own aircraft previously flown as a relief aircraft for several UK Police customers over the years it was never, as suggested in the original story, owned by the UK Police. PAS elected to put the aircraft on the market last year due to declining demand for fixed wing police work.

The sale was carried out in an entirely normal manner following a survey, some negotiation and contract signature. Following the normal acceptance process and transfer of funds, the aircraft was collected and flown away. All dealings took place at Staverton and directly through a representative acting on behalf of the purchaser, who was ostensibly purchasing the aircraft for private use.

Given the relatively few number of Islanders sold to Spain from the UK which have been involved in police work, it would not surprise PAS if the aircraft in the news is the same one. They have only been approached on this by the media.

#### **TRINIDAD & TOBAGO**

Answering to the furore the recent despatch of a helicopter to Guyana the Government have been defending themselves after calls to local criminal activities went unanswered. It seems that the BO105 sent to Guyana was rented commercially from National Helicopter Services Ltd (NHSL) on a short-term lease.

NHSL was formerly the National Security Ministry's Air Division (Helicopter Unit) and is a joint venture between the Government, which owns 82 per cent of the company, and the National Gas Company of Trinidad and Tobago, which owns 18 per cent. It primarily provides helicopter services to the oil and gas sector but also provides them to the Government in emergency or disaster situations.

#### SWITZERLAND

The first Eurocopter EC635 destined for the Swiss Air Force was handed over to the Swiss federal procurement, technology and real estate centre *armasuisse* at the Eurocopter factory in Donauwörth last month. This first delivery took place two weeks prior to the contractually agreed deadline. The contract, signed in April 2006, provides for the delivery of a total of 18 EC635 transport and training helicopters, plus two EC135s for the army's air transport service. The EC635/EC135s will replace the Swiss air force's Alouette III helicopters.

Delivery of all helicopters will be completed by early 2010. The first four aircraft will be manufactured at the Donauwörth Eurocopter plant, while the final assembly of the remaining 16 EC635s will be performed by RUAG Aerospace in Alpnach, Switzerland, and the helicopters will be delivered from there. RUAG will be responsible for maintenance levels I and D of the Swiss air force's EC635s/135s. The EC635, which was certified in 2001, is the military version of the EC135.

Ed: Not having their own air support resources, the police in Switzerland currently use the Alouette III fleet with temporary police marks. It can be expected that police operation will transfer to the new type by 2010.





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

#### UNITED KINGDOM

**METROPOLITAN [LONDON]:** The three Eurocopter AS355N helicopters formerly operated by the police in London have now been sold to a new operator in France. The Buyer is Heli Challenge <u>www.heli-chalenge.com</u>. The sale was arranged through Regourd Aviation as exclusive broker.

**NORTH EAST:** Getting the North East Air support Unit into the programme to replace their 10,000 hour EC135T1 'Classic' continues to be on hold as meetings to overcome differences of opinion on the subject fail to get even started early last month.

Cleveland Police Authority argued that plans to take a police air support unit out of operation and run with just a single helicopter based at Newcastle Airport would have a detrimental effect across the Tees Valley.

Cleveland bosses met with officials from the Northumbria and Durham forces but the meeting was abandoned following a disagreement over whether or not the outcome of the discussions should remain confidential. Representatives from the Northumbria Force and Authority felt that any decision over options for the future should be kept confidential. Cleveland did not. [Hartlepool Mail]

**SUSSEX:** Sussex Police has entered into an agreement with the Kent Surrey and Sussex Air Ambulance to provide all three areas with a measure of night HEMS through to around 1 -30am daily.

Although they have long held a desire to operate in the dark hours air ambulances across the UK are primarily a daylight VFR resource and the new agreement goes some way towards breaking out of that restriction.

This unique collaboration between Kent, Surrey & Sussex Air Ambulance, Sussex Police



and South East Coast Ambulance Service NHS Trust means that from April 1 the Sussex Police MD900 Explorer helicopter 'Hotel 900' will undertake operations outside its own county more often and enhance the health care capabilities of air ambulances in the south east.

For all the right reasons the police air operation based at Shoreham Airport has been weak. From the start of air operations the Sussex locality has been seen as relatively crime free and the air operation reflected that fact in undertaking a dual air ambulance role to fill out its operational usefulness. The crew complement includes pilot, police observer and health service funded paramedic. The air ambulance element did a tiny amount of fund raising on its own behalf but it was never in the same league as that now performed by any of the dedicated charities.

There was considerable consternation when the Kent Air Ambulance Trust [KAAT] set up a rival operation in the county and added Surrey and Sussex to its area. After only a short while the fears were allayed and the current agreement to place the police Explorer within the air ambulances resources is the outcome. KAAT will inject £250,000 into the Shoreham operation and will have three aircraft well spaced out within its sphere of interest.

Based on past experience KAAT do not expect the night operations tasking to the police aircraft to be large but it is expected to see growth as everyone gets used to the resource and will in time see a doctor being carried on the police aircraft.

Assistant Chief Constable Jeremy Paine, said, 'The successful partnership we have enjoyed with South East coast ambulance service over a number of years means that we are happy to extend our involvement in the life saving work that this collaboration supports.

'This collaboration allows us to invest further in our helicopter so it can support future police operations in Sussex, as well as providing night time air cover in a medical emergency.'

David Philpott, chief executive of KAAT and the Chairman of the Association of Air Ambulance Charities said, 'We would like to see a growing night time and specialist operations capability [organ and paediatric transfer] within the air ambulance community but at present there is insufficient demand for dedicated aircraft. This is one stage in a learning curve to expand our services and support the police operation at the same time.'

Assistant Chief Constable Jeremy Paine, speaks with a reporter as TV cameras take in the scene





#### **UNITED STATES**

#### **FEDERAL**:

The US Coast Guard accepted delivery of its first upgraded Lockheed Martin HC-130J long range surveillance maritime patrol aircraft at Greenville, South Carolina on February 29.

The new HC-130J model will greatly enhance the ability of the USCG to perform its missions. Two essential features of the new modification are the nose-mounted FLIR/EO sensor, and belly-mounted multi-mode radar (MMR). The 360-degree belly MMR is the first of its kind on a HC-130 aircraft. The HC-130J mission system is derived from the mission pallet developed for the Coast Guard's new HC-144A Ocean Sentry (EADS Casa CN-235)

During one of the aircraft's test flights the test team illustrated the interoperability of its features by selecting an automatic identification system (AIS) target on the mission system operator display that was approximately 22 miles from the aircraft. They then used the EO/IR sensor to immediately lock on the target. The EO/IR system maintained a lock on the target until the aircraft was close enough to make a positive identification.

The Coast Guard is purchasing a total of six new fully upgraded HC-130J aircraft.

Meanwhile the USCG is improving the condition and capability of 16 existing HC-130H aircraft. The prototype of a new Selex 7500 Sea Spray multi-mode radar is being installed. The new radar promises to be more reliable and capable than the existing APS-137 system. The aircraft will also receive new DF-430 direction-finding radio equipment using the international standard 406MHz distress beacon technology. Later projects will include upgrades to the aircraft avionics and cockpit display suites as well as structural enhancements to extend the operational lives of the aircraft

#### AESA RADAR

## The new Selex radar on display at last month's SAR Conference.

200

© US Coast Guard

AESA tridar rystems provide: - Low cost of oversetable - 40% reduction in through - Over 2000m MTE - high availability - High Performance - Competitive price In the second second

Devide op 1944, 1945 Benkl legeling capabilities in legit energy beens y PA detected on feasing team mediad SELLA (of devinent Achieve Barel Barelening Labor (B), preaking of 1,57 per 5388 associating B. Bi, prof **ALABAMA:** The Department of Public Safety [the State Troopers] based in Montgomery in Alabama has acquired its first new aircraft; a Bell 407 N407SA c/n 53449 equipped for fire fighting and rescue roles.

Since it was set up over 30 years ago the operation has thrived operating a large fleet of Vietnam era Bell helicopters, alongside Beech and Cessna fixed wing. Over the years the ultra low cost operation has consumed significant numbers of OH58s and Huey's in providing a state wide resource flying some 2,500 hours annually undertaking marijuana eradication, narcotics surveillance, and traffic speed enforcement, missing person or manhunts, prisoner transports law enforcement related executive protection flights, photo, and investigative flights. The new delivery is a major departure in the development of the operation.

