

Police Aviation News

A large yellow and white helicopter rotor hub assembly is the central focus of the image. It is positioned in a workshop or hangar, with various tools and equipment visible in the background. A yellow safety staircase with black handrails leads up to the hub. The hub itself has a yellow upper section and a white lower section, with red and black accents. A small black rectangular object is mounted on the yellow section. The background shows a well-lit industrial space with green storage cabinets, a workbench, and other equipment.

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PAR

**HELI-EXPO
PREVIEW
SINGAPORE AIR SHOW REPORT**

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LAW ENFORCEMENT AUSTRALIA

WESTERN AUSTRALIA: The police are looking for two new helicopters to replace one of their two existing helicopters.

The helicopter to be replaced is a 1990 BK117, an airframe now judged to be increasingly difficult to support and no longer fit for purpose. The plan for replacement expects that two smaller, nimbler helicopters would better suit future needs. The newer AS365N will be retained as its larger size and slower speed will continue to suit the command and control and transportation roles.

CANADA

EDMONTON: It appears that the poor performance of the Canadian Dollar is going to delay or halt the purchase of a replacement EC120 for the police air unit.

A report to the Edmonton Police Commission says the cost of the helicopter, first pegged at \$3.47M, has jumped \$2.7M because of the drop in value of the Canadian dollar. [Journal]



GULF

ABU DHABI: The police in Abu Dhabi are responsible for policing and the provision of Ambulances and Prisons. They have a fleet of around 20 helicopters.

They are going through a period on modernisation and are looking to strategically develop the provision of air support to policing and related operations.

To progress this, they are looking to recruit a Strategic Advisor to work alongside the head of the Air wing to advise on the management of the service and its development.

The successful candidate will need to be educated to at least Bachelor's degree level and have at least 20-years' experience in provision of law enforcement aviation. A pilot's licence is not essential; the management experience is considered more important.

The contract will be for an initial period of two years, extendable after by mutual agreement.

Anyone interested in the position and fitting the criteria need to contact Alan Betts the Deputy Team Leader by email. abetts@adpolice.gov.ae

FRONT COVER: On the eve of the annual HAI Heli-Expo in the United States times perhaps to step away from a study of an aircraft in flight to one under maintenance. The Heli-Expo event is as much about engineering support, maintenance planning, role equipment sourcing and fitting and services as the airframes so using this 'Made in America' image is perhaps apt.

SLOVAKIA

INTERIOR MINISTRY: There are reports that a significant helicopter purchase contract first reported late last year is under review.

The tender worth €80M excluding VAT is being checked by the Public Procurement Office beyond the proposed close of the competition on December 21, 2015.

Details are sparse but it seems that there have been complaints about how the contract in favour of Bell Helicopter was formulated. Meanwhile the Interior Ministry has declined to comment stating that the scrutiny is confidential and non-public.

The ministry announced the EU funded competition to purchase eight new helicopters for police officers, firefighters and mountain rescuers last October after it was first made public in August.

US company Bell Helicopter delivered two helicopters to the ministry last year. [Sme Daily]

Ed: The background to this seems to be a complaint by one of the manufacturers passed over in apparently awarding the contract to Bell. Sme suggests they might be Airbus Helicopters, Finmeccanica or Sikorsky.

INDONESIA

POLICE: Bell Helicopter has announced a purchase agreement for two Bell 429s for delivery to the Indonesian National Police. As the official police force for Indonesia, the aircraft will support the law enforcement activities and will contribute to the safety, accessibility, sustainability and security of the region.

The aircraft were signed for at the Singapore Airshow during a formal ceremony.

"The selection of the Bell 429 will help improve the Indonesian Police's support capability to ensure the safety, security and protection of the area," said Damos Nasution, president of Multi Pacific. "Given the conditions we operate in, the performance capabilities of this aircraft fit our mission needs."

Ed: The current police helicopter fleet in Indonesia mainly comprises locally manufactured MBB BO105 helicopters. Sources have suggested that the sale of these two Bell helicopters does necessarily signify that the whole fleet will be replaced by this type.



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TECHNOLOGIES

UGANDA

POLICE: In December PZL-Świdnik, part of the Finmeccanica Group announced that the Uganda Police Force Air Wing completed the process of acceptance of two new helicopters, a GrandNew 5X-MAH and a W-3A Sokol 5X-MAG during an official ceremony attended by the President of Uganda, Mr. Yoweri Museveni, and other high-ranking Ugandan state officials, and by representatives of Finmeccanica. The two helicopters were delivered in accordance with a contract signed between PZL-Świdnik and the Ministry of Internal Affairs of Uganda in June 2014 and officially announced at the 2014 Farnborough Air Show. The aircraft will be used to perform law enforcement missions. PZL-Świdnik will also deliver to the customer a comprehensive training and support package for the helicopters.

With these aircraft PZL-Świdnik marks an important milestone of delivering the 100th helicopter for the African commercial and para-public helicopter market.

The W-3A is an effective and robust aircraft capable of operating in all types of climates and environmental conditions. The version delivered to Uganda has been equipped with a cargo hook, rescue hoist, search light, loudspeaker system, rappelling kit, FLIR camera, provisions for firefighting equipment and an emergency floatation system. The GrandNew helicopter was chosen for its performance and advanced technology providing superior mission capabilities and safety in adverse operating conditions. The configuration delivered to the Uganda Police Force has been equipped with a cargo hook, search light and loud speaker system.

The last modern AW airframe used by Uganda, an AW119 Koala, unfortunately crashed in March 2010. It is planned to boost the size of the fleet to six helicopters and a modern fixed wing, the latter due for delivery later this year. [PZL/NTV]

UNITED KINGDOM

NPAS The base closures have continued with Ripley, Derbyshire sending its aircraft to Staverton for conversion by Bond and the crews dispersed to other nearby units. Sheffield [the former South Yorkshire base] closed on schedule, with the MD Explorer moving to NPAS Barton [Greater Manchester], replacing G-GMPX the Explorer there. The former GMP aircraft is now said to be parked up pending disposal despite its relative youth [2007].

NPAS expect to announce in the near future which organisation has won their tender to be responsible for the disposal of one AgustaWestland AW109S and a growing number of Explorer helicopters surplus to requirements.

Future base closures are planned at Warton, Wattisham and Durham Tees Valley Airport by the end of March 2017, but these are all dependent on the introduction of the new NPAS fixed-wing Vulcanair P68 aircraft and thus the dates are not yet set in stone.

