# **Police Aviation News**

©Police Aviation Research

Number 225 January 2015

HAPPY NEW YEAR

# CANADA EASES UAV RULES POLAND SELECT A SINGLE AUSTRALIAN AMBULANCE DEAL UK GOVERNMENT INJECT CASH WILTSHIRE AA CONFUSION

5.WL 30

PAN—Police Aviation News is published monthly by POLICE AVIATION RESEARCH, 7 Windmill Close, Honey Lane, Waltham Abbey, Essex EN9 3BQ UK. Contacts: **Main:** +44 1992 714162 **Cell:** +44 7778 296650 **Skype:** BrynElliott **E-mail:** <u>editor@policeaviationnews.com</u>

Police Aviation Research Airborne Law Enforcement Member since 1994—Corporate Member since 2014

#### SPONSORS

Bond Air Services/Avincis Broadcast Microwave Enterprise Control Systems FLIR Systems L3 Wescam Powervamp Trakka Searchlights Vislink www.bondaviationgroup.com www.bms-inc.com www.enterprisecontrol.co.uk www.flir.com www.wescam.com www.powervamp.com www.trakkacorp.com www.vislink.com

# **POLICE AVIATION**

#### CANADA

**NATIONAL:** Transport Canada are to set up two separate exemptions for small UAS. One for aircraft up to 2 kg and one for small UAS up to 25 kg's. There are some fairly strict rules which may not work for first responders so they will probably still have to go through the Special Flight Operations Certificate (SFOC) process but it is expected to improve the situation for some commercial users able to work within the height restrictions, minimum distances from people and property and flight within visual line of sight. [AT]



**ALBERTA:** Following on from the meeting that last month's article was reporting it seems that the police in Edmonton will not be getting their expensive new EC135 after all. It is reported that they will more likely get one new \$3.5M Airbus Helicopters AS350 single-engine helicopter after councillors approved the revised purchase - with conditions. The purchase price includes about \$1.1M to trade in the newer EC120 Air-2, which is more valuable than Air-1, also an EC120.

Proposals to buy the single EC135 helicopter for \$7.2M, or two singles for a total of \$7.1M, were defeated.

But this is not going to be a deal signed too soon. Before any money is released, police must report back on where the helicopter would be stored and maintained and on available equipment options and issues such as noise. There is work in hand to move the operation to the Canadian Forces Base Edmonton from its current site at Villeneuve Airport but the police are not great supporters of that plan.

**COVER IMAGE:** Capital Air Charter operate a fleet of eight twin engine aircraft on air ambulance and executive charter duties. Whilst available for a range of ad-hoc special charter ambulance operations throughout Europe and North Africa the company has core business built around some important domestic patient transfer contracts including serving Jersey, Guernsey and the Isle of Man. These three contracts represent the majority of the home country island air ambulances.

As reported in last month's edition Capital has been taken over by the Rigby Group plc Aviation Division. [See page 22 of that edition] Image @CAC **RCMP:** As a result of whistle-blowers coming forward ten cases of wrongdoing have been tabled by the Public Sector Integrity Commissioner to Parliament.

In 2012, the Ottawa Air Section (OAS) of the RCMP's Air Services Branch contravened the Canadian Aviation Regulations and the report alleges that some pilots of the OAS would, on occasion, enter incorrect data or worked backwards when completing the flight logbooks for a Piaggio P-180 Avanti and a Pilatus PC-12 in the fleet at the time and therefore failed to operate within the weight and balance limits specified in their respective flight manuals. The RCMP sold the Piaggio in July 2014.

Although it was concluded that the life, health or safety of persons was not compromised as a result of these overweight flights, *Regulations* were nonetheless breached.

#### BRAZIL

**RECEITA FEDERAL:** From the beginning of December, an Airbus EC135T2+ operated by the Division of Air Operations of the Federal Revenue Secretariat Brazil [Receita Federal] was operating from the city of Foz do Iguaçu on surveillance missions to crack down on smuggling in the State of Paraná.

The main focus of activity was seasonal and driven by the closeness of the borders with Paraguay and Argentina, the aircraft is equipped with an EO/IR camera and searchlight for night operations. [Via Helihub]

## CHILE

**CARIBINIERS:** The Trakka A800 Tactical Helicopter Searchlight has been selected for the agency's AW 109E Power patrol helicopter in Iquique, Chile.

The Trakka A800 searchlight's advanced optics technology provides superior performance and flexibility complimenting the helicopter's role, providing the perfect searchlight solution to meet the broad range of operations performed due to its unique multi-mission capabilities. With the highest level of testing and qualification of any searchlight, the optically enhanced edge to edge white light, internal multi-coloured filter system, and fast/smooth slaving system, all combine to give the operator superior helicopter searchlight performance. [Trakka]

### GERMANY

**NORDRHEIN WESTFALEN:** Six Airbus Helicopters EC145T2 rotorcraft have been ordered by Germany's Landespolizei Nordrhein-Westfalen (North Rhine-Westphalia Police Force), becoming the latest law enforcement customer for this enhanced member of Airbus Helicopters' twin-engine EC145 family. Deliveries of these helicopters are planned in 2016-2017 and will replace the existing fleet of EC155s and BK117s.

As one of the largest of Germany's 12 state flying police forces, the Landespolizei Nordrhein-Westfalen serves North Rhine-Westphalia – the country's most populous state, which includes the cities of Cologne, Düsseldorf, Dortmund and Essen.

They are the second German customer, joining the Landespolizei Baden Württemberg (Baden Württemberg Police Force), which launched the EC145 T2's law enforcement version with an order for six helicopters announced last December. [Airbus]



## ITALY

**POLICE:** Italian police are to start using General Atomics Predator drones operated by the Air Force as a way of monitoring major events and responding to natural disasters, national media speculated they could also be used during protests. In a deal with the Air Force, the unmanned craft will be rolled out for "research missions" during the day and night in Italy covering such as G8 Conferences. [UASVision]



## JAPAN

**TOKYO:** AgustaWestland and Mitsui Bussan Aerospace have announced that the Tokyo Metropolitan Police has placed an order for an additional AW139 intermediate twin helicopter. The aircraft is expected to enter service in 2016. This latest contract brings to four the number of AW139s purchased by the Tokyo Metropolitan Police. [AW]

## POLAND

**BORDER GUARD:** The Polish Border Guard [Straz Graniczna] is to acquire an optionally manned light observation single engine aircraft. The Europe wide requirement for new aircraft to have two engines is not as stringent as you may have thought.

The new Border Guard aircraft is the Stemme ES, a powered glider capable of carrying a significant sensor load. The two-seat, all composite construction, sailplane has an engine mounted in the centre fuselage. The airframe has a shoulder mounted wing, a conventional <u>T-tail</u> and a retractable tricycle landing gear. It can be fitted with a 2-axis autopilot and external under wing payload pods.

The aircraft and systems are being supplied by AEC Air Support based at Breda in The Netherlands

Attendees at recent PAvCon events in Austria and Belgium will be familiar with the craft and will have another chance to inspect it at the 2015 edition at Breda International Airport in the south of The Netherlands. <u>www.aecairsupport.nl</u>





Police Aviation News

January 2015

### **SPAIN**

**DELIVERIES:** Airbus Helicopters has delivered the first AS355 NP Ecureuil to the Spanish Road Transport Authority (DGT) and the first EC135 to the country's National Police Force under the contract signed in February of this year with the DGT.

The agreement covers the supply of a total of seven helicopters: four AS355 NP Ecureuil's and three EC135s, with the latter model to be operated by the National Police Force. The deliveries commenced with these first two helicopters and will be completed in 2016. [Airbus]





It's what you don't see that makes the difference Trakka A800 Searchlight

### Advanced engineering delivers enhanced operational capabilities

- Superior, Clear, Uniform beam profile with sharp edges
- Internal multi-spectral filtering, RED, AMBER, NVG
- Aerodynamic design
- Seamless Integrated Camera Slaving
- NVG compatible Pilot Control Unit
- Tested and Certified to DO-160F
- Over 1 million flight hours on leading aviation programs

5

www.trakkacorp.com

#### January2015

#### UNITED KINGDOM

**NATIONAL:** And what a furore was caused at last month's plans for NPAS fixed wing. Not only was The Editor's e-mail box filled with long rebuttals of the policy, so it seems was that of NPAS itself.

Clearly selecting a specific aircraft and a fairly narrow mission profile has proved a highly unpopular idea. Some, perhaps many, believe that the apparent choice of aircraft [nominally

the Vulcanair P68r] is wrong on many counts and that the stated levels of equipment are also flawed. The main thread appears to be that rather than the P68 NPAS should choose a BN-2 Islander or a Diamond DA-42 and that has reportedly delayed the process.

In their defence NPAS say they have done their homework and they, as the customer, have decided that they want a high wing piston twin. There are indeed a few aircraft that might fit their needs if the homework had not been done but it is unclear why they appear to be fudging the identity of the aircraft type when it is clearly written around the P68r - except that the type does not have a Diesel engine option.



