

Police Aviation News

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Number 218 June 2014

PAR



Flying Doctor Pilatus PC-24

Still to fly type has secured orders for outback missions - and sold out

Canada Selects Bell 429

- the Coast Guard choice is "made in Canada"

And now ... a FLIR in your pocket!

FLIR 1 hits the shelves - see page 24

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LAW ENFORCEMENT

CANADA

COAST GUARD: The Canadian Government has announced the selection of the Bell 429 as the winner of the competition to replace the BO105 fleet operated by the Coast Guard. The contract is worth up to \$172M to Bell Helicopter for the procurement and delivery of 15 light-lift helicopters within the context of the Canadian Coast Guard's Fleet Renewal Plan. The aircraft will be built in Canada.

Coast Guard helicopters support activities such as ice reconnaissance, maintenance and construction of aids to navigation and telecommunications equipment, personnel and cargo transfer between ship and shore, and they provide support to science and fisheries enforcement.

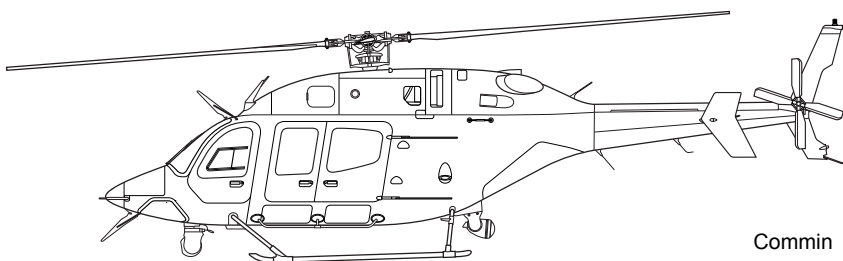
Under the contract, the first Bell 429 helicopter is scheduled to be delivered in May 2015, with one helicopter expected to be delivered each month thereafter. The procurement of these modern aircraft and associated goods and services required with new helicopter acquisitions will help renew the capabilities of the Coast Guard's existing fleet of helicopters. The purchase of 15 Bell 429s will support more than 200 direct and indirect jobs.

Under the wider Fleet Renewal Plan, the Government of Canada will also acquire medium-lift helicopters and simulators.

Ed: Eurocopter and AgustaWestland [in particular the former] continue to complain about the award of the contract and will undoubtedly continue into the next stage if that award also goes against their products.

FRONT COVER IMAGE: Australia's Royal Flying Doctor Service has ordered three of the new, yet to fly, Pilatus PC-24 medium jets with an option for another one. The order was signed last month.

For the RFDS the challenge has been how to combine a turbo-prop's strengths like its dependability and its ability to operate from short and unimproved surfaces, with a jet's speed – and that is exactly what the PC-24 will deliver. *[More on this story later]*



Commin

Meanwhile the certification issues surrounding the 429 rumble on. To the world's main certification authorities [the US FAA and Europe's EASA] the 429 remains a JAR27 certified airframe at under the 3,170kg [7,000 pounds] threshold but in some countries, including Canada, it is certified at a significantly higher weight of 3,400kg [7,500lbs] that nominally means it is at a weight covered by the more stringent JAR 29 regulations. For the regulators it is a step too far, the 429 is easily capable of being certified at 8,000 pounds so they are calling a halt on the changes now.

Those technical difference played a big part in this competition and in order to match the capability of the 429 the competitors found they had to pitch certified JAR 29 airframes [the EC145 and the AW139] to the Canadians to stand any chance.

CHINA

SHANGHAI: Russian Helicopters has delivered its civilian multirole Ka-32A11BC helicopter to the Shanghai Public Security Directorate in China against a contract concluded in 2012.

The Ka-32A11BC is certified in China and boasts a wide array of potential uses on the region. The Ka-32A11BC is designed for special search and rescue operations, fire fighting missions in China's high-rise urban centres using its specialised fire fighting equipment, including water cannon for horizontal fire fighting and a Bambi-Bucket. [Russian Helicopters]



GERMANY

FEDERAL POLICE: Keeping the German Federal Police's large fleet of EC135 rotorcraft mission-ready will be the responsibility of Airbus Helicopters based on a long-term maintenance, repair, and overhaul contract (MRO) signed with the NATO Support Agency NSPA at the ILA Berlin Air Show. The NATO Support Agency (NSPA) is NATO's Integrated Logistics and Services Provider Agency, which executed the procurement process for the service contract on behalf of the German Federal Police.

This service contract covers all 41 EC135 T2i rotorcraft in the Bundespolizei Fliegergruppe (German Federal Police Flying Squadron) fleet, with the initial aircraft to arrive at Airbus Helicopters' Kassel-Calden, Germany maintenance facility later this month. The agreement has an initial three-year timeframe, with an extension option to five years.

Maintenance services covered by the agreement include phase inspections, engine inspections, replacement of operation time limit parts (OTL), component repair and overhaul, the application of service bulletins, the compliance with service letters, the incorporation of engineering orders, as well as helicopter painting.

The German Federal Police is Airbus Helicopters' largest law enforcement customer in Europe, with 85 company-built rotorcraft in its fleet. Their relationship dates back more than 50 years, when the agency's predecessor – the German Federal Border Guard – began operating its first Alouette II helicopter in 1962. [Airbus]

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At last month's Civil ISR conference at the Connaught Rooms in London the Federal Police announced that there is a long term intention to replace all existing searchlights in the fleet with the Trakka. This searchlight is already fitted to the most recently delivered EC155 helicopters assigned to the maritime role. [PAR]

MECKLENBURG VORPOMMERN: Airborne Technologies has been awarded another contract by the police of Mecklenburg Vorpommern for the replacement purchase of a complete EO/IR sensor system and operator workstation for use in two EC135 helicopters by December 2014.

Airborne Technologies displayed the system and its S.C.A.R.-Pod (Self Contained Aerial Reconnaissance Pod) at last month's ILA in Berlin.

This month sales representatives Mr. Marcus Gurtner will be exhibiting at the PAvCon in Belgium while another member of staff exhibits at the Heli-Show in England.
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UNITED KINGDOM

NPAS EXETER: On May 11 the police and Devon Air Ambulance Trust relocated their helicopter operations to a new shared airbase at nearby Exeter Airport.

The two aircraft, a police EC145 and a HEMS configured EC135 have been moved from the former site on an open area on the east side of the extensive police headquarters in Middlemoor, following the sale of land for development by the police.

The helicopters will be housed at a well-equipped secure location at the airport which features a dedicated landing pad, hangar and purpose-built flight operations offices for both teams.

The force and the trust say there will be no change in service from either helicopter, and they will be under visual direction from Air Traffic Control when lifting or landing as well as being at a location which benefits from enhanced security and aircraft services.

The police helicopter, now owned and co-ordinated by the NPAS in West Yorkshire, is used to support ground units and supplement conventional police tactics, the air ambulance is a charity with a very different infrastructure.

Ian Payne, Flight Operations Director for Devon Air Ambulance Trust, and former UEO at the police unit said: "To work in partnership and share resources with the police is a win-win situation for all parties. We have worked successfully at a joint base for more than five years now and have achieved economies, not only in terms of infrastructure, but have also taken opportunities to share pilots and training resources."

You can follow both teams on Twitter: @NPAS_Exeter and @DevonAirAmb



PICTURED: The police NPAS helicopter with (from left) Captain Ian Kingston and Tactical Flight Officers PC Rob Caught and PC Phil Knowles at the new airbase at Exeter Airport. [NPAS]

Ed: The police air unit has been based at Middlemoor from its inception as a Devon & Cornwall asset in 1979 where the air ambulance was originally on a basic site at the airport until attracted to join the police operation to share facilities, pilotage, engineering and thereby cut costs. Under a recent EASA ruling they cannot fully share all aspects of the operation as originally envisaged but there are still savings to be made. The police force were obliged to make cost savings across their budgets and they included selling off the land in the plan and that led to requesting the air operation to move as soon as NPAS took away their air support. Middlemoor is a large site mainly laid to grass so the land loss is not particularly important. <https://www.youtube.com/watch?v=Q6OR9dMyTr0>

TEES VALLEY: Durham Tees Valley Airport, which has been the base for police air support operations across the area for almost 20 years, is now playing a key role in the development of police aviation.