In the wake of a high profile news story on a Virgin Atlantic Airlines aircraft being obliged to return to London Heathrow after a take-off laser strike on one of the pilots Ollie Dismore, director of operations for the UK NPAS was featured in associated storylines. He announced that there had been 108 reports of lasers being used against UK police helicopters last year alone.

In a 23-year career as a civilian police helicopter pilot, has been targeted by a laser numerous times - well in excess of 20.

He described being targeted with a laser while flying an aircraft as similar to walking through the beam of a high powered LCD presentation projector.

"When this comes upon you in the dark it will come through one side into the canopy, which is a bit like a goldfish bowl, and bounces around the internal surfaces - you get a very dis-



The EC135T2 G-NMID has been in service since 2004 and has now been sent for a rebuild to the new standard. ©PAR 2004

tracting flickering effect of the beam inside the cockpit," he said.

"It is quite disorientating because it is not a steady light that you can look at and your eyes adjust to, it is a flickering strobing effect. And if you are trying to fly the aircraft and look at the instruments then it is quite an unnerving experience."

Police helicopter pilots are trained to safely turn away from the beam and NPAS recently commenced a trial of eyewear to mitigate the effects of an attack.

Effects of a laser being directed at the eyes can include flash blindness, after-image and glare, and in rare cases significant damage to the retina.

"It is made worse at night - your pupils are wide because light levels are low - so you can get quite a significant after image while you wait for it to clear. In extreme cases it is like having dust in your eye, and it will stream," said Mr Dismore.

NPAS was able to report a high success rate in tracing the perpetrators - as soon as a bright light is detected on the EO/IR camera system it links directly to a mapping system and provides a location of the source and records an image. It does require ground units to attend the scene quickly.

In the past NPAS has added their helicopter to the airline traffic stream at some quieter airports to enable any attacks to be located and recorded. [Daily Mail]

Ed: See also the reports on UK industry moves to mitigate the effect of these attacks using technology [INDUSTRY below]



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METROPOLITAN: Scotland Yard is said to be interested in emulating a Dutch police initiative to use eagles to take down drones, but some animal rights groups are not so keen. The force's commissioner, Sir Bernard Hogan-Howe [the instigator of NPAS] was said to be impressed by an existing Dutch programme in which trained birds hunted and took down drones.

There have been concerns that drones are increasingly being used to assist criminals in their endeavours – either undertaking crimes or just surveying the scene whilst remaining out of reach.

Editor: Hogan-Howe no doubt has his fans but he certainly seems to be a favourite and regular target for joker of the week for some UK journalists.

For one Daily Mail writer this latest story seems to have provided him with plenty of material for his establishment knocking column over the years. The fact that the very expensive Commissioner looks doomed to lose his job rather soon seems to make it all much more fun.

Notwithstanding that the Dutch police are the instigators of a very professionally undertaken scheme it is being turned around to suit the humour of the writer. In the UK 'the eagles on to drone' storyline is dubbed as Bernard's latest brainwave even if he is just a bystander.

So why has he been selected as the target of these attacks? Well in recent months under his Commissionership there have been detrimental stories linked to his force including the arrest of almost everyone who appeared on TV and Radio in the 1970s and very public investigations into a former Home Secretary as well as a 92-year-old war hero.

More recently his financially challenged Force purchased a rather expensive Range Rover as his personal transport. Probably the biggest error though was the high profile arrest of dozens of journalists for an offences including telling the truth out of turn - on the pretext that they had intercepted telephone conversations to do so. Unfortunately it seems that at least some of the evidence may have been acquired through monitoring journalists telephones. That might have upset some along the way. Whether its bad luck on his part or the abuse of power being suggested remains a moot point.

The Mets air support Twitter account, dormant since last August, is now messaging again. The gap between August 4 and December 31 was never explained. Compared to the past performance though the restart has been modest with only half a dozen Tweets being initiated in the first 6 weeks of this year. The account has 130,000 followers 1470 likes and has now sent out 21,900 tweets many including images of London. Welcome back.

SECRET PLACES: To be officially launched at this year's Security and Policing, UK Home Office Event Farnborough is the Search Systems Ltd U.M.E. (NI) Ltd Sparrow Hawk anti UAV system. New to the event this project was actually quietly launched last year at the PAvCon in The Netherlands [along with the AUDS anti UAV system]. So if nothing else PAvCon stole a lead on two potentially major anti-UAV systems last year. AUDS has been covered in detail since the event [see last month] but the Sparrowhawk launch last year was soft and mainly verbal and we have yet to get significant details.

UNITED STATES

TEXAS: The Nueces County Sheriff Jim Kaelin is demanding some answers from the state. He says the DPS helicopter wasn't available for local law enforcement at the start of February and he wants to know why.

Sheriff Kaelin took to Facebook after he found out the helicopter, operated by the Department of Public Safety, was unavailable for CCPD last week. In the post he says the AS350 in another area and local law enforcement was not notified it was moved.

The DPS helicopter has been a sensitive issue for local law enforcement over the past year.



One of the Texas DoPS AS350 fleet ©AH

Last year the helicopter was relocated to help with border security. It was a move that drew this reaction from Sheriff Kaelin.

Eventually DPS officials agreed to move it back to Corpus Christi where it is 'permanently assigned.' Even so DoPS officials are reserving their position and say it will still be used for other operations in surrounding cities.

Local law enforcement is expected to set up a meeting with DPS officials to discuss concerns surrounding the availability of the helicopter.



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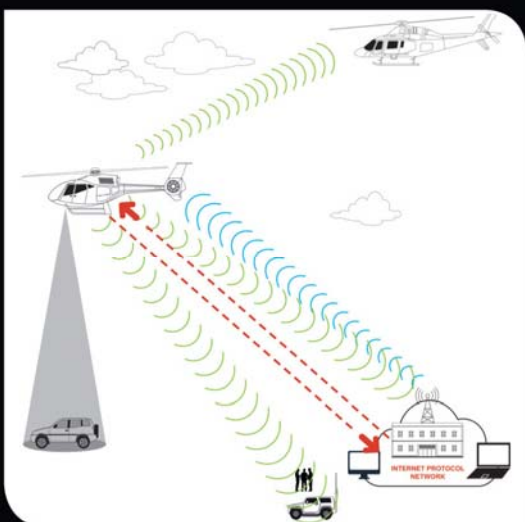


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VIRGINIA: The Unmanned Safety Institute, a professional organization dedicated to the safe and responsible integration of Unmanned Aircraft Systems (UAS) into the U.S. National Airspace System, has announced a joint partnership with the American Association of Airport Executives (AAAE) to provide educational workshops to the law enforcement community throughout the United States. The purpose of the educational workshops will be to train federal, state, and local law enforcement officers on proper techniques for responding to unauthorized or unlawful UAS flight operations, including intrusions within the operating vicinity of airports around the United States.