UK Police Aviation has in the past long been associated with the BN-2 Islander and Defender series in piston and turbine powered forms, then there was a brief foray with the Cessna 337 and various trials of the Tecnam and the Vulcanair P68. NPAS has also been able to gain first hand input from a wide range of other surveillance types including the Dornier 228, the DA-42, various Cessna singles, Reims 404/406 and so on. It has, as the customer, decided it wants a new aircraft with high wings. In short it knows what it wants – right or wrong – that is after all the customer choice. The contract on offer is for a systems supplier.

And of course we keep being brought back to the BN-2 as the ideal surveillance aircraft beloved of many who flew in it – and still do. In the end though this is, like the P68, a 1960s design has certainly had its day and remains in service with customers that wish to have it. The current low level of production of the type is largely based on rebuilding existing airframes.

NPAS wrote the specification around the P68r and then added an option for piston or Diesel engines even though the only potential type with such engines is the low wing DA-42. That bit simply makes no sense. [PAR]

Last month Vislink, the leading global technology provider specialising in the collection, management and delivery of high quality video and associated data, announced its realtime airborne downlink (ADL) equipment is being deployed by law enforcement agencies throughout the UK as part of a Home Office project to boost surveillance capabilities and enable accurate and timely decision making.

The company has been selected to fit 15 aircraft with new integrated video downlink systems capable of transmitting live images from airborne assets to multiple receive sites. During joint operations, regional forces and national agencies will be able to access ADL images transmitted from aircraft using portable and handheld equipment and at regional command and control centres throughout the UK.

Vislink's airborne downlink equipment, has been a key part of the Metropolitan Police Service since 2006, is already in operational use across the UK. The HD quality output of this new equipment greatly improves transfer speeds compared to traditional analogue systems and will increase situational awareness at all levels.

"Vislink's equipment demonstrated an impressive range when compared with our previous system," said Sgt Chris Todd, Base Manager for the National Police Air Service at Newcastle International Airport. "For example, during testing our control room received excellent quality downlink images from our National Police Air Service EC135 aircraft operating over 70km away – which was a first for us."

Tony Price, ADL Project Manager at Vislink, added: "The Home Office contract is a huge

milestone for Vislink. As the latest in a long line of successful deployments with police forces across world, the implementation of this project demonstrates how Vislink has transferred its recognised expertise from the broadcast sector into the surveillance and public safety markets."

Vislink's ADL equipment has been deployed in fixed locations across several UK regions. All remaining equipment will be delivered by the end of this year, with the project expected to complete in March 2015. [Vislink]

**METROPOLITAN:** On behalf of NPAS, members of the local Conservative Party set up a Lippitts Hill Community Engagement Meeting to enable police and public to *"discuss the future of the Lippitts Hill Air Support Unit (Helicopters!)."* 

The notice of the meeting explained that "the National Police Air Service are taking over all individual helicopter bases under one body. There will be little or no local representation at bases. The NPAS have been investigating the possibility of increasing the number of helicopters based at Lippitts Hill from 3 to 4 (a 25% increase, probably mostly night flights!)

"The meeting is schedule for 7.30pm on Tuesday 2<sup>nd</sup> December 2014 at The Owl Public House (Function Room) at Lippitts Hill. All interested residents are invited to attend."

NPAS requested the meeting of local residents but neither NPAS nor the local political organisers informed the press on what was supposed to be an important local issue. The only reason it came to my notice was a question on the Pprune Rotorheads forum posed by an Australian.

There were around 40 people present out of around 100+ local residences [affecting perhaps 250 people] in Lippitts Hill, Sewardstone and Bury Road areas [within hearing distance of the landing pad and under the flightpath] and that includes the principals [police and politicians]. Superintendent Richard Watson NPAS was presiding.

Although the number of people actually living under the already severely restricted flight path is tiny helicopters are noisy beasts so the impact is far wider than the actual over flights. At 2am the current aircraft can be heard running up on the pad two miles away simp-

# CREATE AN UNFAIR ADVANTAGE.



HD IR Image



EO/IR Image Blended



#### Operate with the most capable technologies available:



All digital, full 1080p HD EO/IR imaging

- High-Magnification, Large-Aperture Optics Superior range performance
- Image Blending Uncover more detail from one image stream
- Single LRU systems, common electronics and common interfaces simplifies integration and swapping amongst the fleet

For more information on these technologies visit WESCAM.com or call +1-905-633-4000

WESCAM

ly because of the time of day.

Although they have yet to get a signature from the Met to make this joining happen the assumption is that NPAS will win through and that the "noisy" EC145s will be partly replaced by 10% quieter EC135 helicopters.

Within the industry arguments continue as to whether the EC135 is quieter at all; it is just a different noise that another audience may find worse than the current. Helicopters are noisy but some are noisier than others and in the dead of night at 2am a decibel or two is nothing to those woken up.

As the relatively low turnout hints at not everyone is up in arms about Lippitts Hill or the noise – anymore than everyone choosing to live beside London Heathrow airport hates airliners, but that might not be enough to save it.

Lippitts Hill Camp was created in the late 1930s as a gun site and was subsequently used as a POW camp, a Civil Defence Centre and a Cold War operations centre before the police purchased it in 1960 and continued its Cold War use for some years. Helicopters have been operating from there since 1967 and dogs and firearms training was undertaken there until local politicians led pressure resulted in their cessation and incidentally led to local people losing their jobs at the site. The helicopter use, which has in the past peaked at 6 airframes, continues today with three EC145 helicopters. The meeting was about a plan to increase current activity from three aircraft – the current agreed number - to four.

The site is partially listed for preservation and remains the best preserved example of both WW2 and Cold War military architecture extant

Long delayed, over a year now, the National Police Air Service want to take over the air operation in the face of Metropolitan Police resistance for various police operational reasons.

It steps back to the usual problem of 'hands off policing'.... after NPAS move in they will be controlled from West Yorkshire and the new owners will not be visiting to speak to the neighbours again.

In truth the Lippitts Hill location is too expensive for NPAS alone and they will go looking for somewhere else eventually. The Met can arguable design out their current use for the site with the new tranche of Digital Radio communications and get rid of the important aerials on site and in so doing their need to continue to foot the significant real estate bill.

According to the original plan the Metropolitan Police were to join NPAS at the start of January 2014, the latest guess is April.



Lippitts Hill June 1967 Bell 47G © John Bamford



A few days later some of the Met crews were undertaking their regular dunker training in far off Norwich with Petans Limited at the former RAF Horsham St Faith near Norwich. Petans offers a range of fire, rescue and water training courses to the emergency services and has been a regular supplier of this service to the London based operation for over 20 years.

Twenty years ago the helipad rescue scenario used a panel van converted to look like a helicopter as the centrepiece but more recently they acquired the mortal remains of a former Airspur WG30 helicopter which has recently been repainted in company colours.



**NORTHERN IRELAND:** The Northern Ireland Civil Air Patrol (NICAP) launched its first mission with an amphibious unmanned aerial vehicle (UAV) together with a helium balloon or aerostat, a blimp, in the search for a missing person in Enniskillen.

Paul Trimble, the CAP's most experienced UAV pilot flew the search, "As our first live mission with the new quadcopter, taking off from the deck of a patrol boat belonging to the Police Service of Northern Ireland and landing in the water was very successful. The new technology allows us to search increasingly inaccessible areas, reducing the risk to personnel and the cost of manpower."

Joining the search at the request of the Police Service of Northern Ireland (PSNI), the Civil Air Patrol (CAP) was tasked with providing an aerial search of local riverbanks and inlets where the water was moving too fast for PSNI dive teams to safely operate.

Towing the aerostat behind the PSNI boat provided a live aerial video feed to both CAP and PSNI search teams on board the patrol boat. The most inaccessible areas were then searched with the unique UAV, a quadcopter capable of a landing and take-off from water with a submersible camera system for an underwater search.

While the aerostat has been deployed in a number of searches around Northern Ireland, this is the first time the amphibious UAV has been flown for an operational search mission [CAP]

#### UNITED STATES

**ARIZONA:** The La Paz County Sheriff's Office hopes to accept two helicopters being offered by federal authorities. The helicopters were originally supplied to Maricopa County under the 1033 Law Enforcement Support Program, by which the federal government offers surplus military equipment to local police departments at no charge.

La Paz County, located along the Colorado River in Western Arizona, encompasses approximately 4,500 square miles of desert, rivers, lakes, streams, mountain ranges, and valleys. It is bordered on the west by the Colorado River and has just two incorporated towns, Parker the County Seat and Quartzsite. The Colorado River Indian Tribes (CRIT) Reservation is also located within La Paz County, those three have their own Police Departments and one, CRIT, has existing air support.

As is usual the Sheriff's office has stated that no general funds would be used to pay for operating the helicopters, funds are to come from grants and other sources. As planned it is expected that Maricopa County will supply La Paz County with many of the helicopters' parts as they already had them on hand, and do some of the maintenance work.

The helicopters were offered to La Paz in late November after it seems Maricopa County were told to pass the aircraft on to another operator. It is said that inconsistencies in Maricopa department accounting led to federal authorities demanding all the equipment provided through 1033 be returned.