The airport has invested in the construction of the new purpose-built hangar which is now the new 'home' for the national Police Air Service (NPAS) Eurocopter EC135 aircraft and is one of the five bases providing services across the seven police force areas within the NPAS North East.

The 320 square metres facility, which was built by Darlington-based steel framed building specialists Prospan, has been provided under a five-year agreement between the airport and the NPAS, and is tailor-made to the requirements of the service and the crew based at the airport. [TVA]

UNITED STATES

FLORIDA: For the second year in a row, Marion County Florida's Sheriff's Office Aviation Unit based at Ocala Airport in Central Florida hosted a safety training session for Law Enforcement, EMS, Fire Fighting, and Electronic News Gathering aviation units from around the state of Florida. More than seventy attendees from twenty-three different organisations attended the event. The safety session focused on the United States National Grid (USNG), combating complacency, and formation flying.

The USNG is a mapping point reference system of grid references commonly used in the United States. It provides a nationally consistent language of location in a user friendly format, similar in design to systems used in other nations. [i.e. Ordnance Survey]

The event was again sponsored by Dallas Avionics, FLIR, and Precision Aviation Services (PAS), a PAG company. Dallas Avionics demonstrated and trained attendees on P25 compliant radios; FLIR showed the latest high definition cameras and equipment; and PAG discussed their parts, service and support capabilities.

Lieutenant Neil Dixon and the Marion County Sheriff's Department were praised for their leadership in organising the event on an important safety related aviation topics for themselves and the thirteen surrounding counties in the region.

During the training session attendees practiced a joint search and rescue efforts by identifying coordinates using the USNG.

Marion County Sheriff's Office aviation unit was established in 1974 with the purchase of 3 Bell 47G surplus helicopters. These aircraft were used until early 1990's when they were sold. In 1993 the Sheriff's Office purchased a Hughes 369D helicopter to replace the existing ageing fleet. This aircraft served until 1997 when it was sold as surplus due to the acquisition of two military surplus Bell OH-58 helicopters. They cost just \$100.00 each and are





Air Units from 13 counties fly in for all day training at Marion County Sheriff's office headquarters including the recently delivered AS350B3e N176SC from Seminole County and the EC135P2i Shands air ambulance N912UF c/n 1012. [MCSO]

still in service today.

Although the aircraft are not state of the art local and Federal funding has injected a range of modern equipment into the operation. These purchases have included new FLIR's, a downlink, moving map, searchlights and NVG's. The primary mission of the aviation unit is to support the officers on the street with additional capabilities encompassing cooperation with other organisations including fire departments and lost person and fugitive searches and surveillance.

Currently the aviation unit has five full time flight personnel and one maintenance technician assigned to provide cover seven days a week, 24 hours a day. All full time members are certified Law Enforcement officers. The county covers some 1,600 square miles of forest, swamp, river and scrub with an overall population of 220,000



Captain Lonnie Blackburn of Ocala, Florida Fire Rescue teaches attendees about using the U.S. National Grid System [MCSO]

AIR AMBULANCE

AUSTRALIA

NORTHERN TERRITORIES: Darwin-based aeromedical charity Careflight has bought the first Nextant 400XTi air ambulance to be sold in the Asia-Pacific region.

The modified Hawker 400XP jet will join the air ambulance fleet operated by Sydney-based Business Aviation Services (BAS) but will mainly undertake work in Australia's north.

Nextant remanufactures Hawker 400XP and King Air C90s to provide high quality airframes at a cost half that of comparable aircraft. The 400XTi features Williams FJ44-3AP engines and the Rockwell Collins Pro Line 21 integrated flight deck. [AF]

FLYING DOCTOR: Australia's Royal Flying Doctor Service has ordered three of the new, yet to fly, Pilatus PC-24 medium jets with an option for another one.

The order was signed with the Swiss manufacturer at the European Business Aviation Conference and Exhibition [EBACE] last month.

Grahame Marshall, CEO of the Royal Flying Doctor Service of Australia (Western Operations), said the PC-24 would help them meet some challenges.

"When transporting patients requiring emergency medical care, time is always of the essence," he explained. "With the vast distances we service across Western Australia, covering some 2.5 million square kilometres, the challenge for us has been how to combine a turbo-prop's strengths like its dependability and its ability to operate from short and unimproved surfaces, with a jet's speed – and that is exactly what the PC-24 will now deliver.

"The other great benefit the PC-24 will bring is enhanced accessibility for our stretcher patients and staff because of its huge aft cargo door. There has been a close ongoing co-operation between RFDS and Pilatus in the definition phase of the PC-24, and we are now very excited to take the next step and become a Launch Customer for the new Super Versatile Jet."

Powered by two Williams FJ44-4A turbines producing 15000 kN of thrust each, the PC-24 is predicted to have a top speed of 425 knots and a range with four passengers of 1950 nm.

The aircraft is still in development with FAA and EASA certification expected in 2017 - Pilatus having announced that all PC-24s to be built in the first three years of production were sold over the first two days of EBACE. [Pilatus]

Ed: So far the public experience of the type has reached mock-up status, the latter was on show at the Singapore Air Show.



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EUROPE

On May 3rd Bell's 429 demonstrator N429MD was shipped into their European base at Prague in the Czech Republic. Within four days it had arrived in the UK where it was first demonstrated to Bond Air Services before going on to visit other prospective operators in the air ambulance market. It later moved on for display at the EBACE exhibition in Geneva on May 20-22 and will remain in the region to appear at the Farnborough Air Show in the UK on 14-20 July.

Bell have not released details of the tour so it can be expected to pop up just anywhere in the next few weeks.

Bell continues to lobby EASA and the FAA on the highly-controversial attempt to persuade them to flex the certification rules for the 429 that limits take-off weight to 3,000kg/7,000lb. [HeliHub]

NIGERIA

With a background of the snatch of over 200 young schoolgirls by a terrorist group the Managing Director, Flying Doctors Nigeria Limited, Dr. Ola Orekunrin, appeared on local television saying that Nigerians do not place enough value on human life. Among the statements she made was to compare the differences in lifestyles that reduced interest in supporting charity air ambulances and meant that compared with Europe and the USA there were no charity organisations set up to care for soldiers in the Nigerian Army.

Appearing as a guest on Sunrise, Orekunrin commended the efforts of the United States and others in finding the 234 abducted school girls to help in the search. This contrasted with a long period of inaction within Nigeria until the government was effectively shamed by a public disclosure.

The action was a strong indication of the value other nations placed on human life. There is



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an over reliance on government actions in Nigeria, the government is blamed for every ill, where the doctor said it is not a government issue, stressing the need for citizens to also contribute.

While on the programme, Orekunrin spoke about Nigeria's first air ambulance service, which she founded five years ago. The service ensures that patients, especially those in rural or remote areas, in need of medical care are conveyed by a helicopter or a fixed wing jet to any location where the required medical care can be given.

Shortly after the interview her organisation worked in conjunction with the FRSC and aviation partners, OAS Helicopters, to stage a mock road accident air-rescue in Nigeria. [Sunrise Nigeria]

The programme is available for a short time at: - <http://www.channelstv.com/2014/05/17/nigerians-dont-place-enough-value-on-human-life-doctor/>



SENEGAL

Senegalese operator Arc en Ciel Aviation based in Dakar is looking to expand its medevac service in west Africa, and is entertaining the possibility of flying patients to and from Europe. Chief pilot Guillaume Nicot, who has been flying for the company for four years, says the lack of other operators in the area resulted in Arc en Ciel taking up medevac simply to meet customer demands.

The growth in the medical role meant that the aircraft they initially operated - a Piper Archer II and Seneca II – were found wanting. A change to a Piper Navajo saw them through for a number of years. It offered a good range and was well suited to the mission until Avgas became scarcer.

Around six years ago the fleet was updated with a Cessna Grand Caravan. This principally performed mining missions and, amid increasing medevac requests, the company leased a Beech 90 for one year in 2010. In 2011 the Beech 90 was sold by its owner and the mining contract was lost, leaving the Cessna Caravan undertaking the ambulance role.