The workshop, "Responding to UAS Intrusions" will cover a variety of topics related to the UAS and its components, threats posed by UAS to critical infrastructure, types of UAS users, response protocols and best practices, legal enforcement authorities, and creating an

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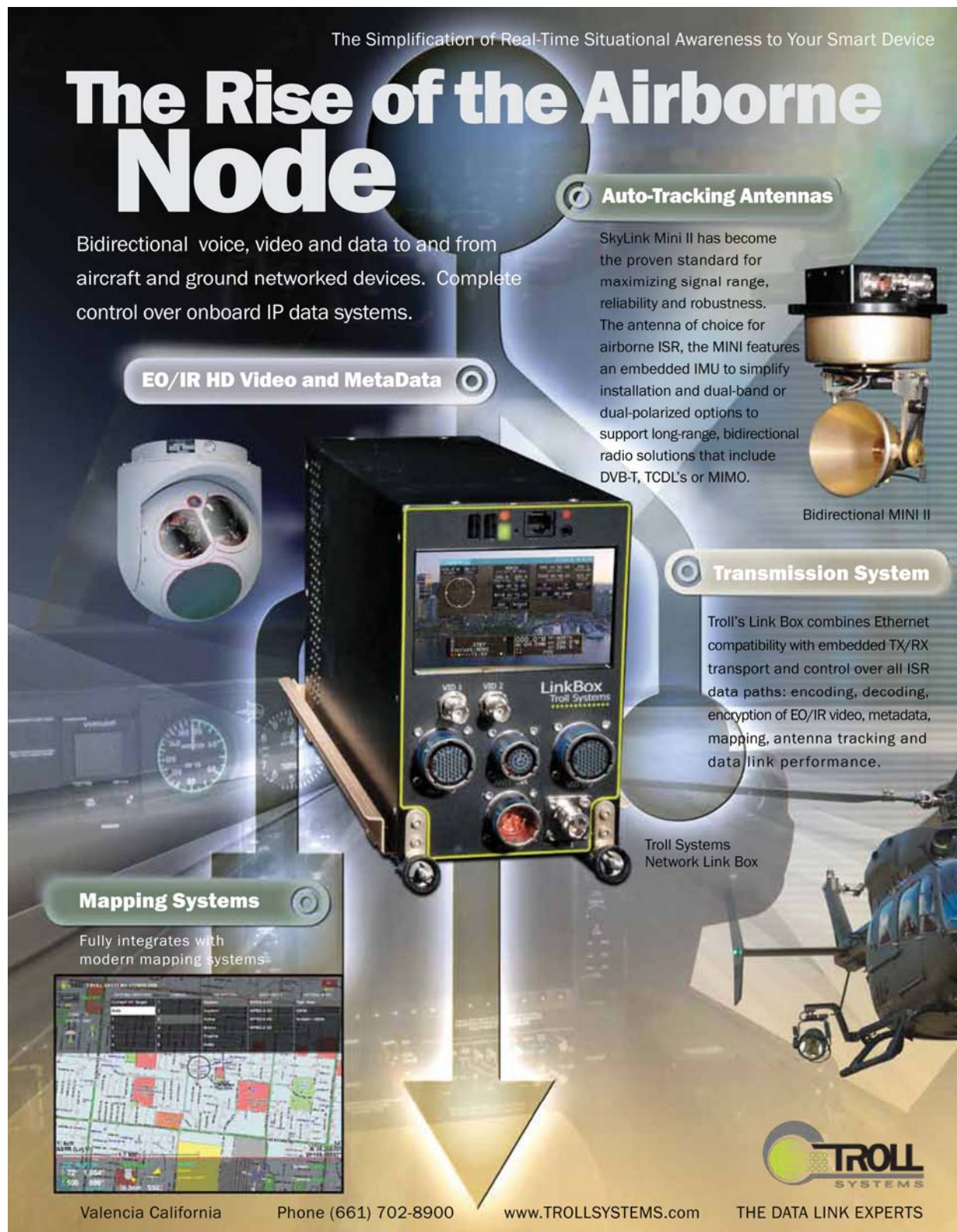
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agency standard. The first workshop will be held at AAAE Headquarters in Alexandria, VA, on March 14-15, 2016. Additional workshops around the United States are planned for 2016. To request further information or to attend this workshop, please call +1 (386) 265-1707 or e-mail info@unmannedsafetyinstitute.org.

The Unmanned Safety Institute is a professional flight safety organization for UAS operators and organizations focused on improving safety in UAS operations through the adoption of aviation safety practices. www.unmannedsafetyinstitute.org.

AIR AMBULANCE SWITZERLAND

REGA: Airborne Technologies has been awarded by the Swiss Air-Rescue Organisation REGA a contract to integrate a camera system and operator workstation into the AW109 fleet.

In order to guarantee best field of view, Airborne Technologies developed an external lift mounted on LH-Side of the helicopter in order to guarantee best field of view. The camera lift, as well as the camera pod, is made of CFRP (Carbon Fibre Reinforced Plastic). A camera system up to 60kg can be installed in the pod.

The lift is extended and retracted using a spindle, which is driven via a gear box by a small electric motor. In the case of failure, a self-sufficient emergency retraction system, powered by an independent battery pack, guarantees a safe landing position. The lifting mechanism and the gimbal mount are covered by an aerodynamic fairing.

The graphics for the aircraft fit also reveal that the provision for a Trakka searchlight is an added feature.

The Tactical Workstation includes the new Churchill ARS Mission Computer, which is RTCA DO160 tested and easily mounted by standard DZUS fasteners.

Heinz Leibundgut, Postholder Flight-Ops Helicopter and member of REGA's extended management board, says: "Airborne Technologies has developed an innovative solution, enabling new possibilities for the crew. Thanks to the new technic an enormous enlargement of the field of view became possible and enables even more precise SAR missions."