**CALIFORNIA:** The City of Fresno is seeking a pilot and offering a Salary in the range of \$4,732 - 5,753 month plus benefits. California's sixth largest city is currently recruiting to fill a Helicopter Pilot vacancy assigned to the Skywatch/Air Support Unit of the Police Department. The Helicopter Pilot is a non-sworn position assigned to the Air Support Unit in the Police Department. Incumbents operate a helicopter aircraft under Federal Aviation Administration (FAA) Regulations parts 61 and 91, and assist in the enforcement of laws, ordinances, and conducting police related missions on aerial patrol in the City of Fresno working variable shifts and hours including nights, weekends and holidays. Applicants require FAA Commercial Pilot Certificate with Rotor craft Rating and no limitations or waivers and minimum flight experience: 500 hours helicopter turbine time, 1,500 hours helicopter PIC time, 250 night hours (unaided) and 100 cross country hours. Preferred Experience: Experience with Fenestron tail rotor system and time in EC120/EC130/ Eurocopter. Possession and continued maintenance of a commercial Rotor craft pilot rating as issued by the Federal Aviation Administration at time of appointment. Possession and continued maintenance of a valid Class 2 Medical Certificate as issued by the Federal Aviation Administration at time of appointment with no limitations. Possession and maintenance of a valid California Driver's License is required at time of appointment. Must successfully complete a polygraph test, a psychological examination, a medical examination, and an extensive background investigation prior to appointment. Apply by April 20 http://www.ci.fresno.ca.us



The Merced County Sheriff's Office Aviation Unit operating around Los Banos is to add a 2005 Robinson R44 Raven to its operation shortly. Although the deal is still being negotiated the Board of Supervisors have given Sheriff Mark Pazin their blessing to buy the machine for about \$400,000. It will be equipped with a FLIR and searchlight.

Although Merced are known to have been using a helicopter operational as far back as 1973 this is their first purchase and it joins an existing fixed wing element set up just over 4 years ago by Deputy Sheriff Carlo De La Fuente.

The helicopter has around 500 hours of previous flight time on its engine. *The* sheriff's department has previously depended on helicopters from Stanislaus and Fresno counties, the California Highway Patrol and other agencies to help its operations.

The per-hour costs of operating the helicopter will be about \$94, which is about what it cost the sheriff's department to fly its fixed-wing airplanes. The helicopter will be based at Castle Airport. [Media]

**KENTUCKY:** It's the same old story of an existing air unit being threatened by a budgetary shortage and this time the victim is the Louisville Metro Police Department air support unit. The shortage of cash has led to one aircraft being advertised for sale – even while the other is itself grounded.

The current unit was founded in January 2003 by combining with Jefferson County PD only to find within months that the Jeffersons aircraft was lost in an accident and would not be replaced.

The one operating aircraft was expected to fly more even though it was made clear it would wear out sooner. Having fought off plans to buy Robinson the unit got an MD520N N510AP in early 2006 – only to have their existing MD520N N520AP crash in the May. That aircraft, 'Air 20', remains under repair in Arizona. It was the third training crash of a Louisville-area police helicopter since 2001.

Last month the Louisville Metro government put one of the two up for sale in the wake of a \$9M budget shortfall. The minimum asking price is \$600,000 and bids have exceeded that. The sale, being conducted at govdeals.com ends in early April.

Councillors asked the police to report on the decision along with how many days out of a year will it be down and unavailable for service. The reply given was four to five days out of every three months [20 days annually].

The media got some freedom of information figures that immediately sidelined that reply. The primary airframe 'Air 10' was found to have been down 37 days for scheduled maintenance and another 49 days for unscheduled maintenance in 2007. A total of 86 days, nearly a quarter of a year, out of service. Just to underline the bad move by the police involved, when the investigating media team went calling at the air unit 'Air 10' was again absent on maintenance and had been gone for a week and it was expected to be missing for a further week. [Wave 3]

#### THE NEXT GENERATION OF SECURITY ...

- Airborne Video Downlinks
- Central Command
- Disaster Recovery
- GPS Tracking
- Ground Surveillance
- Port & Border Patrol
- SATCOM



Visit our new web site at ... WWW.Mrcsecurity.com



Ed: The MD520N up for sale has already exceeded its reserve price of \$600.000 and can be expected to depart early in April. The 1993 McDonnell Douglas MD520N helicopter is N510AP LNO56. The MD is equipped with factory installed air conditioning system [not working] a Rolls Royce 250-C20R/2 engine with a registered 1812 hours of flying time, GARMIN GNS 430 (GPS), a GARMIN GTX327 (transponder), a KING KY 196 (communications radio) and PS ENGINEERING PMA7000-S (audio panel). A rotor brake, night scanner search light, particle separator, a FARGO 21 gallon auxillary fuel tank, V.I.P. interior, IVSA and artificial horizon, auto recognition, dual controls, extended landing gear, heater/defogger kit, engine wash kit, cargo hook kit, pneumatic door openers, super soundproofing, digital tot gauge, digital chronometer/timer, rain gutters and collective hobbs meter.

**NORTH CAROLINA:** Commissioners have been briefed on the New Hanover County Sheriff's sheriff's plan to acquire a \$700,000 Robinson R44 helicopter in July. In November 2006 it was announced that the New Hanover County Sheriff's Office was to have access to a private Robinson R44 Raven 2 N521GH helicopter owned by local businessman Scott Gerow. He was donating his time to fly for the sheriff's department when they need help. Nothing more has been heard of that operation but it seems that it has coloured the perception of law enforcers in the area.

The drug money financed Robinson is being promoted to the local Commissioners as more powerful than the type of helicopter that other police agencies in the area already fly – the Bell OH-58. It is not clear what yardstick for such a claim is.

The two existing area helicopters called "The Sable Unit," are available to local law enforcement agencies - Leland and Wilmington police departments use it in addition to Pender and Brunswick County sheriff's.

Two years ago the Wilmington Police Chief Ralph Evangelous concluded the Sable operation would be sufficient air support for the region. At the time statements to the media suggested that the New Hanover Sheriff thought that a \$25,000 share was too expensive where more recent attributed statements suggest that he simply did not get on with those in the Sable operation.

**TEXAS:** A new audit report on the Austin Police Department has stated it is not worth the money spent on it.

On average, it costs about \$325 an hour for DOC's with the City of Austin giving an all in figure of just over \$1,300 an hour including personnel and a total annual spend of \$2.3M.

The outside audit was undertaken by MGT of America at a time when the air unit was not called upon to undertake a single priority one call.

Part of the problem is that although Austin could justify a larger operation it has just one EC120 helicopter and a crew of two. As a result the number of hours it is available is restricted. Responding to high priority calls from ground starts is seen as a difficult area but the crew and aircraft availability preclude a higher level of availability. Currently they are operating in daylight with most of their flight time being over Austin's roads during rush hour. *Ed: Although this audit report could be viewed as the death knell for the air unit the police chief is actually using it to open discussions on expanding Austin's operations with more patrol helicopters and larger machines able to carry SWAT officers to scenes on a 24/7 basis using Federal funding. For now, APD has no intention of grounding their one eye in the sky.* 

**TEXAS:** Plano police officers complained that television news helicopters – and the live footage they showed – greatly hampered their efforts to end a tense standoff last month.

As a result police officials have been talking to local television news managers to prevent similar problems in the future. If that doesn't happen, Plano police said they'll consider closing air space to keep news helicopters away from similar situations.

At times noise from the helicopters made it impossible to talk to the armed 19-year-old holed up in his parent's house over a 12-hour period. In addition TV stations were transmitting sensitive footage shot by the airborne cameras. Although they left the area after being asked to they were back overhead again within minutes. The helicopters weren't violating any laws so eventually the police were obliged to close the airspace around the scene.

The suspect gave himself up after a third round of gas canisters was thrown into the house. [Dallas News]

## **AIR AMBULANCE**

#### IRELAND

The health service has reached an agreement with the Irish Air Corps for the availability of a 24/7 national air ambulance service using state-of-the-art AgustaWestland AW139 helicopters and medical equipment. Under the contract, they will carry incubators, cardiac equipment, and stretcher systems but the service will not be a full HEMS operation it will primarily act as an inter-hospital transport facility.

Sources described the new scheme, which went live last month, as a half-way house to a full HEMS. Campaigners ultimately want helicopters to rush patients to hospital from car crashes and other emergencies -- within the "golden hour" doctors say is vital to survival. Ireland is the only country in the EU without a full HEMS service.