The Caravan can accommodate two patients in stretchers plus two medics and five other passengers, is capable of 350nm each way in accordance with EASA IFR, can land on very soft runways in all conditions and is simple in flight and maintenance terms.

The Caravan was relatively slow which meant long range flights were very long so Arc en Ciel looked towards the Beech 200 with large cargo doors but settled on a Piper PA42 Cheyenne III in late summer 2012. The company is now able to fly Dakar to Niamey in less than five hours and can perform a 14-hour mission, including 10 hours total flight time and a range of 2,750 nm, with no problems.

The Caravan is now mainly used for bush missions, and is able to connect the aircraft with the Cheyenne III when longer transfers are required.

The possibility of extending the service from west Africa into Europe is now being explored, with a jet being desirable if the economics and demand are viable. [EBAN]



UNITED KINGDOM

ESSEX & HERTFORDSHIRE: On the last day of April the 5th Aeromedical Conference 'Trauma – the Future' was held for the first time at the CEME Conference Centre, Rainham east of London. Previous events had been held at the Ford Dunton facility and this one was also in the shadow of Ford Motors being just a stone's throw from the Dagenham factory.

A good cross section of HEMS attendees from as far north as Norway but in actuality the British presence did not extend beyond Yorkshire. There was a significant military presence, certainly larger than in previous years, and potentially due to the drawback from Afghanistan.

This was a free access event thanks to sponsorship by a string of medical equipment suppliers and Medical Aviation Services. Although there were clearly representatives from other aircraft suppliers present in the delegate list they demurred from exhibiting.



GREAT NORTH: The operator of three AS365N Dauphin helicopters on HEMS across northern Britain has set up an additional support air base at Newcastle International Airport. GNAAS will still hold its main operational headquarters at Durham Tees Valley Airport near Darlington, some 45 miles to the south. It also operates an aircraft at Langwathby in Cumbria, which will also remain unaffected.

Kevin Hodgson, director of operations at GNAAS, said the Newcastle base would provide a strategic waypoint which will allow the charity to better serve the North-East as a whole and reduce flight times to what is arguably the busier area. Tees Valley is only 25 miles north of Topcliffe where Yorkshire has an aircraft that might cover emergencies in the south of the Great North region.

The GNAAS aircraft are frequent visitors to Newcastle's Royal Victoria Hospital, which is one of only 12 hospitals listed by the NHS as adult and children's major trauma centres in the country, along with the James Cook University Hospital in Middlesbrough.

Instead of flying straight back to base near Darlington, the helicopters will now be able to stop-over in Tyne and Wear, allowing for a more rapid refuelling and restocking, while providing the doctors, paramedics and pilots time to prepare for their next assignment. The new base features office space, toilet and kitchen facilities. [GNAAS]

A black and yellow police helicopter is shown in flight, angled towards the viewer. The word 'POLICE' is visible on its side. The background is a light, hazy sky.

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London

LONDON: London's Air Ambulance charity has unveiled its new fleet of ŠKODA Octavia vRS Estate rapid response cars.

Bringing uniformity to the London's Air Ambulance fleet, the new cars will now sport the same red livery as its iconic helicopter, and are emblazoned with high visibility Battenberg strips which are required on emergency vehicles.

The charity, which celebrates 25 years of saving lives this year, has worked with ŠKODA for a number of years to ensure its rapid response vehicles meet the needs of the service.

The Octavia vRS Estate with its 1,740 litres of space, can accommodate more equipment and medicine which is needed as result of the development of London's Air Ambulance service.

The fleet will typically operate at night, in adverse weather conditions or as back up in major incidents.

The charity's Physician Response Unit (PRU) also has a new ŠKODA Superb 4x4 Estate, which will act as a back up trauma car in adverse weather conditions. [Fleet News]

GREAT WESTERN: Spurred on by the recent news that its BO105 cannot use the new helipad at Bristol Royal Infirmary it has been announced that the helicopter will be replaced by a more capable modern type by the end of the summer. Like the current airframe it will be leased from Bond Air Services.

The current Bolkow used by Great Western Air Ambulance does not have engines with enough power and the charity launched a huge fundraising mission to raise £250,000 needed to lease a helicopter with a larger engine on the back of the helipad being brought into service.

Currently the GWAA has to land on the Clifton Downs, around 1.5 miles from the hospital, [Post]

Ed: The Bolkow BO105 have been a fixture of helicopter fleets around the globe for over 40 years and in so doing they have accrued some eight million flight hours.

The BO105 remains the only helicopter in the world that can execute the same spectacular aerobatic manoeuvres as conventional airplanes, and the Flying Bulls Team demonstrate its capabilities at air shows across Europe.

With the introduction of its hingeless main rotor head, the BO105 paved the way for the bearing less rotor systems of today's helicopters. In total, more than 1,400 BO105 helicopters were delivered to customers between 1970 and 2009. In addition to Germany, the



GWAA

BO105 was also manufactured under license in the Philippines, Indonesia, Spain and Canada. Some 700 BO105 are still in service worldwide today, including as air rescue and police helicopters, as transport helicopters in the oil and gas industry, and also for business travel. They completed some 125,000 flight hours in the last year alone.

The longest-serving BO105 was commissioned back in 1974 and is still carrying out aerial work on the Falkland Islands. It now has some 21,000 flight hours under its belt.

Meanwhile the type still provides a relatively cost-effective start-up airframe for new charity air ambulance operations as they grow their fundraising capabilities in the early months and years.

WEST COUNTRY: Both Cornwall and Devon air ambulance charities are warning they may be unable to take critically ill patients to the region's major trauma centre, at Plymouth, in the hours of darkness, unless major changes are made to the hospital's infrastructure.

The charity-funded emergency helicopters will be capable of flying in the dark from 2015, Cornwall with the arrival of its MD902s in January and Devon soon afterwards.

The charities are warning current landing facilities at Plymouth's Derriford Hospital – the region's designated Major Trauma Centre – are unlit, unsurfaced and unsuitable for use at night.

A spokesperson for NHS England said there was no current requirement for major trauma centres to have a helipad as air ambulances do not fly at night or in bad weather.

The facilities at Derriford Hospital are unlit and unsurfaced, with air ambulances landing on a grass site and Search and Rescue aircraft having to land at the nearby College of St Mark and St John's.

A suitable site for improved facilities has been identified and the hospital has plans and permission to build the helipad facilities.

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WILTSHIRE: The design for the paintwork on Wiltshire's new Air Ambulance was unveiled by the Wiltshire Air Ambulance Charitable Trust's board of trustees in April.

The helicopter, a Bell 429, which will arrive from Canada in October this year, will become operational when the current partnership with Wiltshire Police comes to an end in December.

The new helicopter will incorporate yellow and the distinctive Wiltshire 'green', which is used across the county on the Wiltshire flag. The belly of the helicopter will also carry a distinctive 'W', again representing Wiltshire.

The joint police operation based Wiltshire Air Ambulance is available 19 hours a day, 365 days a year and is one of only a few air ambulances in the UK that can fly at night with the capability of ad-hoc landings.

Wiltshire Air Ambulance will take delivery of a new helicopter in December 2014 when its current partnership with Wiltshire Police comes to an end. It will cost £2.5M a year to keep the air ambulance flying.

Although it will be a new scenario WAA intend to continue flying 19 hours a day as it does currently. The new helicopter will be capable of NVG night flying, so it is intended to certify it for night time use.

WAA recently released a series of training videos covering their pilots' approaches to new helipads in Bristol. The new landing areas are at the Bristol Royal Infirmary (BRI) and Southmead Hospital – the accident and emergency department at Frenchay recently closed, resulting in alternate destinations and approaches for local HEMS outfits. You can view the videos below:

Crews from Wiltshire Air Ambulance have filmed their training runs to the new landing areas at Bristol Royal Infirmary and the new super-hospital at Southmead – and posted them online.

http://www.youtube.com/watch?v=FmjKXphCEO8&feature=player_embedded

http://www.youtube.com/watch?v=1rrMBE-k6JQ&feature=player_embedded

http://www.youtube.com/watch?v=05LZStNzO8o&feature=player_embedded



The best laid plans sometimes go awry and that is just what happened when the recently cleared area was laid to turf.