According to the report it is expected that the two helicopters will be Bell OH-58 N117FT and a Hughes 269/ TH-55. The first is a 1969 airframe that has been completely rebuilt several times and is now fully modernised at a cost to Maricopa County of \$600,000.

Again it seems likely that these resources will not be heavily used, the Sheriff said that there was a need for air support just 36 times in 2013 and 2014. Nonetheless La Paz County is a centre for drug and human trafficking, and many illegal activities can "hide in plain

sight" in much of the desert so the availability of locally controlled air support may increase use.

The CRIT will provide hangar space, and the county already has a trained pilot in Sheriff's Sgt Donald Schlecht.

Ed: The 1033 program was established by the National Defense Authorization Act 1997 to provide law enforcement agencies with surplus military equipment. The scheme replaced an earlier less formal method of redirecting used equipment to other government bodies. Some \$5.1 billion in surplus military equipment has been provided since 1997, including \$450 in 2013. More than 8,000 law enforcement agencies are enrolled.

Elsewhere in the State CRIT Police used their helicopter 12 to 15 times a year. Their operation based on a Bell OH-58 is down because they cannot cover the cost of paying a pilot. It looks as if, in addition to housing the La Paz helicopters CRIT will cover the cost for operations on the reservation.

Maricopa may be losing its 1033 Program assets to others, and the OH-58 and the Hughes are only part, but they now have a fleet of newer Bell 407 helicopters recently introduced to service.

**CALIFORNIA:** The Board of Supervisors in Riverside County (California) has approved the purchase of two AS350B3 helicopters, according to local press. The total cost was quoted in the agenda to the meeting as \$11.5M net of which they have an insurance receipt of \$1.96M providing a net figure of \$9.54M.

The insurance receipt relates to another AS350B3 which was lost August last year. The remaining Riverside fleet consists of three AS350B3, one Bell OH-58 and a Cessna 182P fixed wing. The purchase replaces the written-off aircraft and the Bell, which was previously scheduled to be taken out of service in 2009.

The proposal put to the Board indicates that the single-source contract was favourable on the basis that they had a significant investment in maintenance tooling, training etc. and by sticking with the AS350B3 provided ongoing savings. Riverside is expecting to contract with Hangar One Avionics (based in Carlsbad, California) to manage the program from start to delivery.

Riverside County needs to contract with Airbus Helicopters Inc. for these aircraft before 1st January 2015 – at that point the unit price rises by \$90K. The actual purchase price is \$11,064,288 but the \$11.5M figure was put forward to cover contingencies. [Helihub]

**KANSAS:** Helicopters are increasingly seen as the cash cow in any organisation when it comes to balancing the budgets. The Wichita PD Air Section is one of the original 13 charter members of "Operation Sky Knight," the first formal police helicopter patrol programme in the Unit-



The Downlink Experts<sup>™</sup> Learn more at our website or call today! www.bms-inc.com/hc4.html • sales@bms-inc.com • 800-669-9667 (US) • 858-391-3050



ed States looks likely to be temporarily shut down to enable other officer safety equipment to be purchased..

The Wichita Police Department has a plan to purchase more than 400 body cameras; one for almost every officer. It has to come up with a way to pay for them all that involves using money seized in fighting drug abuse [money often used to support air operations without affecting the usual tax based funds] and grounding its single MD500E helicopter for one year.

The air asset survived closure several times during budget talks over the years. This time the department seems ready to ground it, for at least a year.

Although it is seen as an important asset it is clear that it is not used to a full enough capability that might make closure unthinkable. According to statistics provided by Wichita police in 2013 the helicopter was in the air for a meagre 201 hours, resulting in 32 arrests. This year, 161 flight hours netted 34 arrests. At risk is next year's aviation budget of \$345,891.

<section-header>

mance.

successful missions

For more information visit www.flir.com/380HDc

@flir

/flirha

THE WORLD'S SIXTH SENSE

These significant size, weight and performance advantages mean safer, longer, more **OKLAHOMA:** The Oklahoma City Police Department's Aviation Unit has put two new Airbus Helicopters AS350B3e AStar helicopters into service as part of a fleet upgrade plan. The new helicopters, delivered from Grand Prairie, Texas include technological and equipment upgrades that will enable the department to significantly improve its mission capabilities.

The new helicopters were displayed at an event in Oklahoma City, along with an AS350B3e recently delivered to the Oklahoma Highway Patrol and a recently delivered AS350B2 from the Tulsa Police Department. Oklahoma City ordered the two AS350B3e helicopters in 2013 to replace its current fleet of patrol helicopters and increase the type of missions the aviation unit's aircraft can perform.

The new Oklahoma City AStars are equipped with an avionics and mission equipment suite that enhances crew safety and law enforcement operational capabilities. This suite includes the Garmin G500H electronic flight information system, FLIR Systems 8500 thermal imager, Spectrolab SX-16 searchlight and the Aerocomputers UC-5100 moving map system.

The Oklahoma State Auditor and Inspector's Office has stated that a Bell Huey helicopter purchased by the Stephens County Sheriff's Office wasn't properly approved by the county commissioners and wasn't insured for six months from November 2013 to April 2014.

The Stephens County Sheriff's Office acquired the helicopter from the Law Enforcement Support Office, a program through the Department of Defense which provides property to law enforcement agencies. There was a one-time fee of \$5,000 to transfer the title of the helicopter to the county and approval by the county commissioners, required by state statute was not sought.

Stephens County Sheriff Wayne McKinney, who said the helicopter is used for fighting wildfires, search-and-rescue missions and other support services, said he was unaware he needed to have the use of \$5,000 approved by the commissioners. [Duncan Banner]

**TEXAS:** The Texas Parks & Wildlife Department has a new \$5M Airbus Helicopter AS350 B3e helicopter N350PW based in Austin and replacing an older OH-58 helicopter. [The Statesman]



## AIR AMBULANCE AUSTRALIA

**NEW SOUTH WALES:** Contracts have been signed with the two preferred operators to deliver the new NSW Helicopter Retrieval Network – one of the largest of its type in the world – operating as two regions, which it is expected will improve response times and deliver better patient outcomes across the state at a cost of \$152.2M.

The Northern region will be run by Northern NSW Helicopter Rescue Service Pty Ltd - an amalgamation of two well-known non-government organisations (NGO). This operator is already engaged in aeromedical retrieval using two BK117B-2 and two Bell 412 and will be tasked to perform patient retrieval from newly constructed helicopter bases in Lismore and Newcastle and the existing base in Tamworth.

The Southern region will be run by Toll Group - an Australian-listed corporation with a strong track record in helicopter aviation - from newly constructed bases in Bankstown, Orange, and Wollongong and the existing base in Canberra from 2017.

The new plan will see both operators use up to ten examples of the AgustaWestland AW139 as the state-wide standard aircraft equipped with NETS (Newborn and Paediatric Transport Service) and offering a doctor on every patient retrieval flight, from every base across the Helicopter Retrieval Network.

Further information about the tender at www.health.nsw.gov.au/helicoptertender

## ITALY

**DOLOMITES:** One of the first examples of the new EC135T3 is serving as a rescue aircraft in northern Italy's Dolomite Mountains.

The EC135 T3 is going into service with the Dolomites mountain rescue service, Aiut Alpin Dolomites, which works to help skiers, climbers and hikers in difficulty throughout the year.

The new P3 has adaptations which make it even better suited to mountain rescue applications than its predecessor, the T2i; are that it has a wider chord main rotor and has shifted the air intakes for the main engine from the front of the aircraft, above the cockpit, to the sides. These changes, although slight and barely noticeable unless you have both models in front of you and know what to look for, allow for a significant increase in power and improve the helicopter's performance in hover mode and at high altitude.

The only other visible changes to the helicopter are slight alterations to the horizontal stabiliser surfaces on either side of the tail, they no longer have vertical endplates, and small changes to the configuration of the tail rotor housing. [Mechanic]

#### SWITZERLAND

**REGA:** The Swiss air rescue agency Rega has completed instrument flight rules (IFR) certification for its mountain helicopter fleet of AgustaWestland 109 helicopters.

The organisation also hopes that by the end of 2015, all of its crews will have successfully completed IFR training, making use of its Da Vinci Flight Simulator, which facilitates the completion of a large percentage of the practical training, saving on fuel consumption and, consequently, much-needed funds. [Waypoint]

### UNITED KINGDOM

the announcement

NATIONAL: In a recent financial statement the UK Government Chancellor of the Exchequer George Osborne [right] announced that Search and Rescue and Air Ambulance charities will receive Value Added Tax [VAT] refunds over five years, alongside £7.5M in extra support for air ambulances.

The measure means the charities will be able to apply for VAT refunds on their search and rescue activities as of April 2015. The Association of Air Ambulances (AAA), which represents

the majority of Air Ambulance operations in the UK welcomed

#### January 2015

The announcement gives the air ambulance charities a VAT saving of approximately £10M over the next five years enabling them to invest further in their life-saving work.