#### ITALY

For the past decade the air ambulance in the area around Venice has been entrusted to the health services of Belluno, Padua and Verona. A seven month experimental night operation has been funded and at the end of the trial it will be decided whether it is worthwhile running the service across the whole region. [AD]



#### KUWAIT

The Ministry of Health in Kuwait is seriously studying the possibility of using air ambulances for medical emergencies. It is suggested that the Ministry will use the facility for critical medical cases among local hospitals or to overseas treatment services. The Ministry is currently conducting a study on the financial and feasibility aspects of the project. The research suggests that high costs may obstruct further advances and that a fixed wing solution appears to be favoured – including the use of existing aircraft operated by Kuwait Airways. [Arab Times]

#### SWITZERLAND

**REGA:** Furthering the story carried in last months HAI Heli-Expo report it has been announced that Swiss Air Rescue REGA, the independent and privately operated not-forprofit air rescue foundation, signed an order with Aerolite for eleven AgustaWestland A109 Grand EMS Interiors.

Aerolite said its lightweight design, suitable for extreme hot and high performance in the Alps, were a critical factor during the evaluation process, and why REGA selected Aerolite as the preferred vendor. The new interior will allow different configurations such as rescue, hoist, intensive care, incubator and flight crew training missions.

The interior includes a two metre (6 feet 7 inches) stretcher, stretcher platform, stowage cabinet, multi-mission medical floor, up to three medical attendant seats, gaseous oxygen system, rack for the safe and ergonomic stowage of medical equipment and stowage provisions. Delivery is slated for 2009. [Aerolite]

Ed: Since the AgustaWestland/REGA presentation at Houston the editor has been able to ask Eurocopter for their take on the failure to expand its EC145 fleet in service with REGA. They believe that it is the absence of FADEC on the Turbomeca Arriel 1 E2 engines that resulted in REGA selecting the Grand. The EC145 was originally developed for a home market [the Gendarmerie and the Securite Civile] which had no requirement for FADEC. Eurocopter now believe that the absence of this feature is detrimentally affecting some markets and we can expect to see the type being developed with FADEC in the future. Either way the feature could not be made ready in the timeframe required by REGA.

#### UNITED KINGDOM

**DERBYSHIRE, LEICESTERSHIRE & RUTLAND:** Staff and crew from the new Derbyshire, Leicestershire and Rutland Air Ambulance (DLRAA), that will displace the former County Air Ambulance, checked in with staff at East Midlands Airport today, after receiving the good news that the Airport, its employees and Chaplains have all pledged their support to help meet the initial £300,000 fundraising target that will get the service up and running.

Operations manager Dr Dhushy Kumar, paramedic Steve Porter, pilot Richard Craske, Dr Neil Thomson and DLRAA's full-time doctor, Dr Stuart Maitland-Knibb, were dropped off by their sister service Warwickshire and Northamptonshire Air Ambulance, to give staff at the Airport a glimpse of the AgustaWestland A109E power helicopter that will be on their doorstep from 1 April.

The new air ambulance will continue to operate from the existing base at East Midlands Airport, with a dedicated helicopter for Derbyshire, Leicestershire and Rutland. The Agusta 109 helicopter will take just three minutes to get to Queens Medical Centre Nottingham and six minutes to Leicester Royal Infirmary.

**LINCOLNSHIRE & NOTTINGHAMSHIRE:** The MD 902 Explorer based air ambulance operation has completed its 10,000th mission over a 14 year period.

The service, established in 1993, has more than doubled its annual number of missions since 2000 when the service acquired its current yellow Explorer helicopter, the number of missions has risen from 500 to more than 1,200 a year.

**NORTH WEST:** There have been stories in some sections of the press in the region suggesting that the charity has launched a fundraising campaign to acquire an additional aircraft to add to the Eurocopter EC135T2 currently based at Blackpool Airport. The new aircraft would cover the southern part of the region leaving the existing machine to concentrate on the north of Lancashire and Cumbria.

Enquiries by PAN suggest that the charity is clearly thinking along these lines but has yet to launch such a scheme. The new aircraft will require an additional £1M per annum to be raised.

The original story claimed that the charity plans to have the new helicopter up and running in August which suggests that they have already ordered it. In view of the timescales being suggested the service will probably have to await full funding for a new generation helicopter rather than undertake the usual start-up scenario of reliance upon a BO105. The accuracy of this must be put into question until such time as the official launch takes place. The current air ambulance flew 940 missions in the past financial year.

**WALES:** The Wales Air Ambulance uniquely faces a £4M annual bill to upgrade its three current BO105 helicopters to new-generation models. The charity, which relies on donations to maintain the life-saving service, launch its pound appeal – urging everyone in Wales to donate £1 towards the cost of the new helicopters which need to be in service by 2009. Other air ambulance operations have already upgraded their fleet from reliance on the venerable Bolkow but Wales has instead sought to expand its basic service from one helicopter

erable Bolkow but Wales has instead sought to expand its basic service from one helicopter established in the south in 2001 to another in the north and most recently a third in mid-Wales, taking operations beyond 8,500 sorties. This has placed them at a disadvantage in that their replacement programme is now urgent at a time when others [including UK police] are faced with similar tight schedules upon what must be a strictly limited new aircraft availability. Some sources have assumed that the natural progression for the operation would be to order three EC135s from their current lease aircraft supplier Bond Air Services [BASL] at Staverton, Gloucestershire, this is incorrect.





Recently the Wales Air Ambulance charity Trustees requested tenders from industry for the replacement of all three Bolkows by the end of 2009. PAN understands that industry has duly responded and that a handful of submissions have been sent in. No details are available.

If Wales were to remain in a lease arrangement with BASL the type is likely to be the EC135T2 or the Bell 429. BASL has to set up a number of new operators and upgrade others with the Bolkow in the same tight timescale and this must place a severe pressure on the supply of EC135 helicopters into the UK market. Other helicopter types and other suppliers have been submitted to the charity for consideration but again details are not being released at this stage. <u>www.walesairambulance.com</u>



www.integramasseguridad.com

### PRESSURES ON UK AIR AMBULANCE CHARITIES

In recent months there has been a clear change in the official National Health Service [NHS] attitude towards the air ambulance charities in England and Wales and a lengthy article in a recent edition of *The Health Service Journal* reflects some of the problems associated with an apparent new official stance.

With the Charity sector striving to maintain its independence on one hand and the official NHS warming towards one of the few sectors of health provision that the public actually love each side is faced with having to negotiate with each other carefully.

David Philpott the Chairman of the Association of Air Ambulance Charities [AAAC] has noticed a change in attitude towards him and his association. Where once he was shunned he is now sought out.

The recently set up Kent, Surrey and Sussex air ambulance and the subsequent tie in with Sussex Police is just one public aspect of the dialogue taking place—and that in Philpott's own back yard [picture page 17].

From being very hands-off in their approach—originally it was almost impossible to get NHS funds to cover the wages of the Paramedic crews—there is now a growing situation whereby the NHS wants more hands on involvement in the day-to-day operations of new and existing charity funded operations. With the non-too popular Scottish example as an example of the fully NHS funded operation many are wary that it should not go too far. Too much public funding could lead to a public perception that the operations no longer need treating as a special case and the money would increasingly transfer to funding some home for cats or even a donkey sanctuary in Egypt.

With the difficulties associated with crew funding now seemingly a thing of the past the looming new age promises fully funded doctors [in place of the present volunteers] and much more. How to ensure that such easements from the public purse do not turn into millstones around the necks of the industry will create an industry of its own.

In the wake of a root and branch revision of the way the NHS has been set up and new borders put in place there have been other pretty drastic changes that were not of the charity sector's own making. Included must be the 'retirement' of County Air Ambulance into Staffordshire from East Midlands Airport. That instance of a boundary change led to a new NHS region declaring that they did not want to operate in the area covered by a different newly formed NHS region. The result was the setting up of another new charity operation to continue the East Midlands operation.





Arrius 282, highest reliability and lowest Direct Maintenance Cost on the EC 135

#### UPLIFTING EXPERIENCE\* À LA HAUTEUR DE LA LÉGENDE



16

#### Reims F406 Land & Sea Surveillance



The logical economical choice of many operators Police, Fisheries, Coastguard, EMINT, EEZ patrol.

Recent sales and deliveries Serial No. 90, 91, 92, 93, 94, 95 Bob Crowe Aircraft Sales Ltd Tel: +44 (0)1234 750442 www.bobcroweaircraft.com sales@bobcroweaircraft.com



On the police front dual air ambulance operations have found the boundary changes severely affecting them. Sussex have got over their problem thanks to fitting in with the needs of David Philpott's own charity but Wiltshire found that they were sidelined by their local NHS Trust and they in turn were hell bent on setting up a 'rival' air ambulance operation near Bristol because that sat comfortably with their own administrative centre. The Wiltshire police air ambulance was set up with a local NHS that now no longer exists. The level of direct charity fundraising was low [as it had been in Sussex]. This need for the dual funding streams from official providers and the consequent removal of NHS funds as a result of the NHS revisions has distorted the situation. That mismatch has yet to be resolved.