Ed: The equipment fit is aimed at enhancing the search and rescue capabilities of the AW109 da Vinci in service with REGA. It is perhaps ironic that all the trouble that Agusta/Finmeccanica focussed on lightening the basic airframe to enable higher altitude rescues is negated with this modification. Fortunately the equipment is fully removable though so those occasional high altitude mission capabilities remain available to the operator. For the future the equipment—due to be in service in August this year—will also be available for the forthcoming AW169 fleet.



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UNITED KINGDOM

AAA: Employees from insurance company Allianz UK have set themselves the target of raising over £1M for new charity partner Association of Air Ambulances Charity (AAAC). Launched last month the partnership will initially last three years with each Allianz branch organising fundraising activities at a local level to support their regional air ambulance service.

Jon Dye, CEO Allianz UK presented an initial £100,000 to Liz Campbell, Chairman of the AAAC to kick start the campaign and commented:

"We are very pleased to be supporting the vital work that air ambulances do. As the world's largest motor insurer, road safety is a major issue for us as road traffic incidents can have a devastating effect on people's lives."

The AAAC is a registered charity, which is designed to coordinate national donations into individual air ambulance charities. The partnership between Allianz and the AAAC will have a positive impact on the ability of these charities to reach critically ill and injured people across the country. The resources to undertake further night flights and update equipment (for example allowing for the carriage of blood) are just two instances of how this fundraising will help expand the service of the AAAC and help give patients the best chance of recovery and rehabilitation.

Liz Campbell, Chairman of the AAAC said: "We are delighted to have been chosen by Allianz to be their charity partner. We share their value of excellence and focus on customers. The money that they raise will support and improve air ambulance services throughout the UK. We look forward to working with their many colleagues and having fun raising vital funds to help our patients." [AAA]

KENT, SURREY & SUSSEX: Finmeccanica, Helicopter Division, handed over to Specialist Aviation Services its first AW169 new generation intermediate class helicopter. The helicopter is also the first to be delivered to a UK customer and will enter service with Kent Surrey Sussex Air Ambulance following installation of the medical interior by Specialist Aviation Services.

Group Managing Director of Specialist Aviation Services, Henk Schaeken said: "We are very proud to be introducing the all new AW169 helicopter into service in the UK with one of the country's leading air ambulance operators. We have been very busy training our engineers and pilots in preparation for the introduction to service of the AW169, so we can deliver from the outset the same high level of aircraft availability and support which our customers have come to expect from us."

Adrian Bell, Chief Executive, Kent, Surrey & Sussex Air Ambulance Trust added "The imminent delivery of the AW169 is a very significant event in the development of HEMS in the



He new AW169 is now having its medical fit at Staverton ©Finmeccanica

UK, especially in a heavily populated region the size of Kent, Surrey and Sussex – some 3,600 square miles.

The enhanced capabilities of the helicopter will allow us to further develop and improve the life-saving service we deliver to the community and the aircraft offers the exciting potential to reconfigure how these services are delivered for maximum effect in the future”

Specialist Aviation Services has also been appointed as an Authorized Service Centre for the new generation AW169 light intermediate helicopter in the UK and will provide a range of support and maintenance services to AW169 operators.

Editor: The somewhat delayed arrival of the AW169 is an important signpost in many ways. The type is of course new and although much larger overall is a direct competitor for the Airbus Helicopters H145 and already it is clear that these two are the main competitors in the class [JAR29] and are replacing the much maligned MD902 [which I hasten to add is JAR27].

As far as the Kent group is concerned it will also herald a change in working practices in that two 902 aircraft and bases at Marden [Kent and Redhill [Surrey] are being replaced by one.

With SAS having turned its back on the 902 simply because they are not available new and its customers now migrating to the AW169 or other types it does not bode well for the second hand market values of the 902 – notwithstanding the inflated price recently paid by London for theirs. The depressed value is likely to be detrimental to both NPAS and SAS in time.

OXFORD: Only last month PAN carried news of an arrangement being made between fixed-wing providers American Medical Response AMR Air Ambulance of the US and AirMed UK to collaborate and enable their respective clients to have access to a broader geographical range for air medical transportation.

Within days it was announced that the Oxford based Air Medical Ltd/AirMed had gone into administration.

In a statement published on 1 February, the company said: “Many of you have become aware of the past two weeks of the situation that AirMed was facing. On the 19 January 2016, Air Medical Ltd filed a Notice of Intention to appoint an administrator. Since then we have been in negotiations to try and find a way of ensuring that we continue the incredible work that we do. Unfortunately, we have not been successful in this, and so it is with a heavy heart that we must announce ... that Air Medical Ltd (AirMed) has gone into administration.”

The statement continues: “The Board wants to convey how deeply sorry they are to everyone who has been affected by this heart-breaking decision. AirMed only existed due to its incredibly passionate, compassionate and highly talented team. We are proud to have achieved as much as we have and to have touched the lives of thousands of people.” The company also thanked its suppliers and clients for their support over its 30-year history.

The appointed administrators are Neil Bennett and Alex Cadwallader of Leonard Curtis, London.

Air Med has been operating since 1985 and was operating a fleet including the Lear Jet 35 and Piper Cheyenne.



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WILTSHIRE: An Outline Planning Application to build a new home for Wiltshire Air Ambulance (WAA) has been granted by Wiltshire Council.

The new home, on land at Outmarsh Farm, Semington, near Melksham, will bring together WAA's helicopter, aircrew and charity team onto one site for the first time.

The Outline Planning Application received no objections. The next stage for WAA is to undertake further public consultation to obtain the views of local people and stakeholders on the proposed design of the new home, before submitting a Reserved Matters Planning Application to Wiltshire Council.

Currently the helicopter and aircrew are based at a hangar at Wiltshire Police Headquarters in Devizes, while the charity team is based at offices on Porte Marsh Industrial Estate, Calne. The lease on the hangar runs out on 31 December 2017 and the lease on the offices runs out at the end of January 2018.

The new home will cost up to £4M, of which WAA hopes to raise £1M through a Capital Appeal. The remainder will be funded by a private benefactor, who wishes to remain anonymous.