The downdraught from the helicopter was just too much for the recently laid grass alongside the helipad and as a result there will have to be a subtle change of landing technique for a few weeks while the landscaping beds in! [PAR images]



YORKSHIRE

It has been six months since the Yorkshire AA moved its operational base from Leeds-Bradford Airport to Nostell Priory near Wakefield but work continues on getting what is a truly superb base just right. The most recent works could be simply explained away as little more than cosmetic landscaping but there is far more to it than that.

The leased site was a previously occupied by a garden nursery business that failed leaving a fairly messy site strewn with debris and an over preponderance of neglected trees close to what is now the landing pad area. Removing the trees to provide an ample clear area has proven to be a major undertaking with unexpected 'finds' of abandoned pipes, plant pots and other industrial debris being turned up by the bulldozer.

The vast single storey new building provides plenty of room for future expansion and yet already offers a hangar space more than adequate for three light twin helicopters. Currently Yorkshire operates one of the two MD902 Explorer helicopters it owns from the site in a daylight only operation. What it can do is house maintenance on site and to that end it has an area set aside as a sterile engineers store to accommodate future aspirations to set up a Part 145 maintenance operation. There is no rush to set up the 145 but it can be done. Maintenance remains vested with Multiflight – still based at Leeds-Bradford Airport and providing most major servicing operations from there. The MD902 remains very much a type that concentrates its maintenance activities into the four week long 'Annual' so there is currently little ongoing modular activity that would suit the facilities at Nostell Priory.

With a future plan to undertake its own Part 145 maintenance, Yorkshire has become one of the first air operators in the country to achieve compliance with new European air safety regulations. All its operator manuals have been revised to meet new European Aviation Safety Agency (EASA) requirements that come into force on October 28.

In November 2012, the charity became the first air ambulance in the UK to acquire its own JAR-OPS Air Operators Certificate, employing all its own pilots, it now becomes just the third out of nearly 70 UK operators to be awarded a new Air Operators Certificate by the Civil Aviation Authority, which is responsible for ensuring compliance with EASA regulations.

Beyond the large space of the main hangar the rear of the building is set into a number of smaller rooms with a range of duties.

Thus far Yorkshire have steered clear of offering a night service – and their current lease prohibits night flights from Nostell – but they have four rooms set aside for use by overnight resting crews. Unlike some of the new night operations that have designated rooms for

night crew use but have not even started to equip them, the Nostell Priory rooms are already in regular use. Yorkshire is the largest English county and as number of the duty staff are faced with a 2-hour return commute on busy roads between 12-hour shifts and it is they that choose to make use of the comfortable en-suite facilities with wi-fi and entertainment systems 'just like home' for back to back shifts.

Further down the corridor, past the ample entry foyer is a conference and presentation room complete with live closed circuit television feed from the pad area. This gives visitors immediate access to outside activities – the comings and goings of the helicopters on the pad – without the safety and security problems associated with shepherding group's airside.

A basic Crew Room sits alongside a Control Room that is based upon the earlier version that was at the former base at Leeds-Bradford Airport. The controller function is now in-house rather than using ambulance service personnel and is duplicated at the far more austere Topcliffe facility.

Other rooms are set aside as a Sluice, a drugs Dispensary and as a Chief Pilots office but perhaps the surprise is that of a BBC crew room for the production team for the highly popular 'Helicopter Heroes' series that has covered the antics of Yorkshire Air Ambulance operations since 2007.

Although Helicopter Heroes has been off air since April there is a small team embedded to pickup day-to-day footage in the assumption that it will be useful if some of the better jobs are already 'in the can' when the next series is launched.

Time will tell whether the two local NPAS police orphans, the former South Yorkshire and Humberside aircraft, will gravitate towards the facilities at Nostell Priory. There is room at the site for the addition of two more aircraft – both are Explorers – if their current positions become untenable but at Nostell they would be too close to another existing NPAS facility for it to make complete sense. The former Sheffield Airport base has transitioned into being a heliport awaiting an attack by bulldozers that will finally bury the past aeronautical aspirations of the site. Explorer G-HPOL is based at an airport site that looks at best awkward. Both are likely to need new homes in the not too distant future. [PAR]



UNITED STATES

NEVADA: Las Vegas, Nevada based Air medical transportation provider, Life Guard International, also known as Flying ICU, has added a LearJet 35A to their full-time aircraft fleet.

The addition of this aircraft will enable Flying ICU to transport by private air ambulance critically ill or injured patients throughout North America, South America, Europe and the Caribbean. With a range of over 2,100 miles, this LearJet 35A can travel cross-country or to Latin America nonstop without refuelling. With its medical configuration, the aircraft is capable of allowing two to three family members to accompany the patient during the flight; in addition to the flight nurse and flight paramedic providing the patient care.



SEARCH & RESCUE

CANADA

The Ottawa Citizen continues to pour scorn on the deal between the Canadian Government and Sikorsky.

They say it will several more weeks before an actual contract is produced between the government and aircraft manufacturer Sikorsky, despite earlier claims that the matter was resolved.

Sikorsky was supposed to deliver the Cyclones to the Canadian military from late 2008. Deliveries of all 28 aircraft, to replace the air force's Sea Kings, were to be completed by early 2011. But Sikorsky has yet to turn over a single helicopter to Canada and the \$5 billion Canadian Maritime Helicopter (CMH) project has been saddled with problems.

It is predicted that Sikorsky will get its way and be allowed to deliver interim standard helicopters; aircraft not fully outfitted with all the necessary equipment, with a view to then deliver fully compliant aircraft after 2015.

NORWAY

FLIR Systems, Inc. has announced that its Star SAFIRE 380-HDc was selected by the Norway Ministry of Justice and Public Security for its new fleet of AW101 helicopters to be used in Norway's All Weather Search and Rescue Helicopter (NAWSARH) program. Deliveries will commence this year, with an in-service date of 2017.

FLIR's Star SAFIRE 380-HDc selection allows the latest generation of high-definition, multispectral imaging to be used by aircrews in this demanding SAR role, recognized to be the harshest SAR environment in the world.

The Norway Ministry of Justice and Public Security awarded the NAWSARH contract to AgustaWestland in December 2013. Deliveries of the AW101 helicopters to the Royal Norwegian Air Force, who will fly and operate the aircraft, will begin in 2017 and continue through to 2020. The 16 aircraft will be assembled at AgustaWestland's Yeovil facility in the UK.

AgustaWestland will provide initial support and training services, including spares at each of the operating bases and aircrew training, and will provide performance-based logistic support to deliver approximately 90,000 flying hours across the fleet of 16 helicopters over the initial 15 year period.

FLIR has been providing Star SAFIRE systems and product support to European SAR and Police operators for more than 20 years, and continues to achieve an operational availability greater than 99%. FLIR product support, already in place for other UK Police and SAR operators, will blend seamlessly with AgustaWestland's support model for NAWSARH, and its in-country partner, AIM. Working in close association with AgustaWestland, the SAR aircrew training will include familiarization with the capabilities of Star SAFIRE 380-HDc.

The specific Star SAFIRE 380-HDc configuration selected for NAWSARH includes the latest high definition variants of infrared (IR), day-camera, and short wave infrared (SWIR) sensors, coupled with GeoLock high accuracy scene coordinate location, Moving Target Indica-



tion, and augmented image enhancement.

The Star SAFIRE 380-HDc offers a combination of long stand-off observation capability in a compact physical size. The Star SAFIRE 380-HDc sensor system is now entering service in SAR operations, law enforcement, military, and border surveillance missions worldwide. The Star SAFIRE 380-HDc contains advanced payload configurations with multiple high definition sensors, including a full native high definition infrared camera with zoom optics, making the Star SAFIRE 380-HDc the world's only commercial-off-the-shelf (COTS) airborne system to provide real high definition thermal imaging in this class.

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INDUSTRY

McCauley Propeller Systems, a division of **Cessna Aircraft Company**, has announced the FAA Certification of the McCauley Propeller Systems' Blackmac Carbon Series constant speed composite propeller.

The propeller's advanced composite materials and patented high-strength, low-weight continuous carbon loop blade retention system significantly reduces propeller assembly weight and improves product life.