There are others that have found that over reliance on the public purse can be a mixed blessing. The London HEMS operation undertook some charity style fundraising to bolster its operation but again it mainly relied upon major sources of funding—originally Express Newspapers for the aircraft and local NHS for the provision of paramedics, doctors and other funds. Richard Branson's Virgin Group stepped in to take up the aircraft funding when Express Group expressed a wish to get out but it was never going to be a bottomless pit of funding and the NHS money remained very much a primary source. In this instance the air ambulance own wishes to move on cannot be served because they—unlike a separate charity fund—cannot find the money to move on.



[The original article upon which led to this editorial comment appeared in the *Health Service Journal* 20 March 2008 under the pen of Alison Moore]



#### **UNITED STATES**

**TEXAS:** Omniflight Helicopters, Inc. has announced that its Southwest Med Evac division was named the recipient of the South Plains Emergency Medical Systems (SPEMS) Public or Private Organization of the Year Award.

The award recognises exemplary performance exhibited by pre-hospital emergency response organisations operating within a 100-mile radius of Lubbock. There is one winner per year.

Southwest Med Evac was nominated and selected by area hospitals and EMS providers. This award represents excellence in patient care, operations and safety. The award was presented at a recent awards luncheon during SPEMS annual conference. Southwest Med Evac operates four air medical bases that serve the coverage area.

**TEXAS:** From April 1 a Bell 407 will be used by Northwest Texas Healthcare System (NWTHS) based in Amarillo to provide air medical transport service for the region. The service will be operated in a partnership with Med-Trans Corporation.

The current NWTHS air transport service, LIFESTAR, will celebrate its 15<sup>th</sup> anniversary in August and serves around 150-mile radius including Texas, New Mexico, Colorado, Oklahoma and Kansas and is the only Level III Trauma Center in Amarillo and the region's referral centre for trauma services in the Panhandle.

**VIRGINIA:** Carilion Clinic based in Roanoke has chosen the Eurocopter EC145 for its Life-Guard air ambulance fleet. They chose the EC145 to support its expanding mission schedule and continued growth. The aircraft is expected to be delivered at the end of this summer.

The clinic is a multi-specialty healthcare organisation with more than 400 doctors and eight hospitals and operates the region's only Level-1 Trauma Center.

The EC145 replaces a Bell 412 and it will complement an EC135 placed in service in 2005 at the Life-Guard 11 base in Radford. Cockpit commonality between the two aircraft should simplify the transition between them, in the event of cross-training of flight crews.

The new EC145 will receive a custom completion from Air Methods Corporation in Englewood, Colorado. It will have complete compatibility for Night Vision Goggles (NVG's), an industry-leading satellite tracking system, and the new Terrain Awareness Warning System (TAWS) approved for the first time specifically for a rotor-wing aircraft. The medical crews will begin training in NVG's this spring.

## FIRE FIRE FIRE FIRE FIRE

#### SOUTH KOREA

**GANGWON FIRE DEPT:** AgustaWestland has announced that the Korean Government has signed a second contract for an additional AW139 medium-twin helicopter in fire fighting / utility configuration for operation by the Gangwon Fire Fighting Department. The order, secured with the support of AgustaWestland's Korean representative, United Industries International (UII), represents the third AW139 helicopter to be sold into Korea for government applications. The Gangwon Fire Fighting Department AW139 will perform Fire Fighting duties as its primary task and will be delivered with the capability to operate with bambi bucket and belly tank fire fighting equipment. The helicopter will also be equipped



PRAGUE 25-27 APRIL 2008 >>> THE AVIATION EXHIBITION IN THE HEART OF EUROPE with a rescue hoist, emergency medical services provisions and a cabin configuration to transport 12 passengers and separately two VIP's.

#### UNITED KINGDOM

**SOUTH WALES:** After a competition between rival systems South Wales Fire & Rescue is to adopt the German manufactured Microdrone Unmanned Aerial System marketed in the UK by MW Power. The deal will include an element of Training and Support. For MW this is their first paying customer.

The craft will come complete with the optional Thermal Imaging camera that offers a detection range out to 250m [810 feet], 100m identification and just 65m recognition, and has been specially developed to offer full integration with the Microdrone at low cost.

Alistair Fox, UAS Business Development Manager with MW Power said 'We have recently submitted a series of stringent deployment protocols to the CAA, in conjunction with Merseyside Police and West Midlands Fire Service. Having engaged with the CAA back in May 2007, it is clear that our policy of only supplying the system to the Emergency Services, Military and other Government bodies is a good way of ensuring the highest quality of operation of this type of system.'

Since commencing marketing of the German-dervied Microdrones system, in 2006, MW Power have developed a flight simulator, certificated training programme, operational 'best practice' and other bespoke operational aids using their extensive experience of mobile power and satellite communication systems.

In conjunction with Domo, part of Cobham Plc, the Digital Fire Ground, in operation by Avon Fire, has been developed to ensure compatibility with the Microdrone for customers looking to enhance the Domo COFDM link encrypted link for low cost aerial imagery with improved quality and range.

For further information contact Alistair Fox on 07775 918 393 & 01270 875115 or <u>alis-tair@mwpower.co.uk</u> & <u>www.mwpower.co.uk</u>



## **SEARCH & RESCUE**

#### MALTA

**FRONTEX:** The German Federal Police are to operate a helicopter detachment in the Maltese Islands again this year under the Frontex agreements. Details remain scarce pending the deployment but the helicopters – probably Puma's – are expected to arrive in May.

#### UNITED KINGDOM

**COASTGUARD:** The final stages of the transfer of MCA air operations from the Bristow supplied Sikorsky S61 to the CHC operated Sikorsky S92 and AgustaWest-land AW139 are being enacted over the next two months.

The first of the long-awaited three AgustaWestland AW139s for the UK Coastguard contract is now UK registered and undertaking training sorties over the South Coast. The first aircraft keeps the



same call-sign 'last two' as G-CGIJ as the Sikorsky S61N it will replace - G-BDIJ at the Leeon-Solent base in the coming weeks. Also last month [on March 19] CHC took delivery of the second AW139 aircraft G-SARD and the following day [March 20] displayed G-CGIJ to local media representatives at its Lee-on-Solent base.

The timing of this activity saw what will be the last appearance of the venerable S61 at the bi-annual UK version of the Shephard SAR Conference on the sea front at Bournemouth. The 25 years old Sikorsky G-BDIJ flew in company with a lifeboat able to show a history stretching almost as far. The 47 feet long Tyne Class craft RNLB James Bibby 47-014 was previously at Barrow-in-Furness but has now travelled south to be in the Reserve Fleet at the RNLI HQ in Poole. The slipway it once was launched from is currently being refurbished for the £2.6M state-of-the-art Tamar-class boat Grace Dixon that replaced it.

Meanwhile the media has stoked up a row over performance restrictions affecting the introduction of the S-92 into MCA service. The new type has yet to receive certification of its long range fuel tank and a call beyond its certified range resulted in an RAF crew flying nearly 600 miles to save a a Russian sailor on a trawler.

Like the other MCA S92 helicopters the Lewis based example is currently unable to undertake the longest range missions until the tanks are cleared for service. This is not an issue



anywhere other than in the media and was predictable. Long range missions of this nature represent a small percentage of the SAR profile [typically under 15%] and this is understood by those in the industry.

Nonetheless the RAF Lossiemouth Sea King SAR mission costs are thought to run into thousands and a Scottish Member of Parliament raised the issue.

Western Isles MP Angus MacNeil maintains that the MCA should not have introduced the helicopter until it was fully operational. [Daily Record]

Royal Mail has issued dramatic new stamps to celebrate the vital work of the people undertaking SAR. The stamps highlight the actions of the crews of the Coastguard helicopters working closely with the men and women of the Royal National Lifeboat Institution (RNLI).

## INDUSTRY

**Geneva Aviation,** a member of the DART Helicopter Services family of companies, has received Transport Canada approval for its Tail Camera Kits, Cargo Compartment Utility Rack and Rear Communications console.