WAA's Outline Planning Application can be viewed online at www.wiltshire.gov.uk and the reference number is 15/10766/OUT



Wiltshire Air Ambulance is the only air ambulance operator of the Bell 429 in the United Kingdom ©WAA

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YORKSHIRE: The Yorkshire Air Ambulance have confirmed their intentions to secure the purchase of a second new helicopter to complement the state-of-the-art new Airbus H145 model which will be in operation later this year – giving the YAA the resilience it needs to deliver high quality emergency care to the people of Yorkshire

The rapid response emergency service announced the replacement of their oldest MD902 Explorer aircraft, G-SASH in the summer of 2015, however plans for a second Airbus H145 model to replace the other MD902 Explorer G-CEMS have been brought forward.

The original plan was to publicly announce and sign for the second purchase at the Helitech later this year in Amsterdam.

The announcement comes after the YAA Chairman Peter Sunderland [right above] and Vice-Chairman Bruce Burns [left above], last year visited the Airbus factory in Munich to see first-hand the progress of their first new helicopter. It was at this visit that the purchase detail of a second new helicopter was negotiated.

Peter Sunderland, Chairman commented “Our visit to Munich proved a great success. We were fortunate enough to be able to see our first new helicopter on the production line and the progress it is making. We are very much looking forward to welcoming our new helicopter to the UK later this year to provide the people of Yorkshire with an even better state of the art service.”

Mr Sunderland continues “As part of our Vision of the Future strategy, our long term plan had always been to eventually replace G-CEMS as well as G-SASH. However, due to diligent cost control, budgeting and the generosity of the people of Yorkshire we have been able to bring forward these replacement plans. And we are delighted to announce that following discussions with Airbus on our recent trip to their factory, we have confirmed the order of a second H145 model.”

The second new helicopter, which is expected to cost around £5.7M, is expected to join the YAA in the spring of 2017.

Mr Burns added “We are beginning to see growing number of maintenance issues with our current ageing MD902 Explorers as well as encountering mounting issues with obtaining spare parts. This is resulting in ever increasing costs of maintaining them both. Over the last couple of years, we have encountered record spending on maintenance and this has been one of the major contributing factors in our decision to purchase not just one new helicopter, but two. Both of the new H145’s will also be night capable enabling us to operate for longer hours which will be a massive benefit for the people of Yorkshire.

“After long discussions with Airbus, it was apparent that it would be more cost effective for us to coincide the order of the new helicopters rather than waiting sometime between them. It also means that we will have a reduced time where we have to operate a mixed fleet.”

Ed: The charity could find itself with a glut of airframe availability compared with the recent years of experience with the 902. The two Explorer’s have been unavailable to operations for significant periods recently and yet the charity managed to maintain a service. The new Airbus products will offer greatly improved availability in the early years -perhaps throughout the period of ownership and that may lead to a significant alteration in operational expectations.

INDUSTRY

Lasers and their effect on pilots and crew are very much the lead news item these days. As lasers proliferate so do the stories of attacks and the stories of legal retribution. People are going to prison for shining the lights into the cockpits of aircraft.

Meanwhile industry continues to strive and find an acceptable answer to the problem. In the UK NPAS has just started trials of glasses loaned by **Orion Photonics Ltd** of Beaworthy, Devon and this is just one scheme.

A newly announced answer to the problem comes in the form of a protective eye strip developed at **Loughborough University** to protect police from laser attacks. The strip has significantly reduced the effects of lasers during riots in Northern Ireland where it is used.

The visor strip, which is so effective it has changed protestor behaviour, could also achieve the same results in the aviation industry, where laser crime is on the increase.

Professor John Tyrer, an expert in laser safety at Loughborough University, developed the visor film for the Police Service of Northern Ireland in conjunction with the Home Office.

The specially engineered strip fixes to the top of the police visor and allows full usability of the helmet, unlike goggles which impair vision and are difficult to use in low light levels. The strips can be easily and quickly deployed by dropping the sight line of the visor when required. If a helmet visor is not an option the same film can be attached to a pair of over-glasses that the pilot and their co-pilot can wear at take-off and landing, without limiting their vision or functionality.

Laser crime is a growing problem for the aviation industry. A total of 414 "laser incidents" were reported to the UK CAA between January and June 2015. In 2014, there were 1,440 reported UK incidents.

The technology developed at Loughborough University has been commercialised through **Laser Optical Engineering Ltd**, a company based at East Midlands Airport, Derbyshire to take laser research to industry. <http://laseroptical.co.uk/>

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In order to appeal to a larger audience and customer base, **Aviation Specialties Unlimited Inc.**, (ASU) is rebranding its previously announced N16HT Pro system as Ecliptus. The Ecliptus is a wireless, recording and image sharing night vision system. The company has launched a Kickstarter campaign for the new product at <https://www.kickstarter.com/projects/1616551237/ecliptus-military-grade-night-vision-gopro-hero-4>.

The Ecliptus offers a 40-degree field of view, weighs less than one pound, is integrated with the GoPro® Hero 4 and captures images at 12 megapixels with a burst mode at 30 frames per second. It captures night vision images utilising a military grade AN/PVS-14 objective lens, records in ultra-high definition (4X HD), and stores these images using a 16 GB SD card. Images and video can also be viewed in real time using Wi-Fi enabled smart devices. The camera modes can be controlled using the GoPro® button controls and optionally from other remote devices.

The MSRP of the new Ecliptus is \$5,499, but is being offered at a substantial discount to those early adopters on Kickstarter.



From being a tiny Austrian offshoot company formed by former Diamond Aircraft staff to being a type agnostic specialist aircraft and equipment provider to the security services of Europe has been a remarkably short journey for Airborne Technologies of Weiner Neustadt. Few ever expected the small Austrian group to snap up the NPAS fixed wing trial never mind the full contract, but they did – although they have yet to deliver on the promises.

Meanwhile they continue to chase a broadening range of contracts and offer new product lines to the world of aviation.

The latest is a rugged design with long-range endurance based on the tough Thrush 510G crop-sprayer and offers a reliable and robust platform to undertake security missions for civil and military use. There are similar designs available and in service with such as the countries of Central and South America and Saudi Arabia but these come with the marked disadvantage of being firmly under the control of the US authorities through the ITAR regulations. The Austrian solution could be sold into China if there was a customer.

The changing element that enhances the basic Thrush is the Airborne Technologies LINX package that is carried by the S.C.A.R – Pod on a retractable swinging arm. Together with a flight stability kit, a full cockpit, armour and its rugged design, the Thrush 510G is seen as a perfect ISR platform in support of rough land or maritime operations.