The Chancellor also announced an allocation of £1M to Great Western Air Ambulance, £1.5M to Kent Surrey Sussex Air Ambulance Trust and a potential further £5M being made available to all air ambulance charities.

Clive Dickin, AAA National Director said;

"We are delighted with the Chancellor's announcement today. In April's budget the Chancellor introduced a rebate for VAT and duty charged on aviation fuel where it is used in heli-

copter emergency medical service missions of which we were extremely grateful."

The announcement follows lobbying by air ambulances, the All Party Parliamentary Group for Air Ambulances (APPGAA) and the RNLI [Lifeboats] to deliver the result on VAT.

The announcement sees not only a financial saving but also a relief of the administrative burden, allowing charities to recover all VAT and being able to treat all expenses equally across its operation. The use of trading companies and complex systems will no longer be required as a result of VAT relief.

Although the finite detail has not yet been fully provided, the AAA will be working with the Treasury and HMRC to gain a better understanding of this exciting news and advising its members of the resultant changes. [AAA/Media]



www.associationofairambulances.co.uk

**CORNWALL:** The MD902 Explorer helicopter for the Cornwall Air Ambulance service has now flown in its new colours and equipment fit. The new model of helicopter will pave

the way for "significant improvements" to the service, including night flying. The current EC135 aircraft, which has served the county since 2001, has now been retired to make way for two MD902 helicopters as part of the charity's switch to operator Medical Aviation Services.

The biggest change is that the new helicopters are fully Night Vision equipped, meaning Cornwall's air ambulance will soon be available 12 hours per day all year round from early 2015, an enhancement from the current eight hours per day in the winter due to the lack of daylight. The new aircraft will be officially launched at a ceremony in January 2015.



**WILTSHIRE:** Plans to commence operations with the new Bell 429 from January 1 were put on hold in the middle of December. Just as they were welcoming back to Devizes pilots George Lawrence and Nicky Smith following intensive familiarisation training in Slovakia they admitted that the earlier plans had hit a glitch.

The transition from the joint police operation helicopter, the MD 902 supplied by PAS, to the Bell 429 required the new type to be available from day 1 – subject to a complex series of interlinked events – all rightly subject to a whole raft of safety regulations.

David Philpott, WAA's Chief Executive, said: "Because we wanted to maintain cover over the busy Christmas period and get maximum cost efficiencies out of our current contract which we share with the police, there will be a delay of a week or so while we enhance our safety training on the Bell 429 and satisfy the Civil Aviation Authority of our mission readiness.

"We take the safety of our crew and passengers very seriously and categorically will not compromise in this vital area. We are confident, however, that the people of Wiltshire will still have robust air ambulance cover which will be provided by neighbouring air ambulances."

WAA Critical Care paramedics will use the Rapid Response Vehicle (RRV) to attend emergencies while the helicopter is not flying. The RRV is based at WAA Operations Centre at Wiltshire Police Headquarters, Devizes.

Once operational, the Bell 429 will fly up to 19 hours a day. Initially it will operate in the daytime with night flying commencing in late spring 2015. This is to allow the pilots to accumulate experience with the aircraft and The end of an era as police aviation coverage now lies with NPAS in Bristol



operating area while at the same time training for night flying. [WAA]

Ed: This WAA Press Release was erroneously taken by some local newspapers as being 'untrained crews' but they were wide of the mark, Helihub dug deeper and found that it hid some background errors on the part of both the charity and the operator, Heli Charter.

Both Heli Charter and WAA had assumed naïvely that at the stroke of midnight the 902 would fly away and the 429 would start operations but the certification authorities do not work that way and at the core of the story is an administrative delay while the old [PAS] is dismantled and the new [Heli Charter] put in place prior to a CAA inspection.

Heli Charter are new to EMS operations and that will require them to be scrutinized intently to gain the "EMS Supplement" to their AOC, and to allow them to carry out line maintenance from their initial Wiltshire base at the Police HQ in Devizes.

Neither of these are insurmountable, and Wiltshire Air Ambulance are confident that there will be no further delays beyond the booked CAA inspections later this month. Other operators of longer standing managed to hide their little glitches behind closed doors where the new operation involving a wholly new set up was always under the [self-induced] glare of public scrutiny.

In the same vein the installation of the TETRA digital radio modification, design clearances proved to be something of a stumbling block. All the big boys in this game now have to have their own Design Offices to meet significant CAA requirements. All UK emergency services are digital but it seems to have caught the newcomers unawares and as a result the 429 will not be fitted with a permanent installation yet.

This is but another instance of failing to hide the truth behind closed doors. Regular readers only need to notice that the Cornwall operation may not be using the exact aircraft intended to commence operations, or to note the massive gap between PAN announcing the downlink work on the NPAS fleet, and this month's official announcement of the job finally being completed! Wiltshire may be 2-3 months adrift but that downlink work was way longer.

The air ambulances aspirations towards flying night operations will commence in the spring but it will be many months beyond the target of April this year before significant operations commence.

## UNITED STATES

**NORTH DAKOTA:** Dakotas-based Sanford Health says it is adding an airplane ambulance in North Dakota's oil patch. Sanford AirMed is slated to be operating the twinturboprop airplane in Dickinson beginning Monday. The airplane will have a crew of flight paramedics, flight nurses, mechanics and a pilot who will transport patients in western North Dakota. The King Air B200 fixed wing aircraft can travel at speeds of up to 300 miles per hour and can land on a short runway. Sanford Health is based in Sioux Falls, South Dakota, and Fargo, North Dakota.

**UTAH:** Intermountain Life Flight of Utah has taken delivery of its fifth GrandNew for EMS and SAR missions as they expand service to patients throughout the western United States. Completed in Philadelphia, the GrandNew delivered to Intermountain Life Flight provides increased emergency response capability, including NVG compatibility, to the communities they serve. Allowing the flight team to identify hazards during night EMS operations as well as enhance the crew's ability to find and locate stranded hikers and rescue personnel, night vision goggles improve pilot and crew vision and work when light sources are limited.

Intermountain Life Flight's helicopters are based at McKay-Dee Hospital in Ogden, Intermountain Medical Center in Murray, Utah Valley Regional Medical Center in Provo, and Dixie Regional Medical Center in St. George, Utah, with a Neonatal Transport team based at Primary Regional Medical Center in Salt Lake City, Utah. Intermountain Life Flight's specialty care teams are also able to manage LVAD, balloon pump, and high risk obstetrics patients. [AW]



# **FIRE** JAPAN

**IWATE PREFECTURE:** AgustaWestland and Mitsui Bussan Aerospace have jointly announced that the Iwate Prefecture has selected the AW139 twin-engine intermediate class helicopter for fire fighting and disaster relief duties, replacing an ageing model. The AW139, already a benchmark helicopter in Japan with 38 units in service, will be delivered to the customer at the beginning of 2016. [AW]

### SPAIN

**HASA:** PZL-Świdnik, an AgustaWestland company, has announced the signing of a contract with the Spanish company Hispánica de Aviación S.A (HASA) for three W-3A Sokół helicopters in fire-fighting configuration. The contract will also see PZL-Świdnik deliver an Initial Spare Parts (ISP) package, Ground Support Equipment (GSE) and a comprehensive training package. [AW]



# SEARCH & RESCUE

The ARA Flugrettung recently became a member of the ICAR (International Commission for Alpine Rescue). The purpose of the organisation, which has 72 members, is to further develop alpine rescue and safety. The unanimous decision to include the ARA Flugrettung was taken at the ICAR Conference in Lake Tahoe, USA, which was attended by the delegates from 33 countries. The ARA Flugrettung can contribute its know-how gained from over 10 years of practical experience at its Austrian HEMS bases in Reutte/Tyrol and Fresach/Carinthia to the ICAR's work.

Focal themes of the "Air rescue" committee at the ICAR conference included aviation incidents, rescue procedures and newly developed products. In addition, in the three other committees "Terrestrial rescue", "Avalanche rescue" and "Alpine emergency medicine", the delegates swapped information about the latest operations.

The next conference will take place in 2015 in Ireland, where the focus will be on collaboration between crew members from air rescue and terrestrial rescue.

#### FALKLAND ISLANDS

It is reported that a tender seeking an operator to continue helicopter borne search and rescue. air-rescue and air-sea rescue services has been let to the incumbent Brintel. It is said that they are the preferred bidder and started a 30 day cooling off period a month ago.

#### PAKISTAN

The Sindh cabinet has decided to purchase a helicopter from AgustaWestland at a cost of \$15.95M for Provincial Disaster Management Authority (PDMA) to carrying out relief work.

#### **TRINIDAD & TOBAGO**

**AIR GUARD:** Key staff members of the Trinidad and Tobago Air Guard, the country's first Search and Rescue helicopter unit, have been trained to fully take over responsibility for operating and supporting the service.

Two pilots have now achieved the status of Command Officers and the Trinidad & Tobago Civil Aviation Authority have issued licences to five engineers who are now authorized to work independently on the four multi-mission AW139s in operation by the Air Guard.