The Geneva Aviation P129 Tail Camera Kits are ideal for tours, news gathering or aerial survey applications. The kits include a colour video camera which attaches to the upper outboard surface of the helicopter's horizontal stabilizer and provides a wide-angle view of the side of the aircraft and the scenery below. The kits are available for AS350/355 and 206/407 helicopters.

The P153 Rear Communications Console is perfect for AS350 Electronic News Gathering applications or other missions requiring extensive avionics packages. The console can mount up to 20lbs of avionics in the rear centre mounting location and brings the additional equipment or control panels within easy reach.

The Geneva P141 Utility Rack provides a unique equipment racking solution. The rack is designed for any mission that requires mounting of video recorders or other electronic devices. This design allows you to store up to 100lbs of equipment in the AS350/355 aft baggage compartment. It's easy to install and can be easily removed if needed.

A newly-commissioned small engine assembly line at the Rolls-Royce facility in Indianapo-



lis, Indiana has completed the assembly and test of its first production RR300 engine for installation in the new Robinson Helicopters' R66.

The RR300 engine programme has gone from concept to reality in under two years. This delivery milestone follows closely on the heels of receiving the FAA type and production certification awards and signals the start of full-rate production for the RR30; hundreds of which are on order by Robinson Helicopters over the next few years.

The engine delivers 300shp at take-off, excellent hot and high performance and offers outstanding value. A prototype RR300 engine has been flying on a Robinson helicopter since mid-2007.

In addition to the orders from Robinson, Rolls-Royce has signed MoU's with Enstrom Helicopters, Schweizer Aircraft and MD Helicopters to evaluate future applications of the engine family.

**FLIR Systems**, Inc. plans to hold more than 40 free conferences throughout the US. The conferences will focus on infrared technology and how to use infrared cameras for a variety of applications including electrical and mechanical surveys, quality assurance for repair work, roofing, heating and cooling systems, predictive maintenance and more. The conferences will allow for hands-on demonstrations, time with FLIR product experts, the opportunity to learn about new product enhancements and features, and FLIR's Infrared Training Center certification programmes.

Places are limited so early registration is encouraged. To find a free conference near you and to register visit <u>www.infraredseminars.com</u> or call 1-800-254-0633.

In the USA the National Transportation Safety Board [NTSB] will hold a three-day forum on the safety of **unmanned aircraft systems** (UAS). The forum will be convened April 29 to May 1 in the NTSB Board Room and Conference Center in Washington. The forum will provide an opportunity for the Board and interested parties to understand the safety implications presented by the growing use of UAS in the National Airspace System.

Issues addressed will include Regulatory standards, Integration with the National Airspace System, Perspectives of current UAS operators, Design, certification and airworthiness, Human factors and Future UAS applications and perspectives of current users of the National Airspace System.

The forum is a result of the Safety Board's investigation into a Predator B unmanned aircraft that crashed near Nogales, Arizona, in April 2006. The Board's October 2007 meeting on this accident resulted in 22 safety recommendations to address deficiencies associated with the civilian use of unmanned aircraft.

The forum will include representatives from the military, industry, the FAA, and government agencies involved in UAS operations. Interested members of the aviation community and general public are encouraged to attend. A forum agenda will be announced by press release in mid-April.

A live and archived webcast of the forum will be available on the Board's web site at <u>www.ntsb.gov</u>.

The possibility of luring **MD Helicopters** to new pastures away from Falcon Field in Mesa, Arizona continues to catch the imagination of the media in a number of other towns and States. MD may have been a lame duck for a long time but clearly it is now seen as an attractive unit to bring home to somewhere local.

Even as the current landlords are dreaming up ways and means to keep MD in Mesa there are those in Grayson County, Texas, where the commissioners are finding \$1M to spend for the upgrade of utilities and studies at their north Texas airport. According to previously reports, MD owner, Lynn Tilton, is considering Grayson County as one of a short list of places where she might move of her company. Winning the contest to lure the company could mean 400 new jobs for whoever wins. [Herald Democrat]

Honeywell has announced the delivery of the first Sentinel Navigation aircraft system to

helicopter service company Sterling Aviation, for use on the company's Eurocopter BK117C1 operated for the East Anglian Air Ambulance service.

Sentinel is Honeywell's new, cost effective multi-function display and navigation system for helicopters that serves the critical needs of emergency medical, executive and utility helicopter service providers. The system enhances situational awareness and safety and is part of Honeywell's Integrated Safety Solutions program that offers navigation technologies from our Integrated Hazard Awareness System (IHAS) system.

Gerry Hermer, AFC MRAeS, Managing Director at Sterling Aviation, said, "Prior to Sentinel, there were no navigation systems available that could provide a cost effective solution to the specific requirements of HEMS helicopter operations in the UK. We have worked closely with Honeywell to achieve the first installation. The initial feedback from the operational crews is very encouraging. And, we are also working with Honeywell on defining enhancements that will further improve the capabilities of the Sentinel."



Sentinel provides mapping, relative terrain and traffic information, plus checklists. Planned feature growth includes Plates, XM Weather, SATCOM, vertical profiles and user configurable databases.

The system today offers up to 24GB of on-board data storage, which allows the Sentinel Navigator to provide navigational mapping to high resolution over an entire country.

Sentinel is available in several configurations, including NVG options – all of which are ETSO certified. It can operate as a stand-alone panel mounted MFD/Navigator, remote processor or as an integrated element of the Observer MKIII Mission System.

The Observer MKIII is an integrated navigation, command and control system which interfaces to multiple on board displays and sensors including cameras, direction finding (DF) equipment, AIS shipping transponders, SATCOM and flight management systems.

Helicopter operators worldwide can now order night vision applications and products from **DART Helicopter** Services' extensive inventory of aftermarket components and accessories. Under an agreement between DHS and United Rotorcraft Solutions, DHS initially offers night vision lighting applications and related products from URS for Bell 407 aircraft. The agreement was finalized at the HAI in Houston. Within 90 days, DHS will expand its offering to include NV applications and products for AS350, BK117 and Bell 206 helicopters, pending final approval of FAA STC's.

The 2008 DART catalogue is available online at www. DARThelicopterservices.com

**Patriarch Partners**, owner of MD Helicopters, is embroiled in a controversy surrounding bankruptcy proceedings for another of its holdings, American La France (ALF). In a down market for fire equipment generally, ALF has been hit by a computer-related problem and has been in the process of recovery. According to a local report in Charleston, South Carolina where ALF is based, the bankruptcy filing is being contested by the debtors' committee made up of firms owed money from ALF, which alleges that Patriarch's chairman, Lynn Tilton, and Patriarch's lawyers have set up the Chapter 11 proceedings so that an undue amount of ALF's value devolves to Patriarch, with the remaining debtors left holding a nearly empty bag. [Aviation Week]



23

Longer term readers may recall that many years ago [December 2001 and others] Police Aviation News made a point of covering experimentation and contract work relating to the use of airborne radar in what were then commercial contracts – specifically surveys of the M25 Motorway around London. I suggested that perhaps the technology would find a use in police work but even then it was seen as a tenuous link. Things have moved on.

At last months **Oceanology International** [Oi08] held at ExCel in London Docklands [UK] there were two exhibitors promoting similar advances in the technology.

Back in the days of the M25 work helicopters were pretty much obliged to fly at low speed to ensure high quality results.

Over time operating speeds and altitudes have improved but no realistic move to introduce the technology into police crime operations has yet taken place. That said there is growing evidence of similar systems being used in accident scene recording

Both of the systems being exhibited at Oi08 now offer the ability for the airborne laser system to scan and penetrate water as well as receive returns from the topography. The primary object of the water penetration ability is to provide oceanographers the possibility of quickly and accurately surveying foreshores and shallow passages swept by tides and waves that would preclude surface vessels.

PAN suggests that this capability might also offer a means by which any relatively shallow stretch of water might be quickly swept for potentially 'alien' objects and that might include sunken bodies. The operators have already demonstrated that an aircraft flying at 300 feet is receiving clear returns from shoals of fish. An entire reef area of 35km<sup>2</sup> [wave lashed rocks surrounding a UK lighthouse] was surveyed in just 2 hours for the first time ever in 2006.

The return from the scan is colour coded by depth and can indicate the depth of any suspicious objects. At the moment the clarity of the return will not be highlighting a gun lying on the bottom [or sadly the existence of some old treasure chest] but it is quite likely to indicate an object the size of a body suspended in water [floating free] or even tethered by the ankles on the bottom and floating upward.

