

Police Aviation News

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Number 204 April 2013

PAR

Bristow win UK SAR

Spain certifies Pegasus

PSNI expand fleet

Life Lion - K-9 Ambulance

China SAR endorses S-76D



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LAW ENFORCEMENT

BRAZIL

Cobham's Brazilian subsidiary has secured its first major contract in Brazil to equip State Police helicopters with High Definition (HD) video surveillance downlinks which will be used on helicopters in twelve cities during the 2013 Confederations Cup and the 2014 World Cup. The contract was developed with a local integration partner following the opening of the Cobham's Sao Paulo office in August 2012 and includes both airborne and ground based equipment.

This procurement was made through the newly formed Extraordinary Secretariat for Security at Large Scale Events (SESGE), following a UKTI sponsored handover post the London Olympic Games 2012, when Cobham was able to present its security and surveillance capabilities to SESGE.

Cobham's HD solution provides a robust and mission critical platform that is independent of public or commercially available networks such as expensive satellite communications. The solution transmits HD quality video over long distances.

VP Cobham Tactical Communications and Surveillance, David Ashton commented, "This is an exciting development for Cobham's Brazilian business, following the opening of our office in Sao Paulo last year. We are proud to be working with our partner in Brazil on this important contract to provide enhanced surveillance capabilities for the 2013 Confederations Cup and 2014 World Cup, which are events that will be seen around the globe."

JAPAN

NATIONAL POLICE AGENCY: The police in the Hokkaido and Fukushima prefectures are to receive one AgustaWestland AW139 each in the latest contract awarded to AgustaWestland. Another order will see an AW109 GrandNew being delivered to the Kawagawa prefecture located in the southern Kantō region of Japan. This will be the third GrandNew for the JNPA and will offer a state-of-the-art SPIFR type with a four-axis dual duplex digital autopilot coupled with a Flight Director. The helicopter is equipped with the Chelton Flight Systems' Flight-Logic Electronic Flight Instrument System (EFIS), Synthetic Vision and Highway In the Sky (HITS) embedded functions to deliver ultimate situational awareness and groundbreaking automated flight management capabilities. In addition the Radio Management System (RMS) permits the integrated management of radio communication and navigation systems of the helicopter. [AW]

FRONT COVER: Eurocopter AS350B AStar/Ecureuil N498PT on finals as it lands at the incoming exhibits pad behind the Conference Center in Las Vegas, Nevada on March 2, 2013. The helicopter is operated by Guardian Helicopters of Van Nuys, California in a range of roles including fire fighting.

SPAIN

TRAFICO: It took six years but finally the police in Spain have launched the fully certified aerial speed checking capability of the L3 Wescam sensor turret – the technology is known as 'Pegasus' locally. Several Spanish TV stations have been carrying stories on this 'airborne speed measurement', including projections that it will have prevented around twenty traffic deaths and injuries by convincing drivers to slow down during the upcoming 'Semana Santa' week. The period ran from March 22 to April 1 so actual performance will not be available just yet. During this vacation period typically some 13 million cars throng the roads of Spain resulting in some 10,000 traffic tickets being issued; usually around 50 people lose their lives that week - 78% due to excessive speed. It is these fatalities and speed-related accidents that Trafico hopes will be reduced. The authorities in Spain believe that during 2011 as many as 475 people died in accidents where speed was the primary factor.

The delay in accepting the equipment into service has been down to an official requirement that the system has been verified (more than 1500 in-flight measurements were performed!) and endorsed by the Spanish Centre of Metrología. To measure the velocity the helicopter needs to keep the target vehicle in direct sight, usually from an altitude of about 1,000 feet [300 metres], from where it can detect with precision velocities of up to 360 km/h as long as the contact is maintained for a few hundred meters. The system – erroneously termed 'radar' locally – is totally passive and uses a high-definition camera in the MX-15 that follows the car automatically, while special software algorithms measure the speed of the vehicle. A high-powered spotterscope simultaneously reads the registration of the vehicle using ANPR. The resulting data can be stored on-board and instantly transmitted to the ground as well. The system algorithms verify accuracy of the measurements and throw out false readings, achieving speed measurement accuracies at less than 2% error. According to Trafico this is the world's first officially certified airborne passive speed measurement. Thanks to its official certification we can expect to see more of these on European roads and even waterways!

Editor: Wescam confirms it is already putting the final touches on an improved MX-15 that can measure the speed and read the license plate at distances exceeding 1,500metres.



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UNITED KINGDOM

CIVIL AIR PATROL: Exercise Overflow was one of the biggest counter flooding exercises to take place in Northern Ireland, the Skywatch Civil Air Patrol (NICAP) provided air observation and air to ground images of the flooded areas using light observation aircraft and unmanned aerial vehicles, drones, to the Northern Ireland Fire & Rescue Service.

During a long, intensive day of flood related scenarios including crashed vehicles, road closures, stranded house occupants, a boat fire and a chemical leak. The CAP, operating from a forward operating base at Enniskillen Airport deployed two aircraft, a Foxbat F22 and an Ikarus C42 to provide an aerial patrol over the flooded areas and to respond to requests for air support from the exercise control room at Lisnaskea.

During one of the patrols it was a crew from the CAP that was the first to identify a potential hazardous chemical incident in the form of two floating chemical containers. Later in the day, in the early evening, the NICAP drone flew over the local marina to showcase the image analysis potential of an unmanned aircraft to a number of agencies who were attending the exercise. The drone would be particularly relevant should an incident take place at an oil refinery or a nuclear power station where hazardous material is assumed to be released into the atmosphere. [CAP]

NPAS: Although the North West section of NPAS was expected to be the easiest to bring on line a series of different negative events appear to have made the transition anything but smooth. Much of the negative information flow is coming from anonymous dissent expressed on the Internet but there are other sources that back up the 'rumour' material.

Because of the air of suspicion surrounding NPAS the departures of staff have placed additional strains on those remaining and they are not all necessarily in the right place. It is a shortage of police officers, the observers, mainly because it is they that are threatened by Winsor pay cuts and departing in significant numbers.

The extraction of one aircraft from normal North West tasking to cover a high profile court case did not help at a time when the Greater Manchester area MD902 Explorer was off-line for scheduled engineering work. In a further element of misfortune the aircraft scheduled to replace it, another 902, went unserviceable. The serviceability of the Explorer has always been a cause for concern and now that the performance of the machines is not protected by the wish of individual forces to publicly deny any problem it is clear that the 'gloves are off' in discussing the situation.

That said the 902 is not about to leave the scene, it is just a growing acceptance that it has a different maintenance cycle to the EC135 and that difference makes interoperability challenging at times. The EC135 maintenance load is lightened by its ability to have many elements undertaken by an on-site engineer, that leads to a major service period based wholly on hours flown that can be just a few days long. An 'annual' that can be taken without a set dateline, for low time aircraft this can easily be 15 months between major maintenance but for high time aircraft it might require two periods of downtime in a year. In contrast the 902 has a calendar based regime that strictly requires two or more week's downtime annually. The trick with the forthcoming mixed fleets is going to be how to make it all work together.



April 3 sees the North East element of NPAS join up. The existing units involved are West Yorkshire [the lead force for NPAS], Humberside and South Yorkshire with MD902 aircraft and Northumbria/NEASU and Cleveland with the EC135.

South Yorkshire were outside the original plan for NPAS but local pressure led to the Police Authority setting up an additional resource to cover their area in addition to NPAS. Like many of the other police operations this has led to problems primarily caused by the Winsor pay settlement with downsizing to the preferred unit size [8] and the consequent loss of key personnel.

Unfortunately for South Yorkshire the rot was to go further. The Sheffield based unit was one of the few with an in-house engineering set up employing three engineers, that resource has now gone resulting in the aircraft being roaded to Police Aviation Services in Staverton for it to be readied for NPAS operations on April 3.

Although the engineering set up was a cornerstone of the South Yorkshire operation it too was unable to maintain its engineers. Rumour suggests that they walked out but it is a little more complex than that. One moved on to another post last summer and the workload fell to the remaining two - one finally left through sickness last month and the decision appears to have been made to close the engineering support from April 3 and make the remaining engineer redundant.

It all leads to a long held thought that all these small police engineering support operations are unsustainable and may well go in time.



Like many UK air units South Yorkshire has seen many staff departures and these two Twitter Pictures of a special cake released by the unit to mark the departure of their former UEO suggests a wider story. ©South Yorkshire Police ASU



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NORTHERN IRELAND: As expected the PSNI are about to get a second Eurocopter EC145. This latest aircraft is to be delivered in time to bolster resources for the forthcoming G8 Summit in June. The current helicopter inventory consists of an owned EC145 and EC135, along with a leased BK117 each of which provides a high annual utilisation, logging an average 1,100 flight hours yearly per helicopter.