In addition, Airborne Technologies has recently launched a new camera lift for 20" gimbals. The lift is suitable for any airborne fixed wing platform. It is made of CFRP (Carbon Fibre Reinforced Plastic) and is extremely light weight – the materials that have been customer winners for such as the police in Brandenburg. In combination with its compact design the camera lift is ideal for small cabin sizes and allows smaller and cost-efficient aircraft to fulfil surveillance tasks so far reserved for much bigger and much more expensive aircraft. The gimbal is completely retractable. Due to its discreet ramp appearance this solution is on the one hand perfect suited for covert surveillance operations and on the other hand it is totally resistant to hard weather conditions.



©Airborne Technologies

The new camera equipment developed for REGA is mentioned elsewhere in this issue. [see also Singapore Air Show report—they get a few mentions this month!]

The Malta based SAR operation **MOAS** [Migrant Offshore Aid Station] is setting up operations off Malaysia and Thailand from late February using a sea going vessel equipped with unmanned aircraft. In the past they have used the Schiebel S-100.



MOAS were to call a Press Conference to launch the new venture as this edition closed on Friday 26 February so the exact detail remains unknown. MOAS is a charity based SAR operation that has previously operated off Malta and Greece.

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EuroAvionics GmbH has set up a third subsidiary in Switzerland to manage and market unmanned products. EuroAvionics is an OEM supplier of choice for Situational Awareness and Mission Management systems design, production and marketing for certified avionics systems.

EuroAvionics Schweiz AG is headquartered in Sissach, Switzerland. The management team draws on a long-standing and extensive experience in the field of UAV platforms ("unmanned aerial vehicles"). This includes research and development of control and feedback control systems as well mechatronic systems and engine control systems. The team has sound experience in project management and participated successfully in the development of several UAV platforms and OPV projects in the past.

Initially the Swiss subsidiary will focus on two main product lines, industrial multi-copters production and development of autopilots / flight computers for UAVs and OPVs. The multi-copters will target the market of professional operators such as police, fire brigades and monitoring and inspection of infrastructures. The autopilot will be offered in certified and non-certified versions as well as different hardware designs to cover requirements from small multi-copters up to MALE / HALE-class ("medium / high altitude high endurance") UAVs.



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HELICOPTER ASSOCIATION INTERNATIONAL—HELI-EXPO

In a matter of days, the controversial Heli-Expo 2016 will land in Louisville, Kentucky, the City of Champions and the State of the Kentucky Derby [so far I know no more of this place]. So far there are no signs of the predicted snow that might hamper the event but there are signs that visitor and exhibitor numbers will be significantly down. It is none too easy to get to and unlike previous recent Heli-Expo events its likely going to be cold!

Elements of industry have been hyping up the event to make sure that it is not their booth that will be deserted by the public but only time will tell whether they will be successful.

Van Horn Aviation's long-awaited Bell 206 composite main rotor blades have finally arrived and will be featured on their display booth at the upcoming HAI Heli-Expo alongside the long standing tail rotor blades.

VIH Aerospace (www.vihaerospace.com), a provider of global helicopter maintenance, manufacturing, repair and overhaul (MMRO) services are exhibiting at Heli-Expo Booth # 1209 and took part in a Canadian trade delegation to Asia from February 7-20, 2016, as part of a contingent of leading aerospace companies operating in British Columbia, Canada. The focus for the mission was to introduce Canadian and British Columbian aerospace companies to these evolving markets and create viable business opportunities for these companies to attract and expand their market share throughout these regions; with a goal of growing and ensuring the long-term viability and success of the British Columbian aerospace sector. The tour concluded with participation at the 2016 Singapore Air Show.

It looks likely that **Enstrom** will be short of any representation of its new TH-180 training helicopter after the experimental machine crashed in a Menominee residential area last month. The pilot, who was flying alone, appeared to escape serious injury as he walked away from the crash. There was no major damage to property and no residents were injured in the incident. The blue TH-180, N180TH, lost power while flying north at 18th Street and 14th Avenue, according to the Menominee Police Department. The aircraft struck tree tops and a power pole before coming to a stop on 18th Street, between 15th and 16th avenues just a few blocks away from the Enstrom Helicopter Corp. factory. Damage evident was mainly collapsed skid landing gear.

Robinson Helicopter Company's R44 Raven II again ranked as the world's top selling helicopter while its R66 became the world's top-selling civil turbine helicopter according to the General Aviation Manufacturers Association (GAMA) General Aviation Aircraft Shipment 2015 Year End Report. Robinson delivered 347 helicopters (117 R66s, 152 R44 Raven IIs, 44 R44 Raven Is, and 34 R22s) in 2015 marking a slight increase over the 329 produced in 2014.

In 2015, in response to customer feedback, Robinson introduced a variety of optional glass avionics along with a stability augmentation system (SAS) and autopilot. The company also announced the development of its latest model the R44 Cadet, a 2-place R44 designed specifically for training and utilitarian applications.

Robinson's top priority in 2016 is certifying the R44 Cadet which will be on display at Heli Expo.

It remains to be seen whether **Bell Helicopter** can make significant inroads into the sales success of the R66 with their new JetRanger by this time next year. A lot of this will depend on first cost differential. Bell were aiming at having a \$1M airframe to set against the Robinson—its uncertain how close they will get to that when sales start.



FEC Heliports will be exhibiting HEMS-Star, their new HEMS-Star portable helipad lights - Designed for rapid deployment in temporary and emergency situations where effective marking is needed at a designated or ad-hoc helicopter landing area.

HEMS-Star has selectable Green, Red, Blue, White or Infra-Red LED's Night Vision Goggle Compatible Programmable to steady-on, flash warning, location beacon or Morse code Rechargeable via mains, vehicle, solar or wind power Pilot control enabled, automatic sunset/sunrise switching or wireless control from PC/Tablet Portable in cases of 4 or 8 lights Successfully tested for stability under the rotor wash of a CH-147 (Chinook) The HEMS-Star is improving efficiency and safety at more than 30 helicopter EMS sites in the UK as well as USA, Japan and Russia. For a demonstration and your chance to win a Thule PC bag visit the FEC Heliports Booth 9139.