The scimitar propeller blades, optimized for balanced performance, are made of seamless carbon fibre and fibreglass material and feature electro-formed nickel leading edges providing a stronger, more durable and impact-resistant product.

The Blackmac Carbon Series is certified with no set maximum life and with an overhaul interval of 2,400 hours or 72 months. The Carbon Series retains McCauley's standard industry leading parts—including the single-piece oil-filled hub—and labour warranty of 3 years or first overhaul. Compared to other aluminium propellers, it has 25% fewer parts. No other certified propeller rated at 350 Hp, wood or composite, weighs less.

On April 30, 2014, four years after initial FAA certification, the European Aviation Safety Agency (EASA) issued its type certificate for the **Robinson R66** Turbine helicopter. Now over fifty countries (including Australia, Brazil, Canada, Japan, Russia, South Africa, and the U.S.) that have certified the R66.

EASA certification marks an important milestone for Robinson, as two-thirds of the company's sales have historically come from foreign customers. With certification finally in place, Robinson can deliver its current backlog of European orders and focus on strengthening its presence in the European market. Presently, there are sixteen R66 service centres, of which thirteen are dealers, approved in Europe.

To date, Robinson has delivered over 500 R66s and estimates total fleet hours at over 160,000. In response to customer feedback, glass and touch-screen avionics were recently added to the R66's options list. www.robinsonheli.com.

The day before the announcement by EASA China's civil aviation authority, the **CAAC**, certified the Robinson R66 Turbine helicopter on 29 April 2014, almost one year to the day the certification process began. As China relaxes airspace restrictions and its general aviation continues to develop through investments in infrastructure and training, helicopters are expected to play a more prominent role. With low operating and acquisition costs, the high performance

Plans to move **Glasgow Heliport** were first aired at least four years ago as the site owners wanted to use the land for a hotel. Ever since its launch, the Scottish Exhibition and Conference Centre have been supportive of the heliport in one corner of its site alongside the River Clyde, so there was no [...]

The **Kaman K-MAX** unmanned aircraft system has made a name for itself in Afghanistan, with more than 1,800 unmanned resupply missions flown and delivering over 4 million pounds of supplies to troops throughout the region since being deployed in 2011.

The first engine test bench run of **Turbomeca's** new Arrius 2R turboshaft took place in late April at the company's Bordes factory in south-western France.

The latest Arrius variant is destined for Bell Helicopter's new Jet Ranger replacement, the Bell 505 Jet Ranger XTM, and the initial rotations were witnessed by Bell Helicopter's 505 Program Director Paul Watts and the new rotorcraft's development team. The Arrius 2R is designed to deliver performance and power within the 500 shaft horsepower range, while improving safety and lowering pilot workload via a Full Authority Dual-channel Engine Control (FADEC). The twin-module configuration will reduce fuel consumption and lead to lower operating costs.

More than 3,000 Arrius engines have been sold by Turbomeca, accumulating 6.6 million flight hours for 430 customers in 60 countries. This proven reliability is built into the 2R and reinforced by a 3,000 hour Time-Between-Overhaul to be offered at service entry. The engine will also benefit from Turbomeca's renowned service and support capabilities.

The ALEA National Convention is fast approaching and submissions are being accepted for the annual **FLIR Vision Awards**

Selex ES has been awarded a €12M (£10M) contract by the UK Ministry of Defence (MoD) to provide a new type of availability service contract for the MoD's Air Commodity Team. Under the contract the MoD will no longer have to order spare parts as and when they are needed, instead Selex ES will ensure that parts are there when they are required.

"It's a new smart approach to spares supply" said Stewart Miller, SVP of Support and Service Solutions at Selex ES. "Instead of waiting until parts are required and then providing them, we're using advanced computer modelling to work out what parts the MoD will need, and when they'll need them. It means we can pre-empt their requirements and deliver spares so that they're available as soon as they become necessary."

Under the new arrangement, Selex ES will model the requirements and automate the 'buy schedule' for delivery fulfilment by their procurement partner Astute Electronics Ltd. A proactive obsolescence management service is also included in the agreement. Covering 57 bases in the UK, the contract is the first of its kind to be put in place by the MoD's Air Commodity team.

Elbit Systems has launched the SKYLENS wearable head-up display for Enhanced Flight Vision System (EFVS) applications.

Packed in a lightweight, easy-to-install device, similar to a pair of sunglasses, SKYLENS is a revolutionary approach to meet the challenges of today's aviators. Suitable for day and night operations and for all weather conditions, the system provides head-up information while minimizing the dependency on airport instrumentation. Equipped with SKYLENS, aircraft are capable of take-off and landing in low visibility conditions and in locations that non EVS-equipped aircraft could not access previously.

SKYLENS, a part of the Clearvision™ Enhanced Flight Vision System (EFVS) family, displays high-resolution symbology and video on a transparent visor, providing pilots with cutting edge head out capabilities

Designed and built for use by commercial aviation anywhere in the world, the system provides a unique solution for retrofitting existing platforms, small cockpit airplanes and helicopters. The new system, which is in advanced processes of airworthiness certification, is expected to enter into service by end of 2016.

For more than 30 years, Elbit Systems has been a market leader in the field of night vision and enhanced vision systems in the military and commercial aviation market, supporting thousands of helicopters, business jets and other aircraft. To date the company has delivered over 10,000 Head-Up Displays (HUD), Helmet Mounted Displays (HMD) and Enhanced Vision Systems (EVS) for military and civil operators worldwide. These operational systems have gathered more than 2,000,000 operational hours to date.

As part of their fleet upgrade, the **Puerto Rico** Police retained their Bell 407 (to add to their new Bell helicopters) and disposed of the remainder of the fleet. This entailed selling three MD Helicopters -MD500E aircraft, one built in 1985 and the other two from the factory 1992: - N5231G - serial 0120E, N127PD - serial 0502E, N124PD - serial 0501E

The purchaser of these three is Eastern Atlantic Helicopters in the UK, and all three aircraft have arrived at their facility at Shoreham Airport

Today, airworthy fleet consists of one Cessna 310, two Cessna 404, four Bell 407 and one Bell 412.

The team of **Lockheed Martin** and Sikorsky Aircraft has won the \$1.24 billion contract to build a new fleet of presidential helicopters based on the S-92.

Connecticut-based Sikorsky will produce the helicopters, and Lockheed Martin Mission Systems will install the integrated communications and mission systems.

Five years ago, the original Marine One replacement project also managed by Lockheed Martin was cancelled; hopefully they will get it right this time and not overload an even smaller airframe with equipment.

Sikorsky has been awarded a \$1.24 billion fixed-price-incentive-firm target contract for the engineering and manufacturing development phase and will provide six test aircraft, four of which will become part of the presidential fleet. There should be 21 operational Marine One helicopters by 2023.

Ed: As the Canadian's bought up the remains of the original EH101 based Marine One project as spares for their Cormorant SAR fleet and are currently striving to take into service a Sikorsky SAR type also based on the S-92 there may yet be a ready market north of the Great Lakes for any over-spec and over-weight hulks produced this time.

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More fun is **UAV** world, this time in the USA. The FAA has appealed a federal judge's decision in a case involving businessman Raphael Pirker.

Pirker used a remotely operated, 56-inch foam glider to take aerial video for an advertisement for the University of Virginia Medical Center. The FAA then fined him \$10,000, alleging that since the aircraft was being used for profit, Pirker ran afoul of regulations requiring commercial operators of Unmanned Aircraft Systems to obtain FAA authorization.

A judge on March 6 agreed with Pirker that the FAA overreached by applying regulations for aircraft to model aircraft, and said no FAA rule prohibited Pirker's radio-controlled flight.

But more recently another judge had stayed this ruling pending the FAA's appeal.

In the last few days the **ALEA** has issued an alert to members asking them to lobby their member of the Senate after Rep. Rush Holt (a Democrat representing New Jersey) offered two amendments to the House of Representatives 2015 Commerce, Justice, Science, and Related Agencies Appropriation Act to prohibit local, state, and federal law enforcement agencies from purchasing or using an unmanned aircraft based on privacy concerns. ALEA joined with the Association for Unmanned Vehicle Systems International (AUVSI) to oppose these amendments and contacted members.