Newly promoted Command Officers Christen Garnes and Kevin Maharaj, as well as Warrant Officers Vinod Sawh, Desi Geoffroy, Vinod Rambaran, Brent Nora, and Sergeant Jeremy Wilson were recognized in a ceremony at the Ulrich Cross Air Station that was attended by the Permanent Secretary of National Security Carl Francis and were joined by other officials from the Government of the Republic of Trinidad and Tobago, the Trinidad and Tobago Air Guard, and industry partners.

The promotions of the Air Guard personnel are a key milestone as the unit further expands its capabilities and mission profiles in Trinidad and Tobago and the surrounding region. As of November 2014, the Trinidad and Tobago Air Guard has flown over 5,000 hours and has been instrumental in aiding in security during high-profile events, including Carnival, and conducted operational sorties to include day/night SAR missions (onshore and offshore), patrol and surveillance, firefighting, troop transportation and fast roping, life-saving medevac rescues, VIP transportation, disaster relief, and deck landings.

Following the establishment of the Trinidad and Tobago Air Guard in 2005, and the subsequent deliveries of AW139s in 2011, a consortium led by AgustaWestland was established to manage the program in Trinidad and Tobago with training services to be supplied in Italy, the UK and the USA.



February 23-25, 2015 | Washington, D.C.

www.BorderManagementSummit.com

### UNITED KINGDOM

**SCOTLAND:** The search and rescue co-ordination centre [ARCC] at Kinloss in Moray is to close with 27 RAF posts and ten civilian posts said to be affected by the relocation to the National Maritime Operations Centre at Fareham in southern England.

The Kinloss centre currently co-ordinates RAF, Royal Navy and Coastguard search and rescue helicopters, as well as the RAF mountain rescue service.

When making the announcement the Ministry of Defence said there would be no compulsory military redundancies as a result of the closure, and personnel would be assigned to other duties across the UK.

It said the move to Fareham, between Southampton and Portsmouth on the south coast of England, would improve the UK's search and rescue services.



Bristow Helicopters Limited will use Iridium OpenPort® broadband service via LiveAero, a Thales product, to enable high-speed connectivity on their Sikorsky S-92 helicopters for search and rescue applications. Iridium with LiveAero is the only mobile satellite network that has demonstrated the capability of providing reliable in-flight broadband connectivity on rotorcraft.

The equipped Bristow helicopters will be deployed to support civilian SAR services across the UK and around the coastline as part of Bristow's contract with the Maritime and Coastguard Agency (MCA) in the United Kingdom. Bristow began SAR operations in 2013 from the Stornoway and Sumburgh bases. By summer 2017, ten helicopter bases will be fully operational across the UK.

The urgent nature of this work requires a reliable communications network, and LiveAero and Iridium broadband connectivity will enable SAR teams to provide enhanced in-flight care and triage such as fully automated electronic patient information and real-time transmissions of patient vitals to on-ground medical facilities. <a href="http://www.liveaero.com">www.liveaero.com</a>

Although PAN previously reported the building works underway at St Athan early last month (December 2, 2014) an official ceremony was held to mark the start of construction of the new Search and Rescue (SAR) helicopter base.

The base will house two state-of-the-art SAR helicopters, operated by Bristow Helicopters Ltd, their crews and support team. It is due to become fully operational later this year, when Bristow Helicopters Ltd takes over delivery of helicopter Search and Rescue services throughout the UK on behalf of the Maritime and Coastguard Agency (MCA).

The St Athan base is one of a number of new build facilities being developed by Bristow Helicopters Ltd, with its infrastructure delivery partner Balfour Beatty, at commercial airports and airfields around the UK. As the main contractor, Balfour Beatty is outsourcing various aspects of the building works to local contractors in the communities in which the bases are being established.

At the forefront of sustainability, the bases include a raft of environmental technologies including PV solar panels and rainwater harvesting systems.

The ceremony was attended by representatives of the Welsh Government, Balfour Beatty and Bristow Helicopters Ltd.

Bristow Helicopters Ltd has signed a long lease with the Welsh Government for the site on the Aerospace Business Park's Rotary Zone.





# INDUSTRY

In the USA **Phillips Safety Products** have been manufacturing eye protection and other safety products in New Jersey for over 100 years. They have recruited former police pilot and ALEA member Tony Cassillo to promote their "Laser Strike" eyewear, a unique eye protection that they developed for the US Military and are now offering to the civil sector. The Phillips eyewear protects against all three laser light spectrums in three levels of protection. Red, which is the most common laser pointer sold, Blue/Green and Blue/Green/ Red.

The increase of online and in store sales of Laser Pointers has reached all new highs. In 2013 alone, there were nearly 4,000 laser strikes on aircraft reported in the USA In a very short time, our customers include the NYPD, LAPD Aviation Units and numerous individual purchases.

"Laser Strike" eyewear msrp is \$149.99 but ALEA members can receive a 20% discount by entering the code ALEA at checkout on the website <u>www.laserstrikeeyewear.com</u>

Cincinnati based **Argus International, Inc.** (Argus), a specialised aviation services company providing the aviation marketplace with data and information has announced that Transplant Transportation Services, Inc. based in Petaluma, California, USA, a specialised operation set up to meet a need for dedicated transportation solutions for organ transplant teams, has successfully completed Argus' thorough and rigorous evaluation process to meet their Certified Charter Broker rating.

The Argus' Certified Charter Broker Program raises the bar to meet the high expectations and due diligence requirements of charter consumers and commercial aircraft operators thus becoming the first medical flight company to ever receive the rating. <u>www.argus.aero</u> <u>www.transplanttransportationservices.com</u>

**Resource** Group's Unmanned Aviation Flying Services [UAFS] team is one of four organisations awarded a place on the national framework agreement by Network Rail for a three year contract to provide aerial infrastructure inspections and surveys. Network Rail runs, maintains and develops Britain's rail tracks, signalling, bridges, tunnels, level crossings, viaducts and 18 stations.

The use of remotely piloted unmanned aviation systems should help to increase inspection efficiencies and reduce the risks associated with rail engineers working at height and in busy rail environments.

The UAFS is a training organisation for Remotely Piloted Aircraft Systems (RPAS), operating a CAA qualified Remote Pilot Qualification (RPQ) training programme based at the Cotswold Airport [the former RAF Kemble].

The company are able to provide live aerial imagery and video including infrared to aid the emergency services to increase awareness of incident commanders on scene. <u>Uas.projects@resourcegroup.co.uk</u> or call +44 1633 835 117.

Ed: Issue 195 of PAN reported on the opening of LRTT the training set up of the Resource Group at Cotswold Airport in July 2012. In the past the engineering surveillance service has been provided by manned helicopters under contract; it is uncertain at this stage in what form a manned capability will continue – if at all. The British Transport Police used these helicopters for a limited crime fighting capability but that has now been taken over by NPAS.



**California Training Institute** (CTI) based in St. Helena, California has developed what it believes may be the most important law enforcement course available today; a dynamic, participant-centred course, providing the latest in officer involved use of force (UOF). The course delivers material directly credited with saving officer lives on the street, and with preventing some officers from being unfairly convicted of criminal use of deadly force.

ALEA has used Craig Geis, co-founder of CTI, to teach elements of their education streams including aviation human factors and CRM for many years and HAI has used him to teach the same subject as well in the past.

CTI see their course as vitally important training is for all participants involved in police officers' use of force policy and procedure, and is designed for law enforcement Command Staff, SWAT & Patrol, Investigators, Trainers, Police Psychologists, Attorneys, and Risk Managers.

FORCE ENCOUNTERS ANALYSIS: Understanding Human Performance during Critical Incidents is coming to locations in Washington this quarter.

The two announced events are listed simply as February 17-19 at Spokane Police Department and then March 30-April 1 at Vancouver Police Department. You are assumed to know where Spokane and Vancouver are but I may need to tell clarify the detail! Spokane is in Washington State but, contrary to your guesses, Vancouver also is. It is not the Canadian version that most know. The courses cost \$290.00 per person.

**Draeger** has announced that the US Food & Drug Administration (FDA) has cleared its Globe-Trotter GT5400 neonatal transport system. Designed to move effortlessly between helicopters, airplanes and ambulances, GT5400 meets global safety certifications and incorporates high-performance components that are critical for the care of neonatal patients. In the U.S., it is estimated that close to 70,000 neonates are subject to inter- or intra-hospital transport each year.

The GT5400 is a universal transport incubator system that incorporates essential functions such as thermoregulation, ventilation, vibration damping, intravenous infusion pumps, and monitors. While clinicians traditionally had to rely on separate, non-integrated devices to move neonates depending on the type of transport, the GT5400 allows for patients to remain in one incubator – whether they are being moved via emergency helicopter or fixed-wing aircraft, ambulance, or simply wheeled into another area of a hospital.

The GT5400 was introduced at the annual American Association for Respiratory Care (AARC) Congress in Las Vegas last month. <u>http://www.draeger.com</u>

Austria based company **Airborne Technologies** has announced the launch of a revised version of their website and invite you to browse through it at <u>www.airbornetechnologies.at</u>

Late last year **Piaggio Aerospace**, the company active in the design, manufacturing, and maintenance of both aircraft and aero engines, announced that the new Avanti EVO received certification from the European Aviation Safety Agency (EASA).