APG Avionics a global supplier of avionics and aviation equipment for para-military and military applications – will present Controp Precision Technologies Ltd.'s (Controp) new line of S.I.T.E. (Surveillance, Infrared, Thermal and Electro-optical) systems in booth 1535. APG will represent Controp's airborne products and mission systems for the Police, Law Enforcement and Search and Rescue (SAR) market in the United States as well as provide installation, local customer support and maintenance. The new line of S.I.T.E. systems has the ability of converting helicopters into an advanced Electro Optical InfraRed (EO/IR) mission surveillance system. These surveillance systems are most commonly used for a variety of law enforcement applications including Police, SAR, Fire Fighting, Coastal Surveillance and Border Protection and Control.

ACCIDENTS & INCIDENTS

19 November 2015 Airbus Helicopters EC135P2 N36RX. Air ambulance of REACH Air Medical Services, Santa Rosa, California. While conducting live training with a local fire department at their training facility, the flight crew was performing mock loading and unloading procedures, along with multiple landings and take-offs of the helicopter. The pilot and crew had performed two landings and take-offs prior to the event with no observable FOD within the landing zone other than a closed container box (Conex type). At the time of the third approach to landing, while on short final, they noticed the door of the container box open, which allowed a large towel to blow out and into the Fenestron tail rotor assembly. The pilot felt a sudden shudder of the airframe and elected to immediately land the aircraft and perform an immediate shutdown of the engines. Post flight inspection revealed significant damage to blades of the Fenestron. [Concern]



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2 February 2016 Eurocopter EC635 helicopter Jordan Public Security Department helicopter crashed near the City of Salt in western Jordan during a night training exercise killing one pilot, Lt. Hazem Hassouneh and injuring Captain Hussein Najdawi. [Petra]

Ed: Local sources illustrate an EC635 as the crashed type. The funeral of Lt. Hassouneh took place the next day.

10 February 2016 Flight Design CTLE N911TS Tulare County Sheriff's Office, California A civilian pilot and Deputy were killed when the aircraft crashed in the aftermath of assisting officers on the ground near Springville in the San Joaquin Valley.

The single-engine plane, which the Sheriff's Department purchased in 2011, crashed and burned about 10 miles east of Porterville. The pilot, James Chavez, 45, and Deputy Scott Ballantyne, 52, were the only two in the light aircraft that had totted up some 3,000 hours in police service.

Chavez, a resident of Hanford, was a veteran pilot and had significant aviation experience from his service in the California Army Reserve National Guard. He had been hired by the department in 2014 after more than a year of volunteering as a pilot.

Ballantyne had begun working in the department's aviation unit about 18 months ago as an observer. [LAT/Tribune]



Tulare County Sheriff's Deputy Scott Ballantyne, right, and Pilot James Chavez, left, were killed when their plane crashed into a mountain in the San Joaquin Valley. ©Tulare CSO

Editor: This aircraft was displayed at ALEA 2012 in Reno, Nevada and was due to be joined by a similar airframe imminently. The Sheriff's Office entered into an agreement to buy a new airplane similar to the one lost last year. The FAA has authorized the department to install a camera system on the new aircraft, which is expected to cost \$208,530. The department had planned to fly both its planes for search and rescue missions, suspect searches, evidence gathering and other operations. The new fixed-wing platform was expected to be delivered last month.

PEOPLE

The North Dakota Export Council announced that Spectrum Aeromed Owner and CEO Dean Atchison has been appointed by U.S. Secretary of Commerce Penny Pritzker to serve on the North Dakota District Export Council (ND DEC).

MOVE ALONG THERE

Either PAVCon is on the up and up or someone has not done their homework very well.

In early February the office took a call from the mega organisers of the Police & Security Show and the Farnborough Air Show. They had heard about the proposed PAVCon 2017 in Wakefield and thought they would like a slice of the action running it for me.

So the plan was that this rather large company was going to move into the position currently held by the one-man PAR operation and run a leading edge [and highly economical] event that in the past year launched equipment such as AUDS and Sparrowhawk anti UAV systems to the market. Both will now finally be starring at the Farnborough event to a closed and restricted audience.

Unfortunately, I am drawn to believe that it was just bad homework on their part.

And as ever the editor of Police Aviation News remains banned 'by the Home Office' from attending the ADS managed event at 5 in Farnborough and yet has been to every worthwhile security event across the globe without a murmur! ADS, who are not serving police officers or officials, can of course write pretty much what they like about their event and its successes without any worry about contrary reports appearing. All those directly associated with PAN/PAVCon have each in the past had the OK to attend the event and its predecessors wearing different caps but no longer. You really could not make it up.



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EVENTS

SINGAPORE AIR SHOW

February 16-21 Changi Exhibition Centre, Singapore

Arguably the largest air show in Asia the bi-annual Singapore air Show successfully managed to avoid a head-to-head clash of dates with the US Helicopter Association International Heli-Expo for another occasion. That avoidance allowed a significant number of small airborne emergency services suppliers to make both events.

Singapore may be but a small island but as demonstrated time again it is at the centre of aviation in the region and also plays a major part in being a primary supplier to the world market with the right political credentials to be all things to all men. Nonetheless there were a significant number of stands at the show that played safe with the strict US ITAR controls and brought along dummy equipment – or none at all.

With a show such as this where East meets West on neutral territory both sides play the ITAR game in different ways. The authoritarian US edict results in plastic models of the most mundane equipment [if you can call a FLIR turret ordinary] and where, according to one correspondent [Wendell Minnick in Defense News] the Chinese play with an even less open hand. His is in the military world that ITAR was designed to protect but the Chinese bring 'stuff' that does not exist. He reported on models that were displayed on Day 1 disappearing part way through the show when it was someone realised that there were no brochures and that the model was not supposed to be there in the first place. The game then is 'What model?' Fortunately, my market is not that complex but it's a long way to go to view a plastic replica of a sensor turret. It may be significant that an editorial in the most recent edition of Flight International warns of an increasingly belligerent China roaming at will across the South China Sea.

The show was held against a background of low oil prices that on the one hand boosted the civil airline sector and on the other depressed the helicopter sector. That said the in-show news that Bombardier is to cull 7,000 staff within hours of announcing further sales to Air Canada sends mixed messages. The ongoing perceived failure of the C series airliner, which was present at the show, to make big inroads into the markets of Airbus and Boeing, the slowdown in sales of its other product lines due to a depressed business market have

led to a massively depressed share price for Bombardier so it is not a surprise. Where some are simply reporting less buoyant market conditions Bombardier are feeling real pain and trying to do something about it.