Ed: This was a long detailed document to members and, although important, does not bear repeating in full within these pages. Check out www.alea.org for developments in this storyline.

Persistent Surveillance Systems (PSS) has launched an improved website to give clients and visitors more complete information about the company and its products and services.

Visitors will be able access information about PSS products and services including Hawk-Eye II and Vision-RL airborne and fixed mount Wide Area Motion Imagery systems. Other useful information, such as sample videos, briefings, PSS privacy policy, and recent news articles.

The EC175 is **Airbus Helicopters'** newest-certified rotorcraft in the 7-metric-ton class was demonstrating Category A performance and its mission capabilities for the oil and gas sector during a three-nation demonstration tour starting on May 19.

In conjunction with the new rotorcraft's tour of the North Sea, Airbus Helicopters will announce an increase to the EC175's maximum take-off weight, up to 7,800 kg, offering significant additional

payload of 300 kg or an additional 40NM radius of action. The extended MTOW provides additional operational flexibility – particularly in highly demanding oil and gas heli-lift operations, and for missions to oil rigs that are located increasingly further off-shore. Certification of the extended maximum take-off weight is planned before the end of 2016, following a flight test campaign next year.

The demonstration tour took the helicopter to Norwich, England on May 19th; Aberdeen, Scotland during May 20–22, and Stavanger, Norway, on May 23.

Lincad, providers of specialist solutions to customers' power management demands, announces that its new flagship Fast Charger, capable of the independent recharge and management of up to four batteries at one time, has gone into service with the British Armed Forces. The first deliveries to the Ministry of Defence (MOD) began in April.

Designed for the MOD to meet the battery charging and management requirements of Lincad's LIPS (Lithium Ion Power System) suite of batteries, the Fast Charger is an enhanced replacement for the current Caravel single channel battery charger, a device which has seen rigorous service with both British and international armed forces in all theatres of operation for more than 12 years.

Offering a significant improvement on other units, the Fast Charger can effectively halve

charging times, delivering improved efficiency and a potential reduction in the amount of equipment needed for operational scenarios. Its power delivery of up to 2 KW is achieved from a universal AC mains input within its ruggedised 440 X 400 X 310 space envelope. Active thermal management is employed to maintain peak function even in the most challenging environments.

Through ongoing capacity gauge recalibration and fault diagnosis, the Fast Charger is able to manage intelligent lithium-ion batteries and, where it is safe to do so, can carry out a battery reset, avoiding the need for a costly return from an operational theatre.



On May 3, Bell's 429EMS demonstrator [seen left in Singapore] was shipped into their European base at Prague in the Czech Republic. Within four days it had arrived in the UK where it was demonstrated to Bond Air Services and other operators in the air ambulance market. The helicopter was at the EBACE exhibition in Geneva on May 20-22 and will be at the Farnborough Air Show in the UK on 14-20 July.

Bell continues to lobby EASA and the FAA on the highly-controversial attempt to persuade them to flex the certification rules for the 429, which has been approved to the CS27 standard - a category which goes as far as 7,000lb mtow only. Bell took the corporate decision not to design the 429 to the more-demanding CS29 standard from the start, which is applicable to all aircraft from 7,000lb and upwards. Instead they are aiming to get the major certifying authorities to allow the 429 to be certified at 7,500lb mtow without including the various significant modifications needed to fall within the CS29 rules.

Trakkacorp Pty Ltd has achieved approval from Airbus Helicopters Germany for the Serial Production Qualification of the Trakka A800 Helicopter Searchlight. Extensive testing, qualification and close collaboration between Trakka and Airbus Helicopters' engineering teams has taken place over the last three years to ensure that the Trakka Searchlight adheres to Airbus's Helicopter stringent requirements.

This process began after Airbus Helicopters selected Trakka through a competitive Request for Proposal, (RFP) in 2011 for the Search Light for existing and future helicopter platforms.

The TrakkaBeam A800 Searchlight will be Type Certified for the EC135, EC145 and EC175. In addition to this, the Trakka Searchlight is already Type Certified by Airbus Helicopters on the EC155, EC225, and is STC'd on the AS350.

Cliff Schwidlewski, Trakka's Engineering Manager, stated, "The requirements have been extremely challenging but the close working relationship between Airbus Helicopters and Trakka has been paramount to the success of this project. The extensive testing and Airbus's Helicopters engineering and quality teams' process of approval and qualification, has proven that Trakka fulfils the highest quality standards of a product".

The TrakkaBeam searchlight is a paradigm shift in engineering and design, which has eliminated the inefficiencies of traditional searchlight technology. Trakka has concentrated on producing a system that achieves maximum efficiency and visibility, in a variety of operational situations.

The **TrakkaBeam** has become the benchmark in aviation searchlight technology, due to its sleek, aerodynamic characteristics, low power draw, low weight, superior mission functionality and reliability and is used internationally by leading ground and airborne law enforcement, security forces, as well as search and rescue agencies, to strengthen their capability to achieve mission objectives.

Its unique internally integrated filter wheel enables the installation of a range of spectral light filters including infrared, visible red and amber. This creates unparalleled visibility and mission capability during night-time operations, in moist or foggy conditions, and during NVG operations.

The advanced optics, only available with the TrakkaBeam, also makes the searchlight far more efficient than any other on the market, resulting in the use of an 800W lamp whilst still achieving outstanding performance and range.

A variant of the device was mentioned before in PAN but that was in the latter part of last year and talking of a single device that did not look likely to reach general production, well the situation has now changed!

The first personal thermal imaging device for the iPhone*, became available worldwide at popular retail outlets in Spring 2014 for less than \$350. **FLIR ONE™** for select Android models will be available later in 2014.

See in the dark, observe invisible heat sources, compare relative temperatures, see through smoke, and even see through some materials.

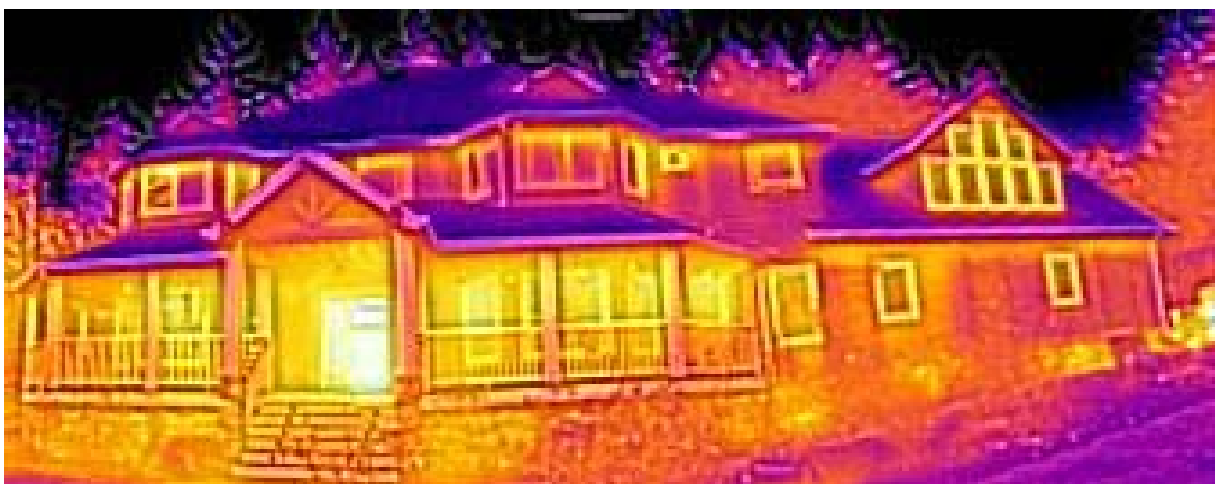
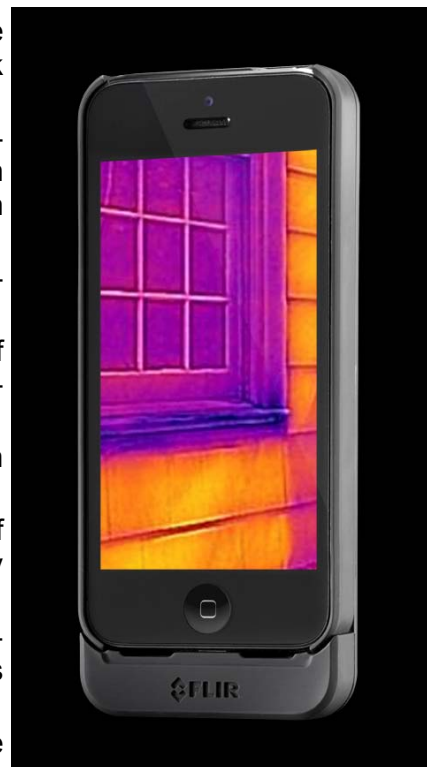
Fits on the phone like a protective case, displays a live thermal image of the world around you right on the phone's screen, and captures still images and videos.