The companies offering the technology are the Vaughan, Ontario, Canada based **Optech** who market their system as Shoals <u>www.optech.ca/shoals4</u> and Cheddar, Bristol, UK based **BLOM Aerofilms** <u>www.blomaerofilms.com</u>

The drawback of this technology in assisting the police in a criminal enquiry is availability. Both companies use dedicated fixed wing aircraft to undertake these surveys across a vast customer base and immediate availability is clearly an issue.

**BLOM Aerofilms** have a long association with UK police dating back as far as 1921 when images of road traffic jams approaching the Epsom Derby Day races were taken and that association continues to this day.

The latest product to attract the interest of UK police [and others] is an interactive air-toground image that brings planning into the 21<sup>st</sup> century.

Pictometry® oblique image libraries are a unique new imaging technique which provides multiple, geo-referenced views of each feature within an urban environment. Blom group is



in the process of acquiring and building a database of over 900 European cities, with approximately 30 towns becoming available each month. The imagery is available for licensing, streamed to third-party websites and delivered either through the internet or depending upon volume, by hard-disk.

With the PC mounted system it is possible to accurately survey and track three dimensional ground images and measure heights, widths of buildings and features all automatically available at the click of a mouse button.

The technology to produce the digital images for this system requires [that same precious] fixed-wing Commander aircraft to overfly the target area and simultaneously fire off multiple cameras that allow the software to view the scene below in 3D.

This is not effectively an air support resource; indeed it could be viewed as watering down the need for air support in the planning role. The product far exceeds the quality and capability of the 'simple' target images offered up by most ASU's and – subject to its refresh rate – is obtained very covertly. The usual contracted image refresh rate is some two years and would typically include the whole of a city or even a force area at a very economical charge rate that would never be achieved if it were undertaken by a police air support unit.

It may seem to be an object of some fanciful Hollywood plot but in fact a number of US police law enforcement agencies use the technology to zoom in on the source of 911 calls. Not the actual immediate CCTV image that Hollywood scripts might suggest but an ability for the 911 control room to view the actual scene indicated from any angle. This can greatly enhance the ability of the good controller to interpret and filter claims made by a caller.

In the immediacy of a serious incident affected by the dark, heavy weather or thick fog that might ground air support an ability to still view and interpret the scene in good daylight conditions can be invaluable.

Northrop Grumman Corporation has signed a definitive agreement to sell its Electro-Optical Systems [EOS] business for \$175 million in cash to **L-3 Communications**. Completion of the transaction is expected in the second quarter of 2008. EOS, a part of the company's electronic systems sector, produces night vision and applied optics products and had sales of approximately \$190M in 2007. Headquartered in Garland, Texas, EOS has approximately 1,000 employees. [Northrop Grumman]

**Goodrich Corporation** has launched a new night vision and laser detection camera that can see from the near infrared (NIR) to the shortwave infrared (SWIR) portions of the light spectrum, beyond what traditional night vision goggles can see. The camera, called NIR/SWIR, uses the company's proprietary indium gallium arsenide-night vision (InGaAs-NV<sup>TM</sup>) technology to detect and track a broad range of battlefield infrared lasers with heightened night and day time sensitivity. The NIR/SWIR cameras are being developed by the Sensors Unlimited, Inc. team in Princeton, New Jersey within Goodrich's ISR Systems unit.

New processing techniques have pushed capabilities of the **NIR/SWIR** camera to see light wavelengths from 0.7 micrometers to 1.7 micrometers, whereas traditional night vision cameras can detect wavelengths up to roughly 1.0 micrometers. NIR/SWIR's expanded capabilities allow the end user to detect and track a wide range of military lasers including the covert eye-safe 1.5 micrometer laser. Because InGaAS-NV technology detects light, unlike today's small thermal night vision cameras that detect heat signature, the NIR/SWIR camera provides exceptional clarity in both day and night use.

Presently available in small, lightweight camera packages with 320x256 or 640x512 resolution, the NIR/SWIR cameras are ideal for integration into night vision and laser detection



#### **Police Aviation News**

Continuing his reorganization of **Bell Helicopter**, Chief Executive Richard Millman has shaken up the company's engineering leadership and confounded some long-time Bell people by bringing in Nick Lappos in the past a very severe critic of the V-22 Osprey.

Nick Lappos, formerly a marketing executive and test pilot with Sikorsky Aircraft Corp., will run Bell's XworkX research and development operation in Arlington, Texas. Jeff Lowinger, an engineering executive from Boeing's helicopter division who will take over as head of Bell's engineering department.

Adding the two engineering executives, Millman said in the message e-mailed to employees, "will help us change the game, pleasantly surprise our customers, and confound the competition."

Both Lowinger and Lappos will report directly to Millman.

Bell Helicopter officials have not been returning calls from the media but Nick Lappos has made an appearance at his long time opinion home <u>www.pprune.org/rotorheads</u>

The hiring of Lappos has upset many current and former Bell employees because of his past criticisms, in public and on Pprune and other Internet forums, over the marketing claims and actual performance of the V-22 Osprey and Bell's much-touted, long-delayed BA609 civil tilt-rotor aircraft.

Lappos is a former Army helicopter pilot, Georgia Tech engineering graduate and 32-year Sikorsky employee who is currently a marketing representative with Gulfstream Aerospace.

On an entirely different tack, **Gulfstream Aerospace** Corp., a wholly owned subsidiary of General Dynamics has announced that it has successfully demonstrated aircraft control using fibre-optic "Fly-By-Light" (FBL) technology. This is the first time FBL has been tested on a primary flight-control surface of a Gulfstream business aircraft.

The **Kalagate Imagery Bureau** a leading provider of Forensic Imagery Interpretation and Analysis services within the UK became a limited company on March 1. The company was founded by Geoff Oxlee who conducted business as a sole trader for the first fifteen years of its life. In 2003, a Partnership was formed and now the company has reached a level where it is appropriate for it to become a Limited Company. Such a change will aid development as the business expands

The Main Office in St Neots, Cambridgeshire was established in 1989 and staff handle hundreds of cases each year for a customer base that includes every Police Force in England & Wales, many in Scotland, the Garda, in addition to the Crown Prosecution Service and Other Governmental Departments.

The Forensic Search Advisory Group (FSAG), and ACPO approved body have decided to affect a trial in light of the new thermal imaging cameras now being operated mid wave infrared by a number of police forces. The aim of the trial is to record the effectiveness of airborne thermal imaging systems in the locating of single buried clandestine graves. Two previous trials concentrated on long wave infrared. FSAG Chairman, David Oxlee of Kalagate, has agreement from both the Bradford and Birmingham Universities to act as scientific co-



**Beijing Exhibition Center, China** 

16-19 April 2008

coordinators for a series of pig burials to simulate human cadavers. Kalagate will lead the interpretation of resulting imagery and details of the trial will be announced later.

Dart Helicopter Services subsidiary **Apical Industries** Inc., has received EASA approval of their innovative Tri-Bag emergency floatation system for BO105 helicopters. The approval provides for two different installations either with liferafts or without. FAA and Transport Canada approval has been previously received

The Tri-Bag system provides the most stable float platform available and is unique in being the only float system certified for take-off after a water landing. The systems include 6 tribag floats (2 Fwd, 2 Mid, 2 Aft). The mechanical valves have no squibs or electrical requirements. The two external life rafts with survival kits are integrated in the mid floats, and may be mechanically deployed either in the cockpit or by two externally mounted T-handles. The externally mounted life rafts conserve valuable passenger space and improve safety.

The systems are compatible with ground handling wheels and the float bags can be removed in a matter of minutes. The floats do not have an age limitation and are replaceable upon condition. The floats are not required to be returned to the factory for recertification; however an Apical recertification service is available upon request.

**Beijing Turbomeca Changkong** launched late last month. This joint venture assembles and tests hydro mechanical units of turboshaft engines for both Turbomeca and Beijing Changkong, for their respective markets. It is located 50 km North of Beijing in the Chinese partner new plant, located in a high-tech park.

A clear demonstration of the entry into operation with its relevant production agreement was given at the occasion.

Fuel Control Units (FCU) and Hydro Mechanical Units (HMU) are assembled and tested in this new joint venture.

Among the control system concerned, the WZ8C HMU (licensed Arriel 2C) powering the H425 helicopter designed and produced by Harbin Aviation Industry, an AVIC II company.

The joint venture obtained the JAR 21G Approval end December 2007.

In China, one helicopter out of two is equipped with Turbomeca engines or Turbomeca licensed products.