The new EC145 is being role equipped at the Eurocopter UK Oxford plant but day-to-day maintenance, logistical and technical services are provided locally around the clock at the customer's base in Northern Ireland.

"With this new EC145 order, Eurocopter has further reinforced its position as the preferred provider of rotary-wing mission capability for law enforcement agencies in the UK and Ireland," explained Markus Steinke, Managing Director of Eurocopter UK. "We are proud that the skies above the British Isles are patrolled by our capable and cost-effective products. In times of government budget austerity we prove again that our solutions make a big difference".

Steinke added that the Police Service of Northern Ireland's EC145 acquisition maintains Eurocopter's 100% market share for police helicopter fleets in Northern Ireland, the Republic of Ireland and Scotland, along with a 70% share for England and Wales, accumulating to a total fleet of 30 EC135/EC145 helicopters. [ECUK]



A rare view of the interior of the completions hangar at the Eurocopter base in Oxford © ECUK

The Guardian newspaper ran a story supposedly started by the BBC stating that the PSNI is expected to buy two unmanned craft for the forthcoming G8 summit in County Fermanagh in June. The aircraft can relay live pictures from high-quality cameras and are flown remotely. The type involved was not released but the reported cost is supposed to be around £1M which rules out the typical quad rotor electric type as they cost a mere £30,000 each. World leaders such as US president Barack Obama are expected to attend this summer's economic gathering, and a massive security operation is planned at the luxury Lough Erne golf resort which is hosting the conference.

The PSNI has told the Policing Board that it wants to buy the drones for use during the G8 summit and afterwards to combat terrorism and crime. The story came out after the matter was added to a briefing agenda to the board in advance of a meeting about the policing arrangements for the G8 summit." [Guardian/BBC]

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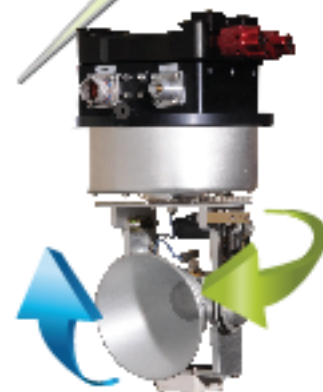



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UNITED STATES

FLORIDA: Polk County Sheriff's Office is purchasing a new \$2.5M MD500E helicopter to replace one of two 41-year-old Bell OH-58 models currently in service.

Funding for the purchase has been through good housekeeping within Polk County. Any annual surpluses have had a portion set aside for an eventual new aircraft purchase and to plan they have been able to buy the MD outright.

PCSO will be reducing one of the Bell-OH58s to parts to ensure the other remains flight worthy. The spare lighting and FLIR systems will be moved into the new craft.

The PCSO operation is a seven days a week commitment to a county that's 2,010 square miles and 'impossible' to patrol without helicopters. [Media]

MARYLAND: The State Police now have started accepting their new helicopters into service. The AgustaWestland AW139 helicopters have arrived at Martin State Airport in Middle River, the first of ten the state has contracts for with AW. They will replace a current fleet of AS365N Dauphin helicopters, mostly over ten years old.

The new helicopters have been bought to enable the Maryland State Police Aviation Command to continue its unique multiple mission capability of Medevac, search and rescue, law enforcement and homeland security. [Media]

NORTH CAROLINA: As part of ongoing efforts to operate more efficiently the N.C. Department of Transportation plans modifications to its fleet of aircraft to save an estimated \$500,000 annually.

The plan includes selling two fixed wing aircraft and one helicopter. Proceeds from the sale of the three aircraft will then be used to purchase newer, more cost-effective aircraft. The capability of the current fleet is more than the state needs for routine travel, while the re-



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vised fleet will have significantly lower operational costs without compromising safety or performance. The changes will be completed without any appropriations from the General Assembly and with no cost to our citizens.

The state's air fleet is used to survey disaster recovery efforts, facilitate economic development activities and conduct air surveying/photogrammetry for building new roads and bridges. The state fleet also is used to transport leadership for official state business.

Phase I of the fleet transition will consist of selling the Cessna Citation Bravo Jet and Sikorsky helicopter. The proceeds of these aircraft sales will be used to purchase a new turbo prop aircraft that can be used as a passenger and photogrammetry aircraft, as well as a Bell helicopter. The new helicopter will be shared with the State Highway Patrol to help reduce the overall cost to the state.

Phase II of the fleet transition would include the sale of one additional fixed wing aircraft and procurement of one smaller turbo prop aircraft. [TV3]

Ed: The Highway Patrol operates a fleet almost wholly consisting of DoD surplus Bell helicopters. Some time back they expressed an interest in obtaining a modern helicopter, this may be the moment.

PENNSYLVANIA:

In what may have been a unique operation a medical helicopter was used to transport a wounded police dog. Police requested an air ambulance to transport one of their dogs to an animal hospital after it was shot. The carrier was a Life Lion medical helicopter.

The call went direct to the EMS dispatcher who passed the request to Lynn Doherty, the Life Lion administrator on call that night. She agreed.

The patient was Zeke,



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the Harrisburg police dog shot by a fleeing crime suspect in Lower Paxton Township. The police dog sustained injuries, including a torn jugular vein, and was losing a lot of blood. Life Lion was summoned and Zeke was flown to an emergency facility for animals. The facility is 18-24 miles away by ground transport. The two-and-a-half-year-old Belgian Malinois lost about 15% of his blood but is expected to fully recovery.

In the incident the villain of the piece, Skyler Stewart, 20, was shot dead by police. The canine transfer is being treated as a 'one off' and while they would probably be repeated under identical circumstances it is not expected that a non-emergency services animal would be catered for. [Pennlive]

TENNESSEE: The Tennessee Highway Patrol has now permanently assigned a Bell 206B JetRanger helicopter to West Tennessee. The machine and pilot, Trooper Lee Russell, will be stationed in Jackson.

The Jet Ranger is equipped with thermal imaging, night vision goggles, a high-powered search light and specialised radios. [wbbjtv]

TEXAS: In recent weeks more stories reflecting differing views on the capability and public acceptance of unmanned systems have shown a level of confusion in the US.

In a hearing held by the US Senate Judiciary committee on March 20, a number of senators expressed privacy concerns over unmanned aircraft, and made it clear there is still much work to be done on the legal front regarding an individual's right to privacy.

The FAA recently predicted approx. 7,500 civilian UAVs will be in use within five years after the agency grants them greater access to US skies, Congress having duly directed them to provide drones with widespread access to domestic airspace by 2015, but the agency is behind in its development of safety regulations and is not expected to meet that deadline even without the interference of the lawmakers.

Some senators expressed severe privacy concerns. Senator Ted Cruz, a Republican from Texas said he had "very deep concerns about the government collecting information on the citizenry, and with the ease and availability of drones, I think there is real concern that the day-to-day conduct of American citizens going about their business might be monitored, catalogued, and recorded by the federal government."

In Arlington the stories have been positive and training is about to give way to operational use. The capability to actually now use (instead of just training with them) unmanned aerial systems for actual missions will be a great addition to APD's crime fighting and search and rescue capability.

The police department has two small Lepton helicopter Unmanned Aerial Vehicles (UAVs). The Federal Aviation Administration (FAA) has granted permission for the Arlington police to fly these unmanned aircraft under certain circumstances: they must fly under 400 feet, only in the daytime, be in sight of the operator and a safety observer, and be in contact with the control tower at the nearby Dallas-Fort Worth airport – one of the busiest in the country. The UAV in question is the Leptron Avenger, made in Utah by Leptron Industrial Helicopters. They are about 5 feet long and can stay aloft on battery power for about an hour. The Arlington Police originally acquired its first UAV with a grant from the Department of Homeland Security to support security for the Superbowl.

Sgt. Christopher Cook, representative of the Arlington Police department, stated that the small craft will only be used in situations that a manned helicopter would be used, but will not be used for police pursuits or for traffic enforcement. Typical uses might be to take crime scene photos from above, or to look for a missing person.



UNITED KINGDOM

CORNWALL: Following a tender process, Medical Aviation Services (MAS) was selected ahead of two competing companies shortlisted including the existing operator, Bond Air Services.



The new deal will see MAS operating two helicopters for the charity to cope with demand and provide a dedicated back up service.

In the future the new air craft will meet the European rules allowing air ambulances to operate night-time missions in the UK.