Load captured images directly to the camera roll and easily share on Facebook, Twitter, Instagram, and other social-media channels.

Onboard battery source powers the device for more than two hours of continuous use; can also be configured to boost iPhone5 and 5s* battery life by 50 percent.

Available in three colours (space grey, white, and gold), which seamlessly match the brushed aluminium and matte black or white exteriors of iPhone5s* models.

Software development kit to develop FLIR ONE™ apps will be available this year.



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At the Berlin Air Show last month Airbus Helicopters and **ADAC Luftfahrt Technik (ALT)**, the maintenance arm of ADAC Luftrettung, signed a parts-by-the-hour service contract for the air rescue organization's EC145 T2 fleet. The ten-year service agreement with a volume of some €25M covers a comprehensive range of services for the new aircraft.

The package for 14 new EC145 T2 helicopters includes technical services adapted to ALT's requirements and provided at fixed costs. In addition, maintenance is organized so as to ensure the highest levels of helicopter availability possible.

With a fleet of more than 50 helicopters, ADAC Luftrettung is one of the largest air rescue organizations in Europe. In Germany, the company operates the EC135, BK117 and EC145 models of the Airbus Helicopters range. The new EC145 T2 will gradually replace the BK117.

Included in the KADEX 2014 aircraft displays at Astana International Airport were two Airbus Helicopters EC145s supplied to Kazakhstan – one operated by the Ministry of Defense, and another with the Ministry of Emergency Situations – part of 45 such twin-engine rotorcraft being acquired by the government.

This major fleet build-up is supported by Eurocopter Kazakhstan Engineering, a joint venture of Airbus Helicopters and the Kazakhstan Engineering state company, which assembles EC145s and is developing local maintenance and training capabilities to support their operations in the country, as well as across the region's new Eurasian Economic Community customs union and throughout central Asia.

To date, Airbus Helicopters has delivered 20 EC145s to Kazakhstan, which are utilised by the Ministry of Defence, Ministry of Emergency Situations, Ministry of Health, and Ministry of Environment. Six more are to be supplied to government agencies in 2014, with the remaining EC145s being delivered through 2016. At KADEX 2012, a Letter of Intent was also signed between Airbus Helicopters and Kazakhstan for 20 EC725 which marked the expansion of the joint strategic partnership to specialized military aircraft.



©Eurocopter



Russian Helicopters are also supplying helicopters to the Kazakhstan Emergencies Ministry. An agreement was signed to deliver a Mi-171E helicopter, with delivery planned for 2015.

The Mi-171E is a modification of the Mi-8/17 series. These helicopters are recognised as among the best in their class for search and rescue operations, and are widely deployed in the aftermath of flooding, earthquakes and other disasters, to fight forest fires around the world, and to provide medical assistance in the field.

Russia and Kazakhstan have developed a successful partnership in operating Russian helicopters in recent years, and Russian Helicopters has completed several joint projects with Kazakh partners. In May 2012, the Kazakhstan Emergencies Ministry took delivery of two new multirole Ka-32A11BCs, while in February 2013 four Mi-171Sh helicopters were delivered to the Kazakhstan Border Service through Rosoboronexport. In August last year another Mi-171E was transferred to the Interior Ministry. At Russian Helicopters' Novosibirsk Aviation Repair Plant, two Mi-26Ts are being overhauled for Kazaviaspas, and this year a Mi-8AMT is scheduled for delivery to the Akimat (regional executive authorities) of Almaty.

Some 200 Russian-built helicopters are in operation with state bodies and in the private sector in Kazakhstan. Today the country's fleet of commercial and military helicopters includes Mi-8/17 series models such as the Mi-8MTV, Mi-171E and Mi-171V-5, the military transport Mi-26, the commercial Mi-26T, the multirole Ka-32A11BC and the Mi-24 military helicopter.

On photo: Russian Helicopters marketing director Mikhail Dubrovin (left) and Minister for Emergency Situations of the Republic of Kazakhstan Vladimir Bozhko (right).

Beechcraft Corporation, now a part of the Textron Aviation, announced at EBACE that the fleet of Beechcraft King Air twin-engine turboprops registered in Europe, Middle East and Africa (EMEA) has surpassed 825 aircraft.

This year, Beechcraft celebrates the 50th anniversary of the introduction of the business turboprop King Air series, which is one of the best-selling business aircraft families in the world. Since 1964, Beechcraft has delivered nearly 7,200 King Airs with the worldwide fleet having surpassed 60 million flight hours.

Ed: It appears that the acquisition of Beechcraft by Textron does have its downside though. Months ago they booked and paid for a place at this years PAvCon but had to pull out at the last moment after some confusion surrounding the change of ownership and marketing strategy. It is probably no more than growing pains.

INCIDENTS & ACCIDENTS

25 April 2014 Shadowhawk unmanned air system/drone Montgomery County Sheriff's Office, Texas. Operators were conducting exercises over Lake Conroe when it malfunctioned and crashed into the lake. Divers with the Houston Police Department recovered the missing drone on May 8. [Media]

2 May 2014 Eurocopter EC120 PR-FPL. Brazil Federal Highway Police at Luiziania, Brazil. During the approach for landing as part of a hydraulic failure training, with the aircraft already sustaining "ground effect", a high level of vibration occurred. In the sequence, the aircraft skidded to the left and rolled, colliding with the ground. The aircraft sustained breakage of the main rotor blades and tail boom. It also sustained substantial damage to the ski and left side of the fuselage. There was an abrupt stop of the engine. [BEA/Helihub]

3 May 2014 Bell 407 N407MH. Air ambulance of Classic Lifeguard, Arizona. Lifeguard 1 from the Moab, Utah base was conducting a search for a lost skier in the Lizard Head Pass area of the San Juan Mountains in south west Colorado. At about 400' above ground level (AGL) the crew noticed a change in the engine noise with slight vibration. This was followed immediately by the illumination of the ENG CHIP caution light which was followed by the illumination of the FADEC DEGRADED caution light. The pilot initiated a precautionary landing to a clearing at 10,000 feet MSL. While on final approach at 150' AGL the engine failed with RPM retreating to zero. The pilot entered autorotation successfully. The aircraft impacted the snow covered terrain skids level with a nose high attitude, slid forward and rolled onto the left side before coming to rest. No injuries. [Concern]

4 May 2014 Bell 407 The contracted helicopter involved in the search for a missing skier crashed in south-western Colorado. The 407 with three crew members and a San Miguel County Sheriff's deputy on board crashed near Lizard Head Pass after it lost power. No one was injured in the crash. [Media]

5 May 2014 helicopter Air ambulance of Mercy Flight, Buffalo, New York. The helicopter landed safely on a western New York baseball field in the town of Boston after a door flew off during a flight back to its base from a Buffalo hospital to Olean near the Pennsylvania border. No injuries were reported. [Poststar]

5 May 2014 Kawasaki BK117B1 ZK-HJC. Air ambulance. Emergency field landing when transferring a patient from Ashburton Hospital to Christchurch Hospital New Zealand when warning light illuminated. Reported as heavy landing, no injuries reported. [Helihub]

26 May 2014 Airbus Helicopters AS365N2 N365WM. Air ambulance of West Michigan Air Care, Kalamazoo. Hand landing in the car parking lot of Constantine High School causing damage to nose wheel and starboard landing wheels. Helicopter came to rest on an angle but without the blades striking the ground [Constantine Police]

FLIGHT SAFETY

The US authorities remain unhappy about the new technology batteries that came to notice last year in the Boeing 787 fires. The National Transportation Safety Board [NTSB] issued a series of recommendations related to the evaluation and certification of lithium-ion batteries for use in aircraft systems, as well as the certification of new technology.