A cooperation framework agreement was signed in 2005 with AVIC II (China Aviation Industry Corporation II), concerning the delivery of 200 Arriel 2C helicopter turboshaft engines to China, along with a partial production license. Turbomeca and AVIC II started working together in the 1980s, with a license for the Arriel 1 engine, initiated by China National South Aero Engine Corporation (SAEC).

## **ACCIDENTS & INCIDENTS**

**21 January 2008 Reims-Cessna 406 Caravan 2 G-SFBA**. Scottish Fisheries Patrol operating out of Inverness. On finals into Inverness '*Air Duct Overheat' warning. PAN declared.* 'RH Air Duct Overheat' warning illuminated during an asymmetric approach, which was being conducted as part of a training flight with the RH engine being the 'live' engine. Bleed air system switched off and a PAN declared. The warning remained illuminated for a



Berlin International Air Show (ILA 2008) Berlin Brandenburg International Airport 27 May-1 June 2008

The focal point of aerospace. further two minutes until on very short finals. Checklist carried out following landing. Investigation found a jammed temperature control valve. [CAA]

**31 January 2008 Eurocopter EC135T2 G-PSNI**. Police Service of Northern Ireland. *Electrical burning smell in cockpit. Smoke observed coming from vicinity co-pilot's intercom selection box. Loss of comms reported by observer. PAN declared. A/c returned.* Co-pilot's station box found unserviceable and smelling strongly of smoke. Surrounding area and associated wiring [CAA]

**20 February 2008 MD900 Explorer G-KSSH.** Air ambulance Kent, Surrey & Sussex AA. Serviced by Police Aviation Services, Gloucestershire. *PAN declared due to main rotor gearbox low oil pressure indication. Precautionary landing carried out in field near Strensham. Oil level lowered.* Inspection found no evidence of an oil leak or connection problems. On the morning of operation, the oil level was checked and found to be just above the fill line and was refilled to 3/4 full: the temperature was 0DegC and when the oil warmed up to operating temperature, the oil level was close to the 'full' mark. This is a known cause of varying oil pressure indications which has been brought to the manufacturer's attention with a view to obtaining clearer guidelines as to gearbox oil levels. [CAA]

**12 February 2008 Reims-Cessna 406 Caravan 2 G-MAFA**. Fisheries patrol aircraft operating out of Exeter, Devon on approach to home airfield when a burning smell became evident on the flight deck. *PAN declared a/c landed safely and shutdown on taxiway. Fire service inspection found no evidence of overheating.* On investigation the equipment cooling fan was found to be inoperative due to a dry soldered joint. Connection remade and function check completed with satisfactory results. [CAA]

**24 February 2008 Reims-Cessna 406 Caravan 2 G-SFBA**. Scottish Fisheries Patrol aircraft operating out of Inverness. On approach it was found that the nose landing gear had not extended. *Flypast inspection confirmed NLG was still retracted. Landing gear c/b reset and NLG extended. A/c landed safely following further flypast inspection.* Subsequent investigation failed to reproduce fault. Micro switches cleaned and lubricated. [CAA]

**1 March 2008 Eurocopter EC145 N456TK**. Air ambulance of Memorial Hermann Life Flight, Houston. About 5 minutes after takeoff, in straight and level flight at 800 feet, a vibration was felt. The left hand sliding door opened uncommanded. The Pilot decelerated slowly, and vibration abated below 60 knots, and ceased below 40 knots. The door was secured by Crewmember holding on to it as the aircraft landed without further incident. There was no Caution Advisory Display warning of a Door Open before the door opened. The bottom rear roller assembly came out of the bottom door track. [Concern]

**6 March 2008 Agusta A109E Power N901EM.** Air ambulance of LifeFlight of Maine, Bangor, Maine operated by Era Med. Shortly after departure from a city hospital helipad in class B airspace the LifeFlight aircraft avoided a midair collision. Aircraft was cleared to operate along an approved helicopter VFR route when it encountered a helicopter with no external lights displayed at an estimated 100 feet [30m]. Near miss has been submitted to the FAA for further investigation. [Concern]

**14 March 2008 Eurocopter BO105 G-NAAB** Air ambulance. Hampshire & Isle of Wight Air Ambulance. Was grounded by engine trouble after arriving at the scene of a serious road accident involving a scooter rider and a car on the A35 west of Lyndhurst. [Echo]

**17 March 2008 Eurocopter BK117C2 N984ME.** Air ambulance of STAT MedEvac West Mifflin, PA operated by CEM of West. PA, Inc. Shortly after takeoff from Baltimore Pier at 150 feet and 50 KIAS, pilot observed oil pressure caution and associated oil pressure loss on VEMD for the number 2 engine. Pilot continued climb out, declared an emergency and made an uneventful single engine landing at Martin State Airport. [Concern]

**19 March 2008 Unidentified helicopter.** A French police helicopter crashed a few hundred yards offshore from Anjouan's capital, Moulsamoudou in the Comoros Islands during an 'unauthorised' flight. No-one was hurt in the crash. Reports are sketchy but it seems that the aircraft from the French-administered island of Mayotte went down near Sima village on Anjouan after technical problems. The helicopter was owned by France's Mayotte-based air

and border police force. It was not clear who was on board the aircraft but one source suggested that it was carrying a pilot and two French policemen who were intent on picking up a politician and flying him out. Other French units rescued the crew.

This is a former French colony off the east African coast that gained its independence over 30 years ago but [like many such places] just keeps on haunting the former Imperial power. Much of the trouble relates to illegal immigrants using the poor islands as a stepping stone to Europe. Tensions are growing on Anjouan ahead of a planned military assault by African Union troops and the federal government to try to wrestle back control of the island. (Reuters/ IPAR)

**26 March 2008 Piper PA32 N8669N** Air ambulance of Belize Emergency Response Team [BERT] operated by the Wagner Foundation. Aircraft ran off the runway and sustained damage after experiencing a lack of retardation with brakes when landing at Belize City Municipal airstrip on a flight from San Pedro. The strip was reopened after being closed for an hour and a half. The pilot landed but noticed a problem when he tried stopping the plane from running. He swerved to the side of the runway into marshy soil to avoid going into the sea. [Media]

**27 March 2008 Mil Mi-8** Ukrainian Border Guard. As many as fourteen people were thought to have died after the helicopter crashed upside down into the Black Sea. Only one of the thirteen people known to be aboard at the time was saved alive and that person died later. The fourteenth body was thought to be a local person who had hitched a ride to the island of Zmeiny where the disaster helicopter was due to deliver 2 tons of cargo, a group of border guards and a civilian specialist. A crew of three and 10 passengers were known to be aboard when it crashed into shallow waters near the island of Krol. It was flying from the Black Sea port of Odessa to Zmeiny when the crash occurred [Media]

**28 March 2008 helicopter** Iranian State Security Forces [SSF]. The patrol helicopter crashed near Varzaqan in the Oushan Mountains in the northwestern East Azerbaijan province killing five on board.

The helicopter had been flying an unspecified mission over the city of Varzaqan. Three of those killed in the crash were the helicopter crew and the other two were SSF officials - Mahmoud Jalali, chief of preventive police force and Ali Niazi, head of highway police in East Azerbaijan province.

#### PEOPLE

Axsys Technologies Business Development director **Andy Healey** is hand-cycling from London to Paris in June, in aid of Leonard Cheshire Disability. Former pilot Andy, who uses a wheelchair after a helicopter accident in 1985, hopes to raise £3,000 by covering the 200 miles in three days. Sponsor him by visiting <u>www.justgiving.com/andrewhealey</u>

The Alabama Department of Public Safety air unit has honoured its founder with an over flight of his funeral by DoPS aircraft.

Long retired, **Maj. Bob Roger Milner**, 81, served as chief of the Alabama Bureau of Investigation and was the instigator of the air support operation centred at Montgomery. Milner was division chief when the department's aviation was formed. Three of the department's helicopters did a fly-over using the missing man formation. This was only the second occasion that this honour has been given. Milner served the department 30 years the air operation was founded in 1974. [Gannet]





PremiAir, the UK's largest executive helicopter operating and charter company, has appointed former police pilot **Kevin Gleeson** as Chief Pilot, Charter & Management, with immediate effect. Previously Kevin was Senior Pilot, having joined the company in 1998.

Kevin has a wide experience flying helicopters, having logged more than 9,500 flying hours. He is currently rated (single pilot IFR) on the A109E, AS355, Bell 222 and the S76 in the VIP Corporate Charter market. In addition he has Training Captain endorsements for the A109E, AS355, Bell 222 and Sikorsky S76.