The move to a new operator marks the end of 27 years of the operator relationship between the Cornwall Air Ambulance Trust and Bond Air Services.

The new contract comes into force in December 2014, giving the new operator and charity operations team 20 months to acquire the new aircraft and fit them out for service as air ambulances.

YORKSHIRE: Increasingly the various UK charity sector is proactively highlighting their services to children. In the past no group of customer patients was highlighted for their age or gender but the financial threat of the Children's Air Ambulance and its umbrella organisation TAAS has apparently re-focussed the media output.

One of the latest stories is that specialist child doctors have praised the work of Yorkshire Air Ambulance in helping to save the lives of critically ill babies and children across the

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county.

Over the last year Yorkshire Air Ambulance has worked with Embrace – the Yorkshire and Humber infant and children’s transport service – to rapidly get specialist medical teams and equipment to local hospitals to deal with paediatric emergencies.

Last month the YAA helicopters flew two missions for Embrace, taking paediatric medical teams from their base in Barnsley to help treat very sick babies in Scarborough and Scunthorpe.

Dr Steve Hancock, lead clinician for paediatrics at Embrace, said: “Although the vast majority of our journeys are done safely and appropriately by road, there are situations where the option to use the helicopter is crucial.

“It has proved really valuable to be able to use Yorkshire Air Ambulance to get a team and equipment out to critically ill babies and children in some of our more distant hospitals.

“They can then assist the local medical team in providing life saving emergency care while the road ambulance follows on to transfer the patient to paediatric intensive care units in Sheffield, Leeds, Bradford or Hull.

“It can be 90 minutes later before the road ambulance arrives at some of the more distant hospitals in the region. So, the arrangement with Yorkshire Air Ambulance has definitely been a real step-up in our ability to equitably provide a service to the children of Yorkshire and the Humber.”

Embrace, which is run by Sheffield Children’s NHS Foundation Trust, provides a 24 hours a day, 7 days a week, transport service for critically ill neonatal and paediatric patients in the Yorkshire and Humber region.

Whilst predominantly a land based service, Embrace also provides a fixed wing Aeromedical service moving patients both within the UK and abroad. Embrace can safely transport premature infants, children and adolescents requiring low dependency, high dependency or intensive care. [YAA]

UNITED STATES

ARKANSAS: Arkansas Children’s Hospital (ACH) has signed a contract to purchase two Sikorsky S-76D™ helicopters for its Angel One® intensive care medical transport unit.

The new aircraft will replace the two S-76® helicopters already flying the Angel One team throughout the greater Arkansas region. The Sikorsky helicopters have been active since 1992, responding to critical calls to transport infants and young children to the hospital for the unique care it provides.





The Angel One fleet is equipped with dual-litter LifePort® interiors, including specialty equipment such as ECMO units, blood-bottle hangers and oxygen systems to treat infant and paediatric patients in distress. Each helicopter flies about 900 hours per year from its base in Little Rock, Arkansas. The children's hospital coordinates with a network of local hospitals that depend on ACH to respond to cases that require an expertise in infant and child medical care. [Sikorsky]

INDIANA: Metro Aviation located in Shreveport, Louisiana has taken delivery of a new Eurocopter EC145 for Memorial MedFlight, the air medical and critical care transport team for Beacon Health System's Memorial Hospital of South Bend. Metro will perform the completion of the new aircraft.

The IFR equipped EC145 was chosen for the larger cabin, larger payload and range as compared to their current EC135. Metro intends to deliver the aircraft in May as Memorial MedFlight transitions from their current vendor to Metro Aviation. The EC145 will be based at South Bend Regional Airport in Indiana. South Bend, the 4th largest city in the state is on the St. Joseph River near its southernmost bend, from which it derives its name. The city has around 101,000 residents, with a population of 316,663 in the metropolitan area. [Metro/ PAR]

MISSOURI: Bell Helicopter have signed an agreement with LifeFlight Eagle for the supply of two Garmin G1000H™ integrated glass flight deck equipped Bell 407GX aircraft for service in the Kansas City area.

LifeFlight Eagle, established in 1978, is a non-profit organisation serving areas surrounding Kansas City in Missouri and Kansas. The two new Bell 407GX aircraft will replace their two hard-working analogue Bell 407s now ten years old.



The Garmin in an Enstrom [see page 22 for the story]

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SEARCH & RESCUE

CHINA

SAR: China's Ministry of Transport Rescue and Salvage Bureau has signed a contract for the supply of four Sikorsky S-76D™ search and rescue helicopters, with an option for another four next year, to further enhance China's maritime search and rescue capabilities.

China's Rescue & Salvage Bureau first introduced Sikorsky S-76 search and rescue helicopters in 2000, and this is the fourth contract it has awarded Sikorsky for the S-76® series of helicopters. When these four aircraft are delivered, MOT will operate a SAR fleet of

twelve S-76 of various versions, these forming the backbone of China's aerial search and rescue capabilities for maritime operations.



RUSSIA

Russian Helicopters has delivered two Mi-171 transport helicopters to Russian aviation company SKOL Airline, LLC. The Mi-171, built at the Ulan-Ude Aviation Plant, are fitted with special lifting and transport equipment including an on-board boom and winch able to lift loads of 150kg (approx. 330lb) and an external hoist with capacity of up to 4,000kg (approx. 4400 lb). Shock-absorbing Fischer seats have been installed to improve comfort and safety for pilots.

SKOL Airline operates various Mi-8/17 series helicopters including the medium Mi-171, Mi-8AMT and Mi-8MTV, as well as the heavy Mi-26T, which are frequently deployed on UN peace-keeping and humanitarian missions around the world. These helicopters are used for transporting cargo, medicines, materials and passengers and to provide humanitarian aid. Helicopters previously supplied to SKOL include three Mi-171, two of which were delivered in 2009 and one in 2010.

UNITED KINGDOM

Ahead of any official announcement, in mid March the Sunday Times reported that US based company Bristow Helicopters had won the UK SAR contract worth approximately £3 billion operating with Sikorsky S92 and AgustaWestland AW189 helicopters. Their prediction was finally confirmed as the month drew to a close.

Bristow were the operators of the UK Coastguard operation using Sikorsky S-61s for many years but lost it to CHC who introduced the concept of a mixed fleet of the Sikorsky S-92 and smaller AW139 to the civilian operations. CHC were eliminated from the competition early leaving Bond and Bristow as the final competitors. Bristow had already been chosen as the operators of the interim UK Coastguard SAR operations.

FUTURE SAR SIGNED

The Department for Transport has signed a contract with USA based Bristow to provide all search and rescue helicopter services in the UK after the military withdraw in 2015. Helicop-

ters will be able to reach a larger area of the UK search and rescue region within one hour of take off than is currently possible, and based on historic incident data it is estimated that there will be an overall improvement in flying times to incidents of around 20% (from 23 to 19 minutes). Presently, approximately 70% of high and very high risk areas within the UK search and rescue region are reachable by helicopter within 30 minutes. Under the new contract, approximately 85% of the same area would be reached within this timeframe.

Although much has been made of the American ownership of Bristow the company does still bear the name of the British creator of one part of this now giant group - Alan Bristow - and there is 24 years of experience providing search and rescue helicopter services in the UK.

Under the new contract, 22 new helicopters will operate from ten 24/7 locations around the UK replacing a fleet of military Westland Sea King's and the existing contracted UK Coastguard helicopters. Ten Sikorsky S92s will be based, two per site, at Stornoway and Sumburgh, and at new bases at Newquay, Caernarfon and Humberside airports

Ten AgustaWestland AW189s will operate, two per site, from Lee on



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Editors note. It has already been noted that there are two helicopters unaccounted for in the total, possibly fleet spares.

GAP SAR

The first of four Sikorsky S-92 helicopters that will service the U.K. GAP SAR contract starting this summer should now be undertaking training with the Bristow crews. This new fleet will introduce night vision goggles to the civil SAR operations.

"For the first time in European civil aviation, a large multi-engine helicopter will be able to be flown under night-vision goggle (NVG) technology," says GAP SAR Project Manager Ian Middleton.

"The Department for Transport and the Maritime and Coastguard Agency contracted Bristow to provide SAR helicopters that can operate in Northern Scotland in all weather conditions, day and night. Our GAP SAR helicopters are entering a completely new theatre of operations using this technology."

Bristow invested in the latest NVG technology in order to give GAP SAR crews the very best equipment to be able to operate safely. The latest-generation image intensifier tubes used in NVG are difficult to obtain and required an export license agreement with the U.S. State Department.