The Avanti EVO gained official approval after an extensive development and test program carried out under the supervision of the Italian National Civil Aviation Agency, ENAC, on

New helicopter project in the pipeline? For need Helimetrics Ltd to help you manage the maze. From operational requirements to programme management, aircraft acceptance, and warranty suppervision Helimetrics Ltd clients already include government agencies, the police, multi national technology companies and private owner-operators Helimetrics.com behalf of EASA. US certification from the Federal Aviation Administration (FAA) is expected within the next few weeks as well as the Indian Certification as the first two Avanti EVO aircraft will be delivered to Indian customers.

The EVO has a number of significant modifications, approved by EASA, that are intended to improve the Avanti design to boost efficiency, reduce operating costs, provide greater levels of comfort and a smaller environmental impact.

Amongst its improvements are a Low Noise power plant where the PT6-66B turbines are fitted with patented exhaust stacks and Hartzell low rpm counter-rotating 5-blades scimitar propellers to reduce community noise at take-off, the combination of Main Wing winglets coupled with new Front Wing wingtips to improve the already sophisticated Avanti aerodynamics and strengthen cruise and climb performance: max cruise range is further extended to 1770Nm (+3%) and Climbing to FL 350 is faster by 10%

The more efficient wing combination increase the service ceiling to FL410, equal to the certified ceiling, which further improves the EVO margin over the competition as the faster and higher flying turboprop on the market.

The design will shortly include anti-skid braking, new low-maintenance landing gear, new digital steering, to both improve performance, reliability and cut maintenance requirements.

**Eagle Helicopters Ltd** has announced the receipt of Transport Canada certification for its Eagle 407HP.

After an extensive certification effort, the wait for this outstanding conversion is finally over. By virtue of a Supplemental Type Certification (STC), the upgrade replaces the OEMinstalled Rolls Royce C47 turbine engine with a 'next-generation' Honeywell HTS900 turbine engine, significantly improving the Bell 407 helicopter's high altitude and hot ambient temperature performance. This is the improvement the long cancelled Model 417 Bell was offering customers some years ago. Bell subsequently withdrew the type in March 2007 despite significant customer interest.

Among the advantages the Eagle conversion offers to operators is even better performance from the Bell 407 via increased shaft horsepower and thereby improved payload capability. Additional key benefits provided by the Eagle Copters conversion include increased speed, reduced fuel consumption, and the incorporation of a true dual-channel FADEC engine control system.

FAA validation is well under way and the Company has now begun taking firm orders for the conversion, optimistic that FAA certification and other foreign validations will not be far behind. For information check out www.eaglecopters.com.

At HAI in February 2006 Bell Helicopter introduced their new Bell 417 as a mock-up in law enforcement configuration. A year later the project which had been brought to market with a massive PR launch claiming that it was 'customer driven' simply disappeared with a whimper by

to a winner.

the following years event with Bell saying there was no The Bell 417 flew but the manufacturmarket for it. It will be interesting to see – eight years er soon abandoned the model when later – whether Bell was right first time and Eagle are on DoD dropped the military version ©

**Northrop Grumman Corporation** is among the sponsors of the Jubilee Sailing Trust (JST), a registered charity whose mission is to promote the integration of people of all physical abilities, including injured and recovering servicemen and women, through the challenge and adventure of tall ship sailing.

As part of its sponsorship, Northrop Grumman's Sperry Marine business unit replaced the navigational electronics on the Lord Nelson, one of JST's two tall ships. This update included the main gyro compass system originally fitted in 1985. Since the JST was established in 1978, they have welcomed more than 40,000 people on board, of whom 15,000 have had a disability and 5,500 have been wheelchair users.



#### January 2015

Lord Nelson and Tenacious are the only two tall ships in the world purpose-built to enable people of all physical and sensory abilities to take an active role in sailing. Supporting and sponsoring JST aligns closely with Northrop Grumman's values of inclusiveness, diversity and equality. <u>www.northropgrumman.com</u>

**Airbus Defence and Space** has launched its new solution for transmitting missioncritical data from remote border security sensor sites to central operation centres via satellite. Moreover, control and analysis software applications for border security sensors can be operated over this same robust link. This gives border security authorities access to a unique border security capability.

Up until now, there was no alternative to expensive and time-consuming long-distance connections with copper cables or fibre-optic links. While traditional terrestrial links – optical fibres for medium distances, for example, and microwaves for short distances – can still be used where the infrastructure is available and the terrain is suitable, these communication bearers can now be complemented by highly adaptable and affordable secure satellite communications to more remote sites in difficult terrain. The same solution can be used to provide short-term 'interim' availability and to deliver connectivity to mobile sensors.

Airbus Defence and Space's satellite solution has been specially developed to deliver 'best in class' throughput and resilience.

A double-handover ceremony marked **Airbus Helicopters**' first deliveries of its new-generation EC175, with two of these 7-metric-ton category rotorcraft provided to NHV for oil and gas missions in the North Sea.

The EC175s will be utilised on the airlift of crews and supplies to oil and gas platforms at sea, along with search and rescue in support of such off-shore operations.

A total of 16 EC175s have been ordered by NHV in its strategy of owning a young, modern fleet. NHV will begin EC175 service this month from the Dutch North Sea base of Den Helder.

**Simavia** based in Prescott Arizona have announced the launch of its AS350 Flight Training Device. Simavia's primary business focus is in the manufacture (OEM) of affordable helicopter and fixed wing aircraft flight training devices at the Prescott Regional Airport (KPRC). The facility which houses engineering, management and technical support offices also houses manufacturing, assembly and fabrication areas. The range of FTDs are variously certified to FAA, EASA and ICAO standards. The two development phase Airbus AS350B2 helicopter devices will be certified as EASA FNPTII. FNPT Level 2 requires a fully enclosed cockpit/flight deck sufficiently enclosed to exclude distraction, which will replicate that of the type simulated. Circuit breakers are required that affect procedures and/or result in observable cockpit indications properly located and functionally accurate. A flight dynamics model that represents various combinations of drag and thrust normally encountered in

# **ATTRACTIVE OPTIONS**

Latest edition available worldwide on-line Downloadable PDF in handy size no need to read on-line Easy crew room print-outs Full 12 months archives at the click of a mouse Research data files freely available on-line

#### NO SIGN UP NO HIDDEN CHARGES





23

#### Police Aviation News

flight corresponding to actual flight conditions, including the effect of change in airplane attitude, sideslip, thrust, drag, altitude, temperature, gross weight, moments of inertia, centre of gravity location, and configuration. The Simulator replicates aircraft in flight and on the ground environment and all normal, abnormal, and emergency operating procedures can be covered. [www.simaviausa.com]

The inaugural **Los Angeles Drone Expo** was marked by disruption by protesters. The event, billed as the largest so far, included a conference at which Retired FAA aviation/UAS safety inspector David Morton in his keynote speech said that failings, including numerous fatal crashes, from the U.S.' adoption of planes in the early 1900s has impacted the agency's stance on regulating drones today and that analysts suggest that far from achieving acceptance in the short term no significant progress will be made in publishing a publicly acceptable policy document before 2017. Morton, a leading light in Federal UAS activity and speaker at many major law enforcement events [ALEA/IACP included] is now to work in the commercial UAS industry. [TDG/PAR]

**Austro Engine,** Diamond Aircraft Group, is celebrating the completion of the 1,000<sup>th</sup> AE300 turbo charged diesel aircraft engine.

Jürgen Heinrich, ČEO Austro Engine: "The 1,000th AE300 symbolizes a significant milestone, reflecting the engine series' quality and reliability. With a Time between Overhaul of currently 1,500 hours our customers benefit tremendously from lower downtimes and reduced total operational costs. For 2015 we are working on an extended power version delivering 180 hp."

With the 170hp AE300, Austro Engine has launched the leading Jet A1 piston engine in General Aviation. More than 480,000 flight hours have proved the power plant's reliability and endurance, the highest performance and efficiency compared to other products in this field.



At equal power the engine has a 45 % lower fuel burn than conventional piston aircraft engines running on AvGas. It produces significantly less exhaust emissions and is exceptionally silent.

Christian Dries, CEO Diamond Aircraft: "2014 was a successful year for Diamond Aircraft and Austro Engine. This is mainly because of our innovative and reliable propulsion system. I expect the AE300's Time between Overhaul to be increased to 1,800 hours."

The Vienna based 1918 Technisches Museum Wien (TMW) has taken delivery of the first **Diamond DA-42** as an exhibit designed to demonstrate an aircraft that brought to

Copyright Notice: The content of this publication includes items that are the copyright of others. The source of words and images will usually be indicated together with the source of additional information that seeks to enhance the original information.

Police Aviation News includes materials produced for it by Ian J Commin of Insight Design of North Burnham, Slough SL1 6DS. This includes the banner titles and the PAvCon logo. In addition from time to times images specifically altered by Insight Design and others but originally produced for McAlpine Helicopters [now Eurocopter UK], Oxford, will appear with permission of the original owner. In some cases it may not be possible to indicate the source of this material directly associated with the images used.

market three innovations at once – state-of-the-art carbon technology, modern avionics and the most efficient drive technology in an airframe used for private flying, for airline and military pilot training and for remote sensing applications."