The five safety recommendations, all addressed to the FAA, are derived from the NTSB's ongoing investigation of the January 7, 2013, fire event that occurred in a lithium-ion battery on a Boeing 787 that was parked at Boston Logan Airport.

Investigators found that the battery involved in the Boston 787 fire event showed evidence not just of an internal thermal runaway but that "unintended electrical interactions occurred among the cells, the battery case, and the electrical interfaces between the battery and the airplane."

The 12-page safety recommendation letter said that the processes used in 2006 to support the certification of the lithium-ion battery designed for the 787 were inadequate, in part, because there is no standardized thermal runaway test that's conducted in the environment and conditions that would most accurately reflect how the battery would perform when installed and operated on an in-service airplane.

The NTSB said that because there is no such standardised thermal runaway test, lithium-ion battery designs on airplanes currently in service might not have adequately accounted for the hazards associated with internal short circuiting.

The NTSB asked the FAA to develop systems and checks to ensure that future electrical/battery systems face more stringent testing in the future.

The full text of the safety recommendation letter to the FAA is available at <http://go.usa.gov/8XaV>.

MOVE ALONG THERE PLEASE

Tensions between drone journalists and the Federal Aviation Administration may be coming to a boil.

The regulator of America's airways is looking into the use of aerial drones by journalists in Arkansas to survey tornado damage and that has led the FAA to attempt to regulate the activity, which may or may not fall under its jurisdiction.

Drone use by journalists has become a sensitive issue. The FAA has tried to limit the practice, even going so far as to send out cease and desist letters to them.

On the other side it appears that the moves by the FAA to limit or punish the use of drones by journalists could fall foul of the First Amendment, which precludes the government from infringing on the freedom of the press.

An earlier attempt by the FAA to fine a commercial photographer led to a court deciding that the FAA did not have that authority — an appeal is pending.

Remember the Amazon deliveries by drone idea/ Something of a non-starter in most people's minds — except it seems Coke in Singapore!

A few weeks back, drones buzzed up to high-rises under construction in Singapore and dropped off cans of Coke to the migrant workers building the towers. Tucked into the care packages were 2,734 messages from Singaporeans thanking the tradesmen for their hard work. The idea was to link two communities that don't often come into contact — Singaporean nationals and the migrant workers who travel far from their countries to build the city-

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state's apartment buildings, offices and schools.

Ogilvy & Mather Singapore and a non-profit, the Singapore Kindness Movement, worked with Coca-Cola on the project, dubbed "Happiness From the Skies."

Ogilvy homed in on the idea of using drones to reach migrant workers at building sites. The guest workers make up about a third of the workforce in Singapore, known for its rapid development and high standard of living. The influx of foreign low-wage workers has brought societal tensions and divisions. The drones brought messages – photos tied to Coke cans – to the workers delivered to more than 2,500 workers using several drones.

Hundreds of volunteers from the Singapore Kindness Movement asked ordinary Singaporeans to write messages of support to the migrant workers, then snapped photos of them holding the notes. [Advertising Age]

Ed: All a stunt of course - how long would it take to actually deliver 2,500 cans by light UAV? – but the judicious use of air delivery supplemented by hand delivery had the right effect.



With this year's **PAvCon Police Aviation Conference** pretty much underway in Brussels as you read this edition, time to contrast that event with the usual events - and that includes ALEA next month.

Table space for exhibitors at PAvCon is just £1,000 this year and that includes two Delegate spaces. Contrast that with reported prices at other venues that may or may not provide a good talking shop between the buyer and the seller.

A recent event was asking for £20,000 for a lead exhibitor to sponsor an event and apparently accepted £2,000, potentially in desperation. Getting additional Delegates into the hall was to be thousands more – surprisingly that 'offer' was turned down. That same event was ringing around companies offering half price exhibitor spaces the week before the event even though it was clear that the long line of first class named speakers they were advertising was not going to appear – although some were substituted. PAvCon manages to allow the police and emergency services in without charge where there is an expectation that they will pay many hundreds or thousands at events which supposedly depend upon them being present. This is all too common as new events are invented with an apparent sole intention to make a profit rather than seeking to support and attract the target market.

PAvCon is set up as an event for those that take part, at the average event you might finish the day at the conference and go back to your travel lodge to dine alone until the next morning. At PAvCon the day continues until you are fed and watered and want to go back to the hotel of your choice. All the time growing your Networking experience and often as not either for free or at a low cost. That is why people come back to PAvCon year on year. It is an experience. The question that needs answering is 'Why are not all events like this?'

I am not so sure that ALEA actually follows these generous principles to the letter. Aside from the fact that ALEA expects its subscription paying members to pay to simply attend the event, a recent e-mail from them was offering PAN and other corporate members an opportunity to spend a great deal of money for little or nothing in return at next month's event in Phoenix, Arizona. Take sponsoring the Sneak Preview Reception – a snip at just \$10,000: and promising to 'Make the first impression to the ALEA EXPO 2014 Attendees by hosting/co-hosting the 2-hour 'Sneak Preview' on the Expo Show Floor.' That is a significant sum of money blasted away in a short time for a potential two hours of attention. But clearly the industry is paying it.

Even the Pre-Conference Coffee runs in at \$2,500 a day (3 days available) and you will get your logo propped up against the coffee pot for your investment. Or you can come to PAvCon and get your logo propped up all day for two days for way less than half the cost.

Perhaps in these difficult times the industry as a whole needs to look seriously at its aims and objectives.



DIARY

A comprehensive listing of helicopter specific events in the coming year can be accessed at <http://www.helicopterlinks.com/shows/> but these are the events of greatest likely interest to readers in the next two months.

The first ever **IQPC Civil ISR Conference** was scheduled the week before the PAVCon event in Brussels at the Kensington Close Hotel, London, W8 but late in the day moved to a smaller venue at the Connaught Rooms in Holborn.

The event offered an in-depth knowledge of the civil ISR sector with leading briefings from a variety of agencies including police aviation, border security agencies and environment protection.

The original speaker line-up was something of a prequel to the following week's PAVCon except that in many cases the posted speaker sent a substitute or did not attend at all.

A brave attempt at duplicating the Europe wandering PAVCon in London but failing on many fronts – including the one that actually pushed PAVCon into Europe in the first place – lethargy. Getting a similar event in the UK with even a track record like PAVCon is like digging a hole in the Sahara Desert.

In its favour the event attracted a fair smattering of police officers from Europe Sweden, Finland, Netherlands, Germany, UK] but only they can speak for themselves as to whether they got what they hoped from it. www.civilisr.com

3-5 June 2014 this year is a very busy period. The PAVCon Police Aviation Conference 2014 Brussels managed to clash with a number of other events:

- Helicopter Show, Sywell Aerodrome, Northampton, UK
- National Association of Police Fleet Managers Conference & Exhibition, Telford.
- Airmed Venue Palazzo dei Congressi, Rome, Italy.
- Deutsche Hochschule der Polizei [German Police University], Munster.

17-19 June 2014 IFSEC International, FIREX International, FACILITIES Show, SAFETY & HEALTH Expo. ExCel, Docklands, London. Organised by UBM.

19-21 June 2014 AviationExpo Europe 2014 at Hradec Králové Airport, Czech Republic. Work is already underway for the AviationExpo Europe event for next year. Show Director Alex Ayling remarked "We are looking forward to building a European Festival of Aviation for Central Eastern Europe. We have just witnessed a record breaking event at our sister event AeroExpo UK and hope to replicate the hard work and ideas into this European event at Hradec Králové Airport, Czech Republic". Europe's Festival of Aviation in 2014, showcasing an exhibition with everything from aircraft to the latest products, services and seminars. Whether you are interested in learning to fly, or are already a Pilot, AviationExpo Europe has a weekend packed full of extras for everyone!



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Duncan Kirk sent in this image of N923AU a water bomber Lockheed P-3 operated by Aero Union parked up at McLellan back in April this year. [DK]

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