In addition to night vision capabilities, other SAR-related features on the S-92 represent the latest and most comprehensive technology available, including:

An L3 Wescam MX-15iHD FLIR/TV camera turret that provides infrared search capability and a high-definition video camera in a fully stabilized and movable turret beneath the nose
A Honeywell Skyforce Observer 2000 mapping system in the rear crew mission station. The system provides detailed mapping and search information on a 20-inch LCD colour touch screen

Multiple communications systems, including high frequency, VHF AM/FM radio, UHF radio, satellite communications, satellite tracking of the helicopter, marine vessel transponder, secure communications capabilities and wireless intercoms

A multiple casualty-stretcher arrangement in the cabin

A long-range fuel tank to increase operating range

A dual Goodrich rescue hoist installation

A Nightsun XP steerable searchlight

The GAP SAR contract start date is June 1, with the transition of the Sumburgh base from the present contractor to Bristow. The transition of the second base, Stornoway, will take place on July 1. As with the future SAR operations, two S-92s will be stationed at each base.

In the past 40 years Bristow crews have received 33 awards for 21 SAR missions, including six Chief Coastguard's Commendations, awarded for bravery or exceptionally meritorious service; two Coastguard Rescue Shields, and three Edward & Maisie Lewis Awards.

In November 1997 Bristow was presented the Prince Phillip Helicopter Award for the rescue on the MV Green Lily.

In 1993 the Queen's Commendation and the USA Crew of the Year were awarded to a Bristow crew for the MV Lunhod's mission, in which 60 Russian seamen were rescued. Bristow rescued a record 32 survivors in one mission.

In 2001 the MV Hansa rescue led to the award of the Queens Gallantry Medal to a Bristow SAR winchman. Three other Bristow crewmen received the Queens Commendation for



Bravery in the Air.

In 2002 the Bristow Stornoway crew flew the longest range civil SAR mission of 293 nautical miles to the MV Muska. This led to the Coastguard Commendation for Meritorious Service.

JIGSAW

In addition to the civil UK Coastguard operations Bond has been providing SAR services in the North Sea since 2006, during which time it has flown over 330 rescue missions. Bond's offshore SAR operation comprises two dedicated, specially-modified Eurocopter Super Puma AS332L2 Mark II helicopters under a long-term contract with BP to provide 24-hour airborne SAR and medical evacuation in a unique UK BP North Sea initiative known as Jigsaw. One of the high-specification, twin engine aircraft is based at Sumburgh Airport, Shetland, the other on BP's Miller platform, in the central North Sea. Bond Offshore Helicopters provides Energy Support services for the oil and gas industry, and Search and Rescue support, in the central and northern North Sea and west of Shetland.



AWARD

Two Bond Offshore Helicopters (Bond) Search and Rescue (SAR) crewmen have been awarded the Billy Deacon SAR Memorial Trophy 2012, in recognition of their key role in a dramatic North Sea rescue last December. The award honours SAR winchmen and operators who have shown great skill and courage in carrying out rescues over land or sea within the UK.

As part of a multi-agency rescue effort coordinated by the Coastguard, one of Bond's SAR aircraft was first to reach the rig standby vessel Vos Sailor. Despite extremely poor weather and sea conditions, winchman Andrew Cowx volunteered to remain on the deck of the stricken vessel for an hour, to manage the rescue of three remaining members of the ship's crew, after winch operator Paul Walters had already lifted eight members of the crew to safety.

The Vos Sailor had lost all power after being hit by a wave, which meant that rescue operations had to be conducted in the dark, and with considerable heave and roll of the vessel. Cowx had also badly injured his foot whilst being lowered onto the vessel. Before rescue aircraft arrived on the scene, one member of the Vos Sailor crew had unfortunately lost their life.

The Billy Deacon SAR Memorial Trophy was established to further the memory of Mr Billy Deacon who was serving as winchman on board the Bristow Coastguard helicopter based at Sumburgh, who in November 1997 lost his life during the rescue of 10 crew members from the MV Green Lily off Shetland.

The trophy is awarded by a committee chaired by the Operations Director of the RNLI and which includes representatives from the RAF, Royal Navy and Coastguard Helicopter Flights. It will be presented on 14 May, in a ceremony in London.



And not to forget the military SAR operations which are to continue for a year of two yet. The crew of RESCUE 169, the duty RAF Westland Sea King search and rescue helicopter from A Flight, 22 Squadron rescued a seriously injured crewman from a French trawler, Alf, in atrocious weather in the Irish Sea on March 21. A Royal Navy Hydrographic vessel [HMS Echo] and an RNLI lifeboat, Angle, also attended.

The French trawlerman had suffered blows to his head as his boat rose and fell up to 40 feet in 35knot winds and surging waves some 50 miles west of Milford Haven [South Wales].

With the French captain speaking little English the rescue had to use a three way translation service using the crews and coastguards on the French and British mainland's to explain how the helicopter crew intended to take the injured party off the plunging ship.

The task was easier said than done though and RAF Sergeant Rachel Robinson made several attempts to be winched on to the French boat as the swell threatened to roll the vessel over. Even as she was winched down towards the tiny deck the vessel plunged away into a trough faster than the hoist wire could be let out. At one stage it was decided to try a ship to ship rescue to transfer the injured man to the lifeboat Angle and winch from its less cluttered deck space but that turned out to be even more problematical than the winch task and was abandoned.

Meanwhile the Sea King had to leave and refuel but on returning to find the boat to boat transfer had failed it repeated the attempts to lift from the Alf with both Sea King pilots virtually blinded by the conditions. Eventually the lift was successful and the injured man flown to hospital with head injuries and hypothermia. [Ministry of Defence]

Ed: And we may yet see more of these operations. The Sea Kings and a dedicated SAR force are going but the RAF and Navy will still have some capable helicopters on strength for their military tasks – which will include out of UK SAR – so there will be occasions when they are involved in future domestic rescues after 2015.



INDUSTRY

Erickson Air-crane the heavy lift helicopter operator have acquired Evergreen Helicopters [EHI] an operator of a mixed rotary and fixed wing fleet. The new group will have a fleet of 64 additional aircraft, consisting of both rotary and fixed-wing aircraft serving a wide range of customers, including significant passenger transport and airlift services for the US military worldwide.

Under the terms of the purchase agreement, EHI is being acquired for \$250M, consisting of \$185M in cash and a mixture of unsecured promissory notes and Erickson Air-Crane shares. The transaction is expected to be confirmed in a matter of months.

Erickson Air-Crane based in Central Point, Oregon, specialises in the operation and manufacture of the Erickson S-64 Air crane heavy-lift helicopter. Erickson Air-Crane owns and operates a fleet of 18 Aircranes, which are used to support a wide variety of government and commercial customers worldwide across a broad range of aerial services, including fire fighting, timber harvesting, infrastructure construction, and crewing. <http://www.ericksonaircrane.com>.

Evergreen International Aviation, Inc. provides a broader range of product lines to the aviation market including air freight and aviation services to air carriers, aviation companies, and government agencies worldwide with a mix of aircraft types up to the size of the Boeing 747s. It has an aircraft maintenance, repair, and overhaul facility, an aircraft ground handling company and undertakes aircraft sales and leasing. In addition to these endeavours, Evergreen owns and operates Evergreen Agricultural Enterprises and is headquartered near the not-for-profit Evergreen Aviation Museum, home of the Spruce Goose in McMinnville, Oregon.

The take-over will result in major changes in Evergreen's income streams. The original smaller company saw a major seasonal income from fire fighting, that sector alone is now expected to halve in percentage terms as the income streams become broader and less seasonal in nature.

Piaggio has configured its Avanti Business turboprop aircraft as an unmanned type for military use. The P.1HH "HammerHead" UAS programme designed to offer 16 hours endurance with a payload of 500 lbs (at maximum fuel capacity).

Within the designs structural envelope, the platform is also able to accommodate, by reducing the fuel load, a higher payload (mission sensors/equipment) up to 2,000 lbs (909 Kg)

The British APCO logo features a stylized blue shield with a white wave and a group of people. To the right of the logo, the text reads: **BRITISH APCO**
Knowledge Exchange for Public Safety Communications
The Annual Exhibition and Professional Development Workshops
Manchester Central, 29 - 30 April 2013
To the left of the logo is a 3D graphic of a cube made of smaller cubes, some of which are open to show images of people and equipment.