The DA42 maiden flight took place on 9 December 2002 at Wiener Neustadt in Austria with Diamond owner Christian Dries as test pilot – after only 11 months of development time. One and a half years later the DA42 made the first non-stop transatlantic crossing by a diesel engine powered aircraft in general aviation.

# **INCIDENTS & ACCIDENTS**

**29 November 2014 Robinson R44 5H-TWA.** Tanzanian Government. The helicopter crashed in the Kipunguni area of the Indian Ocean port city of Dar es Salaam killing the four people aboard. The dead were reported to be two pilots from the police force, a civilian pilot and a police officer. They have been named as Police Superintendent Captain Kidai Senzala, Police Inspector Captain Simba Musa, Police Constable Josso Selestine and Captain Joseph Khalfan from the Ministry of Natural Resources and Tourism. The R44 was donated to the Tanzanian government by the Howard G. Buffett Foundation, a private family foundation working to improve the standard of living and quality of life for the world's most impoverished populations to conduct surveillance operations against illegal poaching of endangered species. [Media]

Ed: In June 2014 Park rangers at the Selous Game Reserve in Tanzania were officially donated the helicopter as a new tool to protect animals against poachers. While on a visit to the country, Howard G. Buffett, eldest son to billionaire Warren Buffett, announced the helicopter, training and GPS equipment for rangers to better survey the sprawling 21,100 square-mile reserve for illegal hunters.

**30 November 2014 Eurocopter EC135** Chile Police. The police helicopter was on the ground rotors running in a city street adjacent to a road traffic accident scene at a junction in San Miguel, Chile. It had been on the ground some time when a fire truck approached it from the rear a struck it. The tail boom broke free at the rear fuselage join and folded back. The pod spun on its skids for some seconds until the tail boom separated as it struck a police car, it then fell over and burned. The pilot was left in serious condition with multiple fractures while the other three officers were being treated in hospital. [9news.com.au/various]

**14 December 2014 Eurocopter AS350B3 AStar N708PD** East Bay Regional Park PD. While flying at 1,000 feet/80knots in the vicinity of Interstate 88022 Avenue/16<sup>th</sup> Avenue, Oakland California close to ongoing areas of civil disturbance had a close encounter with an illuminated orbiting drone at 400 feet. As the police aircraft joined the craft in orbit at 500 feet separation it switched off its light and took evasive action and was lost to sight. [EBRP]



**15 December2014 Eurocopter EC135** Air ambulance of SMURD. Crashed into Siutghiol Lake near the Black Sea coast killing all four people aboard, a pilot, co-pilot and two medical staff based at Constanta County SMURD — the Mobile Emergency Resuscitation and Extrication Service. The helicopter was returning to refuel at Mihail Kogalniceanu airport base from a mission after taking a patient to Constanta County Hospital.

Reports claim that the aircraft hit the water and broke up with parts floating to the surface where some of the crew exited the aircraft were seen in the water but that rescue was slow and only one member of the crew Dr Laura Vizireanu, was saved and brought ashore but she died later in hospital, all the others sank with the craft in 6 metre deep water.

It is stated that the aircraft involved was only taken on charge on November 25 and others that it was a new aircraft recently delivered from a Eurocopter 'technical examina-tion.' [AGERPRES/media]

## PEOPLE

Bell has announced a new addition to the European team. Effective immediately, David Bond [pictured right] will assume the role of Regional Sales Manager (RSM), responsible for overseeing sales activity in the United Kingdom (UK) and northern Europe.

Prior to this position, David was responsible for sales and business development activities of Bond Air Services, one of the largest providers of helicopter operations in the UK, delivering Helicopter Emergency Medical Services, police and offshore energy support. David has over 12 years of experience in the aviation industry, and has spent 10 of those years specializing in helicopters.

## LETTER

#### Dear Editor,

As a regular reader of Police Aviation News I was intrigued by your reference to the former North East Air Support (NEASU), December issue, page 7, in which you suggest that, "The on ground time of the (Britten- Norman BN-2) fixed wing was so high that it was done away with in favour of a second EC135 helicopter."

January2015

Whatever the reason for making this change it was, most certainly, nothing to do with any failing on the part of the aeroplane. As part of a wider study, which compared the aeroplane, a BN2B-20 Islander, with the helicopter, an EC135, the downtime for both aircraft for individual events over an 18 month period was as follows:

Event.	BN2B-20	EC135
Mechanical defect.	122	602
Aircraft servicing.	204	493
Adverse weather.	80	272
Percentage of total.	23%	77%

it was also found that the 'hit rate', the number of arrests per hour flown for 'search crime' and 'vehicle pursuit' was 0.23, with one arrest for every 4 to 5 tasks for 'search crime' and 'vehicle pursuit' for both aircraft. However, the success rate diminished with distance flown and the time taken for the aircraft, both types, to arrive at the scene of an incident. Two years after the change, after the warranty for the new, second helicopter had expired, it was decided that two helicopters was unaffordable and the NEASU was disbanded.

More modern aeroplanes, those with aero-diesel engines, are even better with routine servicing every 100 hours and a fuel bill that reflects the economy of a piston engine that burns the less expensive Jet-A1 at an average of 5 USG per flying hour for each engine.

Yours sincerely, Tony Cowan

James A Cowan MBE

Former senior pilot (FW) NEASU

# **MOVE ALONG THERE PLEASE**

The Navy ought to be distraught – they are just about to take the venerable Westland Sea King out of service when the publishers of those well-known motor vehicle maintenance guides Haynes bring out a guide to the Sea King. Forty years too late.

As a fitting tribute to its long service, the Owners' Workshop Manual publisher has commissioned a book that allows the reader to get up close and personnel with one of the Navy's most loved flying units. Just in time for those preservationists who might pick one up on the surplus market perhaps?

The Haynes Westland SAR Sea King Mk 5 Manual brings together for the first time an almanac of facts and figures that are complemented by pictures from inside 771 Naval Air Squadron at Royal Naval Air Station Culdrose, Helston, and Gannet SAR Flight in Scotland.

The book – ISBN 9780857335050 retails at £25 from Haynes International in Yeovil, Somerset but can be picked up for as little as £17 if you search around.



# . (



After the story about Singapore getting an aerostat to improve radar coverage of their nation comes news that the North American Aerospace Defense Command, NORAD, is to launch a similar device over Maryland's Aberdeen Proving Grounds just east of Washington DC. The media have suggested that it is to seek out drones threatening the skies over DC.

It is the technology that found a secret police aircraft just months ago, and it looked like a repeat performance when an aircraft was seen zig sagging across the deserted waters of The Wash on England's East Coast in the early hours of the day via a mobile telephone App. But who were they and what are they doing?

Far from being a spy plane checking on Britain's coastal defences for illegal immigrants, smugglers or drug runners it seems it was a contractor working for the Environment Agency intent on capturing aerial survey data of England, which is used for, amongst other things flood mapping and environmental monitoring.

This example of remote sensing is the capture of data of an environment without direct contact. Techniques vary from the very simple, such as aerial photography, to the more complex like laser scanning (LIDAR) for terrain modelling.

The contractor from Coventry operate two light aircraft from East Midlands airport; a Cessna 404 (G-MIND) and a Cessna 406 (G-LEAF) working in shifts 24/7, 365 days of the year and spend on average over 1,000 hours per year in the air capturing high resolution digital photography and LIDAR (Light Detection & Ranging) data around the country. Last year the operation surveyed over 15,000 km squared of England's urban areas, coastal zones and rural river plains.

Each survey aircraft is equipped with a range of instrumentation, which allows the taking of high resolution images for ongoing monitoring as well as emergency response work, such as during floods.

The survey team gets the opportunity to see the country in a way that very few people do and the incredible imagery and data that they capture is used daily to support the environment and help reduce flood risk. <u>www.geomatics-group.co.uk</u>. [Environment Agency]

With the Avalon Air Show next month it is worth marking that last month New South Wales Police in Australia officially accepted new aircraft into its inventory including a Bell 412 and a Cessna 208 Grand Caravan. Below are some images from the NSW Police web site.