Kevin started his career with the Royal Marines, moved to commercial air transport in 1987 joining Bristow Helicopters. In 1993 Kevin joined the Metropolitan Police Air Support Unit, dedicated to Bell 222 and AS355N operations.

## **RECENT EVENTS**

#### SHEPHARD SEARCH & RESCUE [SAR 08] Bournemouth, Dorset March 17-19.

The bi-annual visit to Bournemouth, Dorset on the south coast attracts many of the worlds SAR practitioners – most are military. Nonetheless within its portals there are facts to be found about both the civil and military SAR world – and in 2012 the two UK worlds will [the politicians claim] be as one. Though you would not gather that from what took place in Bournemouth.

The interim UK SAR solution is just slotting into place and now is a time for all to talk together to get the final solution in place in time for 2012. That I do not need to remind everyone is just 4 years away and aircraft take around 2 years to order and deliver. So by the time of the next UK based SAR conference we should see everything pretty much in place. Or so you might think. It was made abundantly clear that this forum of SAR people were muted on the subject. It was taboo to talk about every aspect of SAR-H. Some tried to talk on the subject in a humorous vein but were quickly put down by the others in the room as soon as the joke was aired. There was if anything an inane fear in the room. Now that looks very promising - I don't think!



And yet the whole proceedings started off on the afternoon preceding the two day conference with Combe Jerome the SAR Key Segment Manager for Eurocopter being able to provide a presentation very much directed at promoting the varied EC fleet for SAR in the future and promoting the brand new EC175 in the SAR role. Strange!

The new EC175 is of course being slotted head to head against the highly successful AW139 and actually has the same core engines [PWC PT-6] but different flight characteristics to the existing competitor machine. In theory the in-service timescale is against the EC175 elbowing out what will then be a tried and tested AW139 but the 175 has many potentially interesting features that could tip the balance – especially if the 2012 deadline slips. The EC175 is 16 passengers and two pilots slotted into the EC range between the EC155 and EC225. It will be the Z15 in China the cooperative manufacturer. It was clear, cooperation or not, that EC is driving this important new machine and will not allow any shortfalls in China industry to hold it back. To save too many difficulties the programme will call on existing technology including the highly praised EC225 autopilot that already confers 'hands-off' pilot activity.

Extremely inconsistent politics aside the meeting of minds brought together some good material as you would expect of any well thought through conference but equally it brought to light a number of blatant misconceptions in the room. These were misconceptions that should not have been there.

One RAF SAR Force speaker opened the proceedings in speaking with some despair about the recent arrival of the winch fitted EC145 police helicopters at the London Metropolitan Police air base. For him there was a clear danger that the police [in general] would be creaming off the 'easy' strata of SAR mission that allows MCA, RAF and RN crews to keep up their training on less arduous SAR operations. He spoke as if the EC145 crews were practicing the craft as he spoke. He could not have been further away from the truth if he had tried.

One thing that the conference underlined was that there were no policemen in the building – strange for people intent on working up a SAR capability. Embracing winch work that is both labour intensive and costly to even get a single crew up to a standard that might just be good enough to achieve an adequate standard is not to be entered into lightly. No one was putting figures on the real cost but suffice to say that the RAF is buying into the Virtalis ground based trainer rig in an effort to reduce its own overall costs and flight time and that kit can cost a cool £500,000. As yet the Home Office has not stumped up any funding specifically aimed at this training requirement.



In another presentation on the severe flooding that beset a number of UK West Country counties last year it became clear that the whole RAF/RN operation suffered from very severe communications problems that led to the local control staff having to speak to a helicopter just over the hill via the control room in Scotland. To add to that officers of the fire brigade involved are still kept unaware of their own future with digital communications. Although the police largely have '*Airwave*', the ambulance are getting it and the fire people ordered it a couple of years ago the practitioners have clearly not yet been told that it is on the way. To the fire officer presenter '*Airwave*' was something he had to go 'cap in hand' to the West Mercia Police HQ at Hindlip Hall to borrow. A measurable improvement in SAR communications was picking up the local cop and flying him and his hand-held *Airwave* radio [fortunately at low level] as their comms enhancement.

The Fire and Rescue Service awarded a £350m contract for a new national digital emergency radio communications system to O2 Airwave in 2006. The rollout of the new digital radio system, known as *Firelink*, includes both voice and a data capability is due for completion in 2009. Procurement of a digital communications network for the fire service has been delayed because of an ongoing row about the centralisation of fire service control rooms. That timescale does not allow for the massive problems that the police still have to overcome on their system just to carry the promised data link content.

The [less than perfect] Tetra-based Airwave network is currently available to all police forces in England and is mid-way through a rollout to ambulance trusts.

No one was able to suggest the arrangements being put in place to ensure that military SAR could talk to the police, ambulance and eventually fire – except the concept of landing at the police HQ and signing for a radio on loan. And of course it was off limits to talk about it post 2012!

Things should improve in the near future as the RAF and others are talking with ACPO about formulating some long overdue Standard Operating Procedures [SOP's].



In a presentation from the US Coast Guard it became clear that the largest of the US law enforcement agencies see their task growing ever more. On present estimates they believe that the worsening effects of Global Warming will see the melt of shipping routes previously closed for the whole year. In recent times ships have already forced the North West Passage to the north of Canada and Alaska. In ten years time the USCG see such traffic as being pretty

much every day and the waters are almost wholly uncharted..

The pressure is in place now to get the charts in place and to get ice breaker ships in place for ten years time they need to design and order craft now.

The commercial pressure to use the currently frozen over Arctic routes above Canada and Norway are tremendous. A ship travelling from Japan to the UK currently sails some 15,000 miles via the Panama Canal. Sailing via a northern route reduces that to just 8,500 miles.

In an item on the new Century 21 system roll out it was shown that it is now in place around Florida and most of the Eastern Seaboard with a completion date of 2011. Alaska will see the completion of its sector by 2017.

Readers may recall the story in one of last summer's special editions from Sweden about the very rustic Kenya lake rescue operation set up last year in among the fishing fleet there. The latest report from there given at the conference is that some 91 lives have already been saved.

Aerodata AG one of Europe's Special Mission completion houses in Germany was recently involved in the delivery and role -equipping of the replacement MD900 for Police of Niedersachsen [Lower Saxony] and are currently undertaking work for the German Federal Police delivering 19 helicopter mission systems. The advanced mission systems integrate various sensors and systems on the helicopter, e.g. the electro-optical system and a



video transmission system. The new equipment will substantially increase the capabilities of the German Federal Police to perform their missions. The Federal Police were the launch customer for Aerdata's GPS/inertial navigation system and this is a follow on order. The delivery and integration of the new systems into the EC135, EC155 and AS332L1 helicopters will be performed throughout 2008.

Their products are to be found in a far wider market than Europe, with a variety of fits going into flight inspection and patrol craft across Europe, North and South America, the Middle East and Australia.





#### **UPCOMING EVENTS**

**16-17 April 2008 IJOCC 2008** International Joint Operations Command Conference [IJOCC 2008] Managing Major Emergencies. An event for senior commanders from the police, fire, ambulance and other emergency services, emergency managers and planners, senior commanders from public safety organisations, community protection professionals, homeland defence professionals, risk managers, public health professionals and critical infrastructure stakeholders. London Fire Brigade, UK +44 1306 876856 info@ijocc.eu www.ijocc.eu

**23-24 April BAPCO 2008** Being held in its now customary venue in the Business Design Centre in Upper Street Islington from the British Association of Public Safety Communications Officers annual Public Safety Communications and IT get together will have its fair share of attractions.

The latest mobile internet, data technology and devices from Orange will be on show. Specifically aimed at enhancing the delivery of public safety and civil contingency services across the UK, the technology is enabling organisations to transform the way they operate.

New devices for critical communication include, Blackberry and Microsoft handsets as well as the mobile broadband service, Business Everywhere. These will all be demoed on the Orange stand.

Recent emergency services projects from Orange include Humberside Police and North Wales Police. North Wales Police employs 2,500 people across 75 police stations within an area of 5,600 sq miles. It used to have over 45 independent databases, but invested in a Records Management System (RMS) creating a single resource. This was implemented with a mobile capability resulting in the force being issued with BlackBerry technology. Frontline officers can now access RMS, the Police National Computer, and email whilst working remotely. North Wales Police's use of technology was recognised in the Orange National Business Awards 2007 where they were finalists in the Best Use of Technology category. Visit stand 250 to find out more. Reference Lucy McPhail +44 20 7973 6635 I.mcphail@hgluk.com www.bapco.co.uk