Austro Engine, located in Wiener Neustadt (Austria), received the 1,500 hrs TBO (Time between overhaul) for the 170 hp turbo-charged Jet-A1 and diesel engine AE300

In less than one year the European Aviation Safety Agency (EASA) raised the AE300 TBO in two stages, from 1,000 to 1,200 hours and now from 1,200 to 1,500 hours. This proves once again the high quality and durability of this power plant. The engine overhaul price with approximately EUR 16,700 (USD 22,000), which is EUR 11.13 (USD 15.00) per flight hour, is the cheapest in the industry.

Austro Engine has pointed out that only one part of the AE300 is lifetime-limited within the TBO period. As the TBO periods extend based upon hour building Austro Engine's customers benefit from lower downtimes and reduced total operational costs per engine. Further improvements are in progress.

Ed: Austro Engine is part of Diamond Aircraft. Some of the reticence of potential customers in buying such as the DA-42 is the relatively low TBO offered by the engines. The engine, based on an automotive core, can only increase the certified TBO rate through use. The production line of Austro Engine is part of the factory tour included in the forthcoming PAvCon 2013.



In the wake of the recent HAI Heli-Expo in Las Vegas [see separate report] Eurocopter sent two of its new types, the EC145T2 and the EC175 on customer display tours in the USA.

Eurocopter has reported that the EC175's performance, advanced avionics, handling qualities and operational safety received 'rave reviews' during its tour. The type was being exhibited to the off-shore oil and gas sector, as well as the law enforcement and emergency medical services sectors.

Performed with the no. 1 series production EC175, the three-week multi-state tour enabled pilots, support person-

nel, managers and others to experience the EC175's capabilities first-hand during flights conducted from locations along the US Gulf Coast.

During more than 50 flight hours logged in last month's demonstrations, 285 crew members and passengers were flown in on-shore and off-shore operations from New Iberia, Lafayette and Lake Charles, Louisiana; concluding with a three-day wrap-up at Houston, Texas.

The helicopter's new Helionix avionics was widely praised by pilots who were able to assess this advanced system's flight envelope protection, pilot assistance and situational awareness in their hands-on evaluations. Helionix further extends the avionics systems already proven on Eurocopter's EC225 helicopter, and incorporates an innovative alerting and self-monitoring system.

The EC175 has been airlifted back to Europe aboard a chartered cargo jetliner, and this helicopter is to be used for follow-on demonstration tours planned later this year to several additional regions of the world.

Records set in 2012 by the second prototype of the Mi-38 helicopter have been officially registered as world records by the **Fédération Aéronautique Internationale (International Aeronautical Federation, FAI)**. It was verified and officially confirmed that five world records were set in 2012 by the Mi-38 prototype.



On August 26, 2012, during the World Helicopter Championship test pilots from the Mil Moscow Helicopter Plant (part of Russian Helicopters) set three world records with the Mi-38 in the E1h class (the FAI category for helicopters weighing 10,000 to 20,000 kg).

The first record was for altitude – flying to an elevation of 8,620 meters without a payload. The second record was for climbing speed – reaching a height of 3,000 meters in 6 minutes. The third record was also for climbing speed – reaching a height of 6,000 meters in 10 minutes and 52 seconds.

On September 10, 2012, at the testing centre of the Mil Moscow Helicopter Plant another two world records were set: the altitude record for flying with a 1,000 kg payload (7,895 meters) and altitude record for flying with a 2,000 kg payload (7,020 meters).



Rotorsim, the joint venture owned equally by CAE and AgustaWestland, has announced that ENAC (the Italian Civil Aviation Authority) has certified a CAE 3000 Series AW139 full-flight simulator (FFS), jointly developed by AgustaWestland and CAE, to Level D, the highest qualification for flight simulators. The new AW139 FFS, the third for Rotorsim, is the second located at the AgustaWestland Training Academy in Sesto Calende, Italy. This simulator is installed in the new simulation building which will include up to nine FFSs and five FTDs (Flight Training Devices) further expanding the Training Academy capabilities.

The AW139 FFS for Rotorsim features AgustaWestland-developed flight dynamic model, avionics and aircraft software modelling, combined with CAE core simulation technologies, including: CAE True six degree-of-freedom (DOF) electric motion system and high-performance vibration platform to replicate vibration cues critical to helicopter pilots; a high-fidelity CAE Medallion-6000 visual system; and a direct projection 210 degree by 80 degree extreme field-of-view dome display system. This new AW139 FFS also features important mission kits such as SAR autopilot modes, FIPS (Full Icing Protection System), hoist and cargo hook operations with external cameras, EURONAV V digital map, AIS transponder, cockpit central display and floatation system.

The Rotorsim training centre in Italy is located within the AgustaWestland 'A. Marchetti' Training Academy and now houses three CAE-built FFSs. Two of these simulators feature CAE's revolutionary roll-on/roll-off cockpit design, enabling cockpits representing the AW139 and three variants of the AW109 to be used in the two simulators. Rotorsim also offers training on a CAE-built AW139 simulator located at CAE's North East Training Centre near New York City.

Enstrom Helicopter Corporation has been working on achieving certification for the 480B in Argentina. The application was completed May 1, 2012, and since then it has been an ongoing process to complete the validation. During the process, Enstrom created a dedicated Rotorcraft Flight Manual Supplement for Argentina. Six officials from the Administración Nacional de Aviación Civil (ANAC) visited from Córdoba, Argentina from November 26 through November 30 to perform preliminary certification review items. There was also one FAA official in attendance.

Enstrom is currently working on delivery of two aircraft to Argentina. The aircraft are expected to ship first quarter of 2013 upon approval of the Supplemental Type Certificate (STC) for the requested optional Litter Kit. Argentinean type certificate No. HE-1201 for the Enstrom 480B was issued January 7, 2013.



Garmin International Inc. has announced that Enstrom has selected the G1000H all-glass, integrated flight deck for its 480B introduced at the HAI Heli-Expo in Las Vegas.

The G1000H integrates all primary flight information, navigation data, communications, terrain awareness, traffic, weather, and engine parameters on two 10.4-inch, high-resolution displays. The G1000H's reliable Attitude and Heading Reference System (AHRS) provides accurate, digital output and referencing of the helicopter's position, rate, vector and acceleration data. The G1000H also incorporates a large moving map, and supports a wide array of safety enhancing features, including Helicopter Synthetic Vision Technology (HSVT™), Helicopter Terrain Awareness and Warning System (HTAWS), data link weather, Garmin's traffic awareness and collision avoidance system, and more.

Rolls-Royce delivered the 31,000th M250 engine to Enstrom Helicopter Corporation for installation in a 480B training helicopter destined for the Japan Ground Self Defence Force.

The Rolls-Royce M250 engine line has amassed an impressive 223 million flight hours over the past 50 years of operation and has been continuously updated through a series of innovative design improvements during the lifetime of the program. The M250 engine continues to be installed on new applications, including the latest variant – the M250-C47E – on the US Navy's Northrop Grumman MQ-8C Fire Scout.

Aviation Specialties Unlimited, (ASU) has completed night vision cockpit modifications for an AS350B2 for Era Training Center, LLC. in Lake Charles, Louisiana. Era Training Center needed their aircraft modified within a short period of time and wanted it done before the recent Heli-Expo. Through a collective effort ASU was able to complete the modification in a little more than a month.

ASU has previously modified three AW139s, three EC135s a BK117 and an AS350 for ERA Helicopters, LLC, and two BK117s, 19 AVS-9s and conducted pilot training for EraMed, LLC.

Cessna Aircraft Company is to expand its worldwide sales force by nearly 50%. As part of this effort, the company is placing an emphasis on decentralised satellite offices in global markets where Cessna's presence is well established or where the company sees opportunity for growth.

In India the **Central Bureau of Investigation** has registered cases against number of companies and individuals allegedly involved in the EH101 sale by AgustaWestland to the Indian Air Force. The targets are a mix of manufacturers in Italy and the UK, middle men, agents and past and present military employees in India.

It is claimed that even before the result of investigation is known that Indian Defence Minister A.K. Antony is leaning toward barring Anglo-Italian helicopter firm AgustaWestland from doing business in the country because of the corruption scandal.

There is a fear that such a move could set back India's efforts to modernise its military, a task that is regularly beset by delays. India plans to spend \$100 billion in the next decade on military hardware but challenges to competition results and corruption enquiries regularly intervene.

The Indian Armed Forces are on an expansion spree because of deteriorating security climate in South Asia. The Indian Army is expected to add around 70,000 more personnel to its strength of 1.13 million over the next 10 years and other groups including the police and border security formations will generate new requirements for defence and border surveillance products in India in the coming decade.

Any decision on barring AgustaWestland will initially be taken by Antony, but it will need approval of a cabinet committee.