## SHOWTIME

The US based NBAA has announced the dates for this year's Business Aviation Conferences and Exhibitions in China, Europe and the USA. The China event [ABACE] is in Shanghai April 14-16, next is the EBACE at its familiar location in Geneva, Switzerland May 19-21 2015 [the week before PAvCon] and finally NBAA 2015 takes place in Las Vegas, Nevada, USA November 17-19. The NBAA conventions, conferences, forums and seminars featured in 2015 are designed specifically for business aviation professionals, with a wide selection of programme content. This includes continuing education, professional development, and networking; forums to share industry best practices; venues to find the latest products and services for your operation; or some combination thereof. NBAA's Conventions are large-scale, 3-day events that facilitate networking, foster and grow client relationships, and feature educational programs on a wide variety of topics. Check out the website for other NBAA conferences and Regional Forums [exclusively operated within the United States]. These go more in-depth on a single facet of the business aviation industry. www.nbaa.org

## FORTHCOMING EVENTS DIARY

27-29 January 2015 ALEA South East Region Safety Seminar. DoubleTree Suites by Hilton Hotel, 3050 N. Rocky Point Drive, Tampa, FL 33607-5800 The Southeast Region Safety Seminar is historically a very well attended seminar, and the 2015 looks to keep the tradition. Remember to register for a table top to present your products and services to our attendees. The first evening ALEA hosts a *Welcome Reception* in the vendor exhibit area, allowing for one-on-one interaction between members and you. The second day is filled with education, interaction and networking with the members of attending air units. This is a great opportunity to introduce new products and make your company stand out! Table top \$400 Electricity \$50. Sponsorship options available from \$500 to \$3,000. Contact Belay Osborne at the ALEA Office in Frederick. +1 (301) 631-2406 Fax (301) 631-2466

23-26 February 2015 IDEX at the Abu Dhabi National Exhibition Centre, Abu Dhabi, UAE. All guests are required to register as visitors to attend IDEX. The quickest way to do this is to complete the IDEX visitor registration process online. <u>www.idexuae.ae</u>

23-25 February 2015 Border Management Summit, Washington DC. This includes a presentation on Utilizing Unmanned Aircraft for Border Management. The promotional text states that Effective surveillance is a must when it comes to border control and management; but how do we make that happen in the most cost-efficient manner? The debate over unmanned aircraft as being a solution continues as many wonder does the cost outweigh the benefits and are the rumours of these drones only being used 40% of the time actually true. This session will deliver best practices as to how Unmanned Aircraft Systems (UAS) are being used to protect national borders.

The organisers are working with the key stakeholders who are setting the specs for current and future RFPs and RFIs. Including: Michael Fisher *Chief US Border Patrol Customs and Border Protection*, Kenneth Fletcher *Chief Risk Officer Transportation Security Administration*, Joseph Campbell *Deputy Assistant Dir. CID FBI*, Thomas Homan *Executive Associate Director Enforcement and Removal Operations US immigration and Customs Enforcement*. The event is being run by IDGA in *Tampa, Florida*. Contact details for the event are +1 212-885-2677 www.idga.org

24 February 2015 – 1 March 2015 Australian International Air Show and Aerospace & Defence Exposition, Avalon 2015, Geelong, Australia. PO Box 4095, Geelong, Victoria. <u>www.airshow.com.au</u>



2-5 March 2015 Heli-Expo 2015. Orlando Convention Center/International Drive, International Drive, Orlando, FL, United States - NORTH & SOUTH HALLS <u>www.rotor.com</u>

#### FAR EASTERN SCIENCE PARK REVISITED

A little over two years ago Bell Helicopter Asia based in Singapore moved their in country customer support presence into a new facility on the new Seletar Aerospace Park (SAP), a business area located on a former RAF base and civil airport in the north of the island state. They joined a swathe of the worlds aerospace companies setting up new plant and MRO facilities around the former air base and enjoying its tower facilities and runways.

At the time of my earlier report on the then new Eurocopter facility at Seletar building the Bell facility was started but far from complete. Eurocopter South East Asia (ESEA) unveiled its new 8,200-square metre facility in SAP on 11 January 2011 and PAN visited later that year. The report was in the January 2012 edition.



What was evident at that time was the relative lack of new buildings at Seletar. You cannot say that now as the Aerospace Park expands at a rapid pace while still allowing space for some of the existing architecture. I am unsure what you should rightly call the remnants but perhaps it should be Empire Style for most of them hark back to those times of British rule. In Singapore's mad rush to build

new and high pockets of older British military buildings remain, often sidelined but usually protected until the authorities find time to refurbish them.

Bell Helicopter in partnership with Cessna Aircraft Company, opened its new regional service centre in Singapore at Seletar Aerospace Park in July 2012 - just a year after work started and left behind a dedicated 34,000-sq-ft Bell Helicopter Singapore Supply Centre on Loyang Industrial Park at the eastern end of the island and close to Changi International Airport.

The old Bell facility was nearer Changi but was elderly and remote. Seletar on the north The old nestles beside the new at Seletar. In the background is east of Singapore island is presently remote the new build Pratt & Whitney facility. ©PAR from public transport links but it is an aero-



space community and that alone is attracting major transport improvements, daily new concrete is poured on new roads and bridges to enhance connectivity.

The new state-of-the-art Bell facility offers customers a onestop shop for comprehensive repair, completion, fulfilment, and maintenance and customisation solutions designed to extend improve customers' aircraft performance and lower their operating costs. Like the Eurocopter – now Airbus Helicopters - facility it is connected to the active runways of Seletar, primarily to give the fixed wing customers of Cessna access.

The service facility is 160,500 total square feet and equipped with hangars for Bell and Cessna products, a paint booth, warehouse, overhaul and maintenance shops, offices, and a 77,000 square foot ramp. The new facility offers space for training, aircraft customization and completions, major refurbishment projects and parts sales, as well as maintenance, repair and overhaul. Bell Helicopter and Cessna envisioned the facility to be a regional hub for response to customer needs in Australia, China and India and that has been its primary area of success.



In keeping with the training ethos of the facility there is a strong emphasis of keeping an eye of where the tools are and the prominent FOD bag this Bell supplied image underlines that ©Bell

#### Police Aviation News

#### January2015

Bell Helicopter is the prime tenant of the facility and being part of the Textron Group brought in the partnership with Cessna Aircraft Company. Since the pair moved in Textron has taken over Beechcraft and it may be that in the not too distant future the Beechcraft badge will be added to the building. Currently Asia representation for Beechcraft is based with disparate organisations based in Australia, China, Hong Kong and Singapore.

For ten years Ray Waller was Bell Helicopter's 'Man in Singapore.' In November 2011 he was promoted from Director Customer Support to General Manager to guide the company into the new building. Two years after seeing the facility open he moved on.

Michael (Mike) Greene became the new general manager, Bell Helicopter Singapore, in early August 2014 so at the time of my arrival he was still learning some aspects of his complex task. He has been with Bell helicopter since 1999 and has evolved into an experienced Aerospace Manager specialising in aircraft assembly and composite detail part fabrication processes. Mike has an FAA Airframe and Power Plant License, a master's in Industrial Technology from Purdue University and an MBA from Texas Christian University.

For the last seven years he has been based and living close to the Fort Worth and Amarillo plants in Texas. With five years in Final Assembly production lead addressing design Mike Green, left, and his sales team meet for production issues before moving on to the new Bell 525 Relentless programme where he was likewise responsible for manufacturing assembly operations, his knowledge of manufacturing composites being an obvious advantage.

His back up team on the island state includes Chih Ming Hwang the Managing Director, Commercial Business Asia Pacific at Bell Helicopter since his appointment in April 2013.

At 160,500 square feet the facility is more than a match for current, and near future, needs in the region. There are few Bell helicopters in Singapore, the military is mainly served by Eurocopter and Sikorsky, and the only locally registered helicopters are three Airbus Helicopters, two owned by the operation at Seletar, so the immediate task is to attract specific type customers to the maintenance and the Bell Training Academy [BTA] training courses in Singapore whilst awaiting the all important new product sales that will inevitably serve to fill the vast hangar.

Currently the facility has three resident Bell helicopters, one 407 demonstrator still in completion and two non-airworthy airframes used for the training courses - a 206 and a 412 alongside a number of parts able to offer hands on experience of gearboxes, rotors and other primary components. At the time of the visit by Police Aviation News the hangar floor at Bell was occupied by the three airframes and three recently refurbished tail booms for Thai Air Force Huey's, not signs that the facility was over stretched. Over in the Cessna hangar things were significantly busier with a couple of customer business jets and a 208 Caravan.

For now the BTA training is the primary facility on offer and the dedicated classrooms are well equipped to give attendees a useful and intensive 2-3 weeks hands on training





potential customers at the recent military show in Jakarta, IndoAerospace. ©PAR





#### Police Aviation News

#### January 2015

courses that the Civil Aviation Authority of Singapore (CAAS) recently renewed Part 147 certification and approval for. This approval will allow six new technical training courses to be undertaken at the facility.

The six new training courses include:

- Bell 212: B1.3 and B2
- Bell 212 and Bell 412: Differences B1.3 and Differences B2
- Bell 412EPI and Bell 412 EP: Differences B1.3 and Differences B2

The CAAS approval expands the BTA's ability to provide regulated maintenance courses in the Asia Pacific region. The certification also covers helicopter maintenance B1.3 and electrical/avionics B2 theory and practical training for all approved aircraft including for the Bell 206, Bell 407 and Bell 429 product lines.





This Singapore Government illustration gives a view on the extent of the development at Seletar and how the new buildings are living side by side with the older barrack blocks erected by the former owners. The larger buildings at the bottom of the image house the regional headquarters for Rolls-Royce and represents some 15% of Singapore's aerospace output. © JTC

## www.PoliceAviationNews.com A wealth of on-line resources