India placed six defence companies on a blacklist last year after allegations that bribes were paid to win contracts. The companies involved included Rheinmetall Air Defence, Israel Military Industries and Singapore Technologies Kinetics, which have been barred from doing

business in India for 10 years.

The result may be that graft is more difficult but it also means that the military is unable to achieve its upgrades at all. The army has been unable to upgrade its artillery for decades because the likely sources are not available to it simply because there are a relative few very large groups providing a range of civil and defence products. Blacklisting AgustaWestland could have a knock on effect on the Finmeccanica group as a whole and that would serve to halt a wide tranche of defence companies from bidding in India.



After more than 80 hours of flight testing **Selex ES** have handed over to Corporate Aircraft SA, exclusive distributor of Beechcraft a Beechcraft King Air 350ER equipped with the company's Airborne Tactical Observation and Surveillance (ATOS) system. The end user of the aircraft and system has not been released.

Under the programme, Selex ES has been responsible for the design and integration of a complete surveillance solution for the customer's maritime patrol aircraft. The solution provided saw a Beechcraft SKA 350ER equipped with a retractable electro-optical system and ventral radome, all integrated together under the ATOS system.

The modifications, which have been certified by EASA grants the aircraft the capability to patrol for more than six hours, an equivalent performance to the VIP version of the aircraft.

The ATOS, which includes electro-optics, a laser illuminator and the T200 Gabbiano radar to provide 360 degree coverage, has been expertly integrated into the King Air aircraft by drawing on Selex ES's more than 10 years of experience with the system across a number of existing customers.

At the recent Heli-Expo **Avincis Group** and Eurocopter announced a global framework agreement, including the acquisition of 10 new EC145 T2 helicopters for emergency medical service (EMS) work. The agreement covers aftermarket support and training, as well as the purchase of aircraft for use by its operating companies across the world.

Three of the new EC145 T2 helicopters will be used to deliver life-saving EMS missions services in the UK, with the rest being destined for use in Italy, France and Spain. The initial aircraft will be delivered in the first half of 2014.

Over the past five years, Avincis has invested over €400 million on the purchase of new aircraft, allowing it to operate one of the most modern and technologically-advanced fleets in Europe. Headquartered in the UK, the Group provides central resources, global standards and systems and expertise to its 13 local operating companies.



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In addition to that agreement Avincis Group has signed an agreement with **Turbomeca** (Safran) for support of approximately 180 helicopter engines operated by Avincis' operating subsidiaries around the world.

The Memorandum of Understanding extends the provision of Turbomeca's Support By the Hour (SBH®) programme to Avincis' INAER operating companies. Bond operating companies already benefit from the SBH® service. The agreement provides for support for 14 different engine variants.

Last year the 350 aircraft operated by the group flew over 108,500 hours, conducted over 50,600 emergency health care missions, rescued more than 8,600 people at sea or on mountains, helped to put out over 7,800 fires and carried more than 175,900 passengers in the oil and gas industries.

Last year, Avincis companies flew over 108,500 hours, conducted over 50,600 emergency health care missions, rescued more than 8,600 people at sea or on mountains, helped to put out over 7,800 fires and carried more than 175,900 passengers in the oil and gas industries. [Avincis]

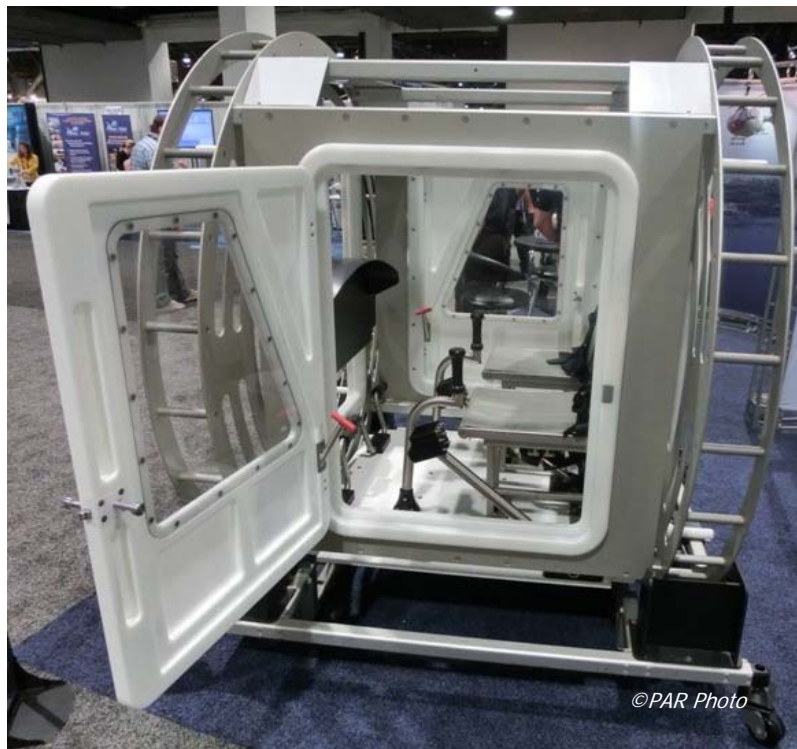


Survival Systems Training Ltd based in Dartmouth, Canada offer an aircraft ditching simulator system that is different to many already on offer to the industry. The Aircraft Ditching Egress Practical Trainer (ADEPT) represents a revolutionary leap in the delivery of aircraft ditching Underwater Escape Training (UET) at locations closer to flight operations centres, potentially saving time and money for organisations with a requirement to train their rotary or fixed wing aircrew in UET.

The normal requirement is for the crews to be transported to the specialist HUET training centre where a purpose built water tank and mechanically launched rig are sited together.

The secret of the SSTL training rig is that it is a light manually operated device that can provide an accurate representation of almost any aircraft specific exits through the provision of easily moveable seats and exits. The ADEPT can be configured to represent both

'rollover capsize' (commonly associated with helicopter ditching) and pitch pole end-over-end capsizes (normally associated with fixed wing ditching). www.sstl.com



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*Although the type is still lagging behind in certification in Europe the **Robinson R66** has now been formally certified in Russia – the announcement being quickly followed up with a story that nearly fifty of the type have now been sold in the country. There are signs that Bell Helicopter have finally woken up to the fact that there is a 'backyard' alternative to the Bell 206 JetRanger and have spoken of a replacement single engine turbine that might be an alternative to the R66 in the immediate future. Bell has to meet a sub-\$1M price point and will have to get it to market quickly.*

Kitchener Aero Avionics (KAAV) – a Canadian avionics and special mission's modifier – has announced the completion of a new upgrade package for the Cessna C208 Caravan. The heart of this upgrade is an Aspen EFD-1000C3 PFD and Class B TAWS.

The Aspen PFD replaces the problematic and expensive gyros in the King KFC-150/225 Flight Control Systems that were originally installed in the C-208 fleet. The TAWS upgrade to the GNS-530W is fully compliant with the "Enhanced Altitude Accuracy" provisions of Transport Canada's TAWS mandate. Class B TAWS is an option on the GNS-530/530W, as well as the new Garmin GTN-650 & 750 Touch screen WAAS Navigators.

This C208 upgrade package from KAAV includes the Aspen PFD and required Adaptors which enable removal of the KCS-55A HIS, the KI-256 Flight Director Gyro, the VSI, & Turn Coordinator. Standby Attitude, Airspeed, and Attitude Indicators are required.

For additional information about KAAV or this C-208 upgrade package, visit them on the web at www.kitcheneraero.com. (Canada).



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Russian Helicopters, part of state defence holding Oboronprom and a leading global designer and manufacturer of helicopters, and Denel Aviation of South Africa have opened a maintenance, repair and overhaul (MRO) centre in South Africa for Russian-built helicopters, strengthening Russian Helicopters' position in the African market.

The MRO centre was launched on 26 March 2013 in Johannesburg during the BRICS summit. The ceremony was attended by executives from Russian Helicopters and Denel Aviation, representatives of the South African government, as well as heads of operating companies and potential clients for Russian-built helicopters.

"This is an important step in the development of our global after-sales support network for Russian rotary-wing aircraft," Rostec Deputy CEO Dmitry Shugaev said. "Russian helicopters are very popular in Africa and our other core markets, so it is very important for us to be able to offer repair and maintenance services on the spot. This will help our partners in the sub-Saharan region to keep their businesses running smoothly by offering certified after-sales care for civilian helicopters when it is needed most. The high-quality service offered at our service centres around the world makes Russian equipment even more attractive to customers."

Today there are about 600 Russian-built helicopters in Africa, mainly from the Mi-8/17 series and Ka-32s.

Curtiss-Wright Controls Defense Solutions (CWCDs) has introduced the newest member of its Skyquest™ family of rugged mission displays for airborne platforms. The new 21.5" Skyquest™ AVDU5500 is the company's largest high definition (HD) display to date. This next generation video display with touch screen is designed for the most demanding helicopter and fixed wing applications. Featuring a wide array of digital and analogue inputs, the AVDU5500 easily connects to the market's leading electro-optical turrets, either directly or via any of Curtiss-Wright's sophisticated Skyquest™ VMS video distribution units. The display delivers full HD 1080p resolution and features and performance designed specifically for the demands of defence, law enforcement and SAR applications.

The unit combines the industry's best array of video viewing options and visibility features. The integral "quad screen" option enables operators to view up to four independent live video images simultaneously from any of the multiple video sources sent to the display. The AVDU5500 uses advanced optical bonding techniques to ensure maximum visibility in bright sunshine conditions and improved ruggedness.

As standard, the AVDU5500 utilizes a dual LED backlight for Night Vision Goggle (NVG) filtering purposes. When required, the display can be switched into NVG mode which

switches off the standard white backlight and turns on the NVG filtered backlighting, conforming to MIL-STD-3009 NVIS B. This gives the user full colour, high brightness imagery usable with direct sunlight during daylight operations, as well as perfectly filtered imagery for NVG operations at night. All other display bezel lighting is also NVG filtered as standard. The AVDU5500 complements Curtiss-Wright's broad range of rugged video displays and video management system products including the VDSU-1420 HD distribution unit, VRDV-5004 HD video recorder, AVDU4300 17" display and VRD1. [CW]

ACCIDENTS & INCIDENTS

28 January 2013 Bell 407 N772AL. Air ambulance of AirLife Denver of Aurora, Colorado operated by Air Methods. The Bell was returning to base after an inter-facility transport in the Denver Metro area when the crew and pilot heard a loud banging noise directly above their heads. Although no caution or warning lights were noted and no vibration or variance in the cyclic was noted, the pilot elected to make a precautionary landing in a large open field without incident. After an inspection of the aircraft it was determined that the noise was a compressor stall caused by a combination of having the air filter close to the service limit and the use of snow baffles. The filters are due for cleaning at 300hrs, and the current time was approximately 291 hrs. There was a subsequent change of practice of air filter cleaning/change from 300hrs to 200hrs with snow baffle use across the fleet. [Concern]

29 January 2013 Bombardier LearJet 31 N382AL of AirLife Denver operated by International Jet. The flight team was dispatched from Centennial to Alamosa, Colorado. The conditions at the departure airport (Centennial) contributed to collecting slush on the wheels and landing gear during the taxi out so the crew followed best practices in delaying gear retraction (this usually helps blow off collected ice and slush). As the pilots attempted to retract the landing gear they realised that not all the slush had been removed from the gear. Due to the squat switch being frozen, the aircraft systems were in ground mode. This safety system not only stopped the landing gear from being retracted but also influenced another safety system in the pressurisation. Because the aircraft systems thought the aircraft was still on the ground, no pressurisation commenced. The flight was abandoned and the aircraft returned. [Concern]

14 February 2013 Eurocopter EC145 N481LF. Air ambulance of Geisinger Life Flight of Danville, PA. The helicopter struck a flag on top of a crane used for construction on the campus of Geisinger Medical Center. The pilot landed safely without incident on the rooftop helipad of the medical centre and shut down. The aircraft sustained visible damage to the tip of one rotor blade and scratches on another rotor blade. [Concern]

24 February 2013 Helicopter. Colombian Police. Seven policemen were injured when their helicopter crashed in the war-torn Catatumbo Region in northern Colombia. It is believed the helicopter was on a drug crop eradication mission in the Tibu municipality in the northern Norte de Santander department. [Media]

2 March 2013 Sikorsky S-92 Saudi Civil Defence. A trained rescue officer died after falling from the hovering helicopter during the celebration of the World Civil Defence Day in the capital Riyadh. First Class Private Abdul Aziz Bin Abdullah Al Qah'tani was not able to survive the severe injuries and fractures he suffered when he fell 250 metres onto the car park area of Gharnata Mall. [Al Sharq] http://www.liveleak.com/view?i=b46_1363267490

3 March 2013 Bell 407 N911LL. Air ambulance of Air Link at Regional West Medical Center, Scottsbluff, Nebraska operated by Med-Trans Corporation. When lifting to operate an inter facility transfer at Scottsbluff the crew heard a thump on the port side of the helicopter.

The pilot returned to the pad a precautionary landing. No damage was found but believed to be a bird strike. [Concern]

7 March 2013 Eurocopter EC145 N909SH. Air ambulance operated by Sanford Intensive Air of Sioux Falls, South Dakota. While returning to Sanford Hospital from Prince of Peace (Mitchell, SD) with a paediatric patient, the aircraft experienced a bird strike on the pilot's windscreen. The pilot made a precautionary landing approximately 14 miles west of Sioux Falls on Maple Street. [Concern]

15 March 2013 Eurocopter AS350B2 N911KU. Air ambulance of Life Star of Kansas, Topeka, Kansas. On its way back to base from transporting a patient to a Kansas City hospital the helicopter experienced a bird strike to the left sliding door of the aircraft. The bird broke the window, several pieces of which entered the cabin. The pilot determined the aircraft was safe for continued flight and landed safely the Life Star base at Lawrence. There were no injuries to the crew and, except for the window, no damage to the aircraft [Concern].

21 March 2013 Eurocopter AS332L1 D-HEGB and EC155B1 D-HLTM. Federal Police Germany. The two helicopters crashed near Berlin's Olympic stadium during a major police exercise involving helicopter and ground police leaving at least one person dead and several injured. It is believed that two Puma aircraft and the EC155 were flying into the snow covered site. Two landed without incident but the third, the AS332L1 D-HEGB entered white out conditions and landed on top of the EC155B1. In the resultant impact and debris field one 42 years old pilot died and several male and female police officers were injured.

http://www.youtube.com/watch?feature=player_embedded&v=zKlejg9BS8

23 March 2013 Piper PA-31T Navajo N716WA. Air ambulance of Cal-Ore Life Flight, Bookings, Oregon. After take-off from Jack McNamara Field at Crescent City, California on a patient transport the pilot selected the gear up and noted that the Red "unlocked/in-transit" light remained illuminated. The pilot re-cycled the gear with the same result. The pilot then returned the landing gear to the down position, receiving the normal three green indications and returned to the Crescent City airport. The fault was found to be that the nose landing gear hydraulic actuator was slightly out of adjustment due to normal wear allowing the lock hook to not fully engage. [Concern]

27 March 2013 Beechcraft King Air 350 VH-CZO. Air ambulance of Careflight, Australia. The aircraft suffered a main landing gear failure and crashed on the main runway at Darwin Airport. The plane, Fleet number 28, was about to land at Port Keats to pick up a patient when the pilot noticed the indicator lights showed the landing gear was not down. He returned to Darwin and followed all the procedures for manually lowering the landing gear. It landed on the runway and the main left-hand gear folded. There were no injuries to the pilot or the flight nurse and the plane received minor damage. [Media]

30 March 2013 AgustaWestland A109. South African Air Force. Helicopter undertaking anti-poaching patrol protecting rhino in the Kruger National Park crashed killing five members of the SA Defence Force on board. [Media]



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PEOPLE

The crew of a Search and Rescue helicopter from **771 Naval Air Squadron** rescued 2 sailors from a stricken yacht 75 miles (120km) south west of the Scilly Isles in July 2011 and now one of the crew Sergeant Tony Russell, Royal Marines, has been awarded the George Medal.

The yacht 'Andrietta', with her two-man crew on board, was reported to be in distress in mountainous seas and gale-force winds, unable to steer, with damage to her sails and an unserviceable engine when the Royal Naval crew were scrambled from their base at Royal Naval Air Station (RNAS) Culdrose in Cornwall.

When on scene, the helicopter crew assessed that, due to the high sea state, the wind, and the violent movement of the yacht, the safest method of rescue would be to get the two yachtsmen to leave the yacht and take to their life-raft from where they could be picked up. The rescue flight's aircrewman, Sergeant Russell, was winched down, and the first yachtsman was hoisted out of the life-raft, but due to severe wave motion, gusting wind and the change in the balance of the life-raft, it capsized, throwing the second yachtsman into the sea.

Sergeant Russell recovered the first yachtsman to the safety of the helicopter and returned to find and rescue the second man, who was now nowhere to be seen.

After searching the area around the life-raft, Sergeant Russell then dived under it to check if the second yachtsman was trapped there. He duly located him, but then had to deal with the yachtsman desperately clinging to him while he released himself and his survivor from the various ropes and lines now tangled around them.

This done, Sergeant Russell and the second yachtsman were safely lifted to the helicopter.

The longstanding head of Eurocopter, **Dr. Lutz Bertling**, plans to leave the EADS division in favour of Berlin-based Bombardier Transportation – a railway train company. Although there have been suggestions that he may have moved as a result of the recent grounding of the Super Puma the timescale appears much too short and it is likely that it is nothing more than a career move.

It is likely that the post at Eurocopter was simply a job for Lutz, but in my opinion he did it so well and you could actually understand what he was saying and what he appeared to be thinking – always difficult for his second language projection.

Bertling, 50, was appointed CEO of Eurocopter in November 2006, taking over from Fabrice Brégier, who moved onwards and upwards within EADS to become COO of Airbus. Bertling was quick to build upon the dynamically developing helicopter company that Brégier had left and continued if not accelerated its momentum, making Eurocopter one of the fastest-developing helicopter manufacturers in the world.

EADS has now appointed Guillaume Fauray as the new CEO of Eurocopter from 1 May. Fauray joins Eurocopter from Peugeot S.A., where he has served as Executive Vice President for Research & Development since 2010 and as Member of the Managing Board since 2009.

Forfar businessman **James Gray-Cheape** has been appointed the country's first volunteer regional ambassador for Scotland's Air Charity Ambulance (SCAA).

The national charity will provide Scotland with its first charity funded air ambulance helicopter, based at Perth Airport.



MOVE ALONG THERE PLEASE

Two Quebec inmates climbed up a rope into a hovering helicopter to make a daring day-light escape from a jail northwest of Montreal, authorities said, but both were later recaptured.

The escape is but one of fifty that have taken place in the years since helicopters became an accepted part of society but was perhaps a little more interesting in that the chosen tool for the escape was one never designed for such escapades – the Robinson R44.

The R44 Raven 1 C-GMTQ operated by Heli-Tremblant Quebec Helicopters was more used to undertaking training and trips around the sights for the pilot and no more than three customers so having it undertake the equivalent of a long line rescue with a pilot and two armed people already aboard before the rope was dropped in the hover so two others could grab it and the landing skids for a short trip across the prison threshold to freedom was somewhat outside the operators manual.

Quebec Provincial Police arrested four people about 50km (30 miles) north of the Saint-Jerome jail from which the inmates escaped. Two of those arrested were 36-year-old inmate Benjamin Hudon-Barbeau and 33-year-old inmate Danny Provencal.

The rope was found in the woods a short distance away and it's speculated that the convicts met up with others involved in the daring breakout plot and possibly drove off in a Cadillac Escalade to put distance between themselves and the prison.



An attempt to break out of a Russian penal colony the day before was less successful. Prison guards foiled the 'Hollywood-style' attempt to spring two inmates the colony in central Ukraine despite being well armed.

A helicopter carrying two armed accomplices of the inmates carrying a dummy Kalashnikov assault rifle landed in the Petrovskaya penal colony but was stopped from leaving by the prison guards.

UPCOMING EVENTS

PAvCon – POLICE AVIATION CONFERENCE 2013

The 2013 edition of this conference and exhibition organised by Police Aviation Research, publishers of PAN, is to be held on 21-22 May 2013 at Wiener Neustadt, Austria.

Planning for the event is going well and both industry and the police are showing a high level of support. There are still about six weeks to go to the event and historically the final 2-3 weeks result in a flurry of late booking confirmations.

The event is to take place within the aviation museum at the heart of the Diamond Aircraft factory in Wiener Neustadt giving a fully aeronautical flavour to the conference programme. PAvCon will be given access to five elements at the venue, a 100-seat conference programme, an inside exhibition area and the museum exhibits within the museum building, a static display park immediately outside and factory tours of the adjacent Diamond Aircraft factory and its associated Austro Engine plant. In addition there will be aerial displays of technology.

Currently the static display area includes displays from Airborne Technologies, Diamond Aircraft and Eurocopter with operational EC135T2 helicopters in both the police and air ambulance roles already slated to be on-site. As it is their home territory it can be expected that the full range of Diamond products will be on-hand for inspection by delegates.

PAvCon is not just about the daytime conference, exhibition and tour schedule; it has long been highly regarded for its opportunities for industry and customers to mingle together – Networking – before, during and after the event and this will continue.

It is expected that some 25 exhibitors will eventually be signed up in the coming weeks, this will double the number already contracted. Police from Australia, Austria, Belgium, Czech Republic, Spain, United Kingdom and the United States are signed up others will confirm this month.

By going to the event web site www.pavcon.org you can keep up to date with the latest situation relating to exhibitors and delegates. On the site you will find booking forms for Exhibitors and Delegates and, as ever, all serving police and emergency services professionals go free.



Due to unforeseen circumstances the dates for Securing Asia 2013 have been changed from 17-18th June to 24-25th June 2013.

17 September 2013 The ninth UK Business & General Aviation Day - BGAD13 - will take place on Tuesday September 17 at the regular venue of Cambridge Airport. The floor plan for BGAD 13 has now been finalised, it enjoys the same layout as last year, following the popular move to Cambridge Airport's newest hangar. Booth costs and packages have also been maintained at the same price as 2012. BGAD exhibitors can bring aircraft or other equipment to display at no extra charge. There are varying sponsorship options available. There are some exciting plans in development to bring more aircraft to BGAD13. BGAD13 is a joint venture between EBAN magazine and Cambridge Airport. www.bgad.aero

24-26 September 2013 Helitech 2013, ExCel, Docklands, London. This premier event takes up its new venue in the east of London. Full details at www.helitechevents.com

19-22 November 2013 Milipol, Paris Nord Villepinte. The event has moved again, this time to a modern site, located close to the Paris C D G airport and TGV train station. The new site combines all the infrastructure and services needed to optimise the exhibition, the participation of the exhibitors and make the visitors' welcome. Services include an RER train and taxi station on site, a Reception gallery with a wide range of convenient services, all in all a venue dedicated to business and a real meeting place: a central esplanade, green spaces, resting areas to relax and free Wi-Fi. More details can be found on the web site www.milipol.com



4-6 November 2014 Dubai Helishow 2014 Grand Stand, Meyden Hotel, Meyden Racecourse, Dubai UAE. Strangely it is back despite less than rave reviews. To include a Military & Homeland Security Exhibition and an Air Medical and Rescue Show. Operated by The Domus Group, PO Box 5196, Dubai UAE. +971 4 328 5666 info@domusgroup.ae www.dubaihelishow.com

DIARY

10-11 April 2013 10th Tangent Link Aerial Firefighting Event, **Academy for Fire, Rescue and Civil Protection Officers (ENSOSP) and the Aerodrome des Milles, Aix-en-Provence, France.** The event will include a 1½ day conference, supporting exhibition, a static display of firefighting aircraft and live flying demonstrations. For more information please visit the website www.tangentlink.com

10-13 April 2013 Army Aviation Association of America - Quad A - Forth Worth, Texas. The major military show of the US military but opinion suggests that the current financial situation in the USA will result in it being devoid of military visitors! A disaster may be looming! www.quad-a.org

16-17 April 2013 3rd Annual Offshore Patrol Vessels Asia, enquiry@iqpc.com.sg, call +65 6722 9388 www.offshorepatrolasia.com

25-26 April 2013 Civil ISR Europe Conference & Exhibition, Gretchen Airport, Switzerland This new European based conference and exhibition to attract an international delegate base to discuss and debate the wide-ranging requirements of civil organisations and agencies to utilise manned and unmanned ISR systems and related technologies. www.tangentlink.com

24-25 April 2013 Counter Terror Expo 2013, Olympia, London. The largest international event to protect against threats for: Police, Emergency Services, Government, Military, Intelligence & Security Services, Private Sector, Large Scale Sensitive Sites, Oil & Gas, Cyber, Maritime/Anti-Piracy and Critical National Infrastructure. 9000+ attendees, 400 + exhibitors, 5 conference streams, 12 workshops and the A-Z of security and counter-terrorism solutions. www.counterterrexpocom Twitter: [@ct_expo](https://twitter.com/ct_expo)

29-30 April 2013 British APCO 2013 at Manchester Central. Organised by BAPCO, PO Box 374, Lincoln LN1 1FY, UK. +44 1522 548325 Event organisers: +44 20 79736401 www.bapco.org.uk