Two years ago the organisers were saying goodbye to the location of the 2014 show in the expectation that it was being pushed off to a new and exciting site. It is unclear what is not happening but this year was exactly the same spot as 2014 right down to the parking place for the plastic F-35 mock-up. Did it stay there for 24 months? The next edition of the event, in 2018, will be set against a backdrop of an open Terminal 4. The route to this year's event was through the earthworks of this project. When it opens it will herald Asia's first full self-service pre-flight check-in, using biometric and facial recognition technology.

As well as checking in for your flight via your phone, you will be able to print your own boarding pass, tag and drop your own luggage, and clear immigration, all without dealing with another human being until you get on the aircraft – where hopefully there will still be a pilot in command.

The 2014 edition of the Singapore Airshow wrapped up the trade segment of the six-day event with deals announced worth US\$32 billion, surpassing the value of deals announced in 2012 but no-one has an expectation of anything like the same numbers. Two years ago every air show event had plenty of slack to announce the thousands of new generation jets that now occupy the order books of Airbus, Embraer, Boeing and Rolls-Royce but those numbers are no longer in the offing. The end of show results this edition were \$12.7 billion – way less than half.

Sometime before the event Airbus Helicopters were letting it be known that their sales revenues, largely connected to oil were significantly down. Helicopter sales last year and this year in the Southeast Asia Pacific region reflect a downturn and even a flurry of sales in China last year cannot offset the effects of the slowing economy. This year the Airbus Helicopters static park contained examples of recent deliveries [an H130 and H145] and one EMS H135 from last year.



The indoor stand/booth space was well laid out crowded but cool and positive for most exhibitors and visitors. It is a good job too as on a personal level I found that the Media facility was wholly inadequate both in size and capability. It was clearly being shunned by the exhibitors with the usual array of hundreds of press release trays being left empty and the numbers of press wishing to use the room being far in excess of capacity. It was more like a refugee camp and I noticed that people like *Flight International* sensible had their own facility outside as a stand space – was it past experience? This does raise the question about why the journalists were congregating there rather than out getting the stories! On the floor of the show there was plenty to see and stories to be gleaned - not all publishable just yet.





Project Zero all electric and due an upgrade to hybrid power still carries the Agusta-Westland markings ©PAR

Most manufacturers exhibited in the usual flamboyant style but others appeared more muted than expected. Finmeccanica for instance was in a small space occupied by models and it may be interesting to see whether this will read across to the Heli-Expo next week. Outside in the searing sun there was the Project Zero experimental electric vertical lift craft. Airbus Helicopters were also reliant on models inside but both they and Bell Helicopter and the other Textron marques were well represented in the static park. Finmeccanica have significant market penetration in the region but it was odd that they had brought no operational airframes with them.

Finmeccanica announced AW189 sales at the show. TPG Aeronautik Sdn Bhd of Malaysia ordered two AW189, consolidating the success of the type in South East Asia. The helicopters, whose delivery is planned in 2017, will be operated by the Fire and Rescue Department of Malaysia (Jabatan Bomba dan Penyelamat Malaysia) for firefighting, search and rescue and disaster relief missions. JBPM selection of the AW189 will expand their capabilities and will, as an existing operator of two AW139s, enable them to take advantage of the shared benefits in training, operations and support provided by the Family of Agusta-Westland products, which include the AW169, AW139 and AW189 types. Finmeccanica's Helicopter Division continues to grow in Malaysia with the delivery to Galaxy Aviation of two AW139, joining the already impressive fleet of the types operating in the Country, and in the Philippines, with two helicopters to be operated for corporate/executive transport. South East Asia continues to be claimed as one of the fastest growing market for Finmeccanica and its Helicopter Division and yet the absence of effort is odd.

Bell Helicopter, and Textron Inc., had a good showing and were able to time a couple of significant orders to fit in with the event. It made sense to announce the sale to the police in Indonesia here rather than at Heli-Expo and a similar line of thinking resulted in the announcement of the signing of a contract for the supply of two Bell 429s to the Flight Calibration Department of the Indonesian Ministry of Transportation. The aircraft will be used for flight calibration operations throughout the region, performing instrument calibration for Helicopter Ground Instrument Landing and Departing Systems at airports, heliports and helipads. The show time signing was between the leadership from Bell Helicopter, Flight Calibration Indonesia, Carpediem Mandiri and Aerodata AG.

"The Bell 429 will provide the Indonesian Flight Calibration Department with superior performance and safety, while operating throughout Indonesia," said Mr. Syafruddin Rachman,

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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.

owner and president director of Carpediem Mandiri. "We have received the highest levels of support and service from Bell Helicopter, so we look forward to building our relationship with Bell Helicopter and the delivery of the two Bell 429s."

Aerodata AG is a third party supplier that will support the aircraft by integrating their system into the Bell 429. Aerodata AG is a global market leader in flight inspection systems with its headquarters at the Research Airport in Braunschweig, Germany.

The Bell static area included an example of the 206L LongRanger and an mock-up the new JetRanger. The other elements of the Textron Group, Cessna and Beechcraft were in an adjacent area and included a fetching Ce 208 bearing the registration that might suggest a connection with PAN.



South East Asia is a target market for a range of familiar companies in the airborne emergency services arena including the Weiner Nuestadt, Austria based neighbours Airborne Technologies, Diamond Aircraft and Scheibel. Each was there pretty much back-to-back on the Austrian stand in the display hall and most are likely to be displaying at the PAVCon later this year.

Airborne Technologies were majoring on their new REGA contract to supply camera equipment for SAR helicopters in Switzerland, the new lightweight camera lift for 20" gimbals and the Thrush 510G based ISR aircraft using the now familiar S.C.A.R – Pod, Diamond were promoting their range and Schiebel included an S-100 in their stand display.

Regular readers will have recalled last month's initial message from NPAS relating to the post Glasgow EC135T2 crash relating to meeting an AAIB recommendation for the fitting of a crashworthy voice and data recorder to police helicopters. There is a product fitted



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to new Airbus Helicopters but it was absent from the older crashed helicopter and probably not robust enough to meet the AAIB message even if it might have been an adequate data store in that specific case. Clearly the wish is for something better that will survive accidents and subsequent fires.

There is no information out there yet on all the likely candidates but Curtiss-Wright turned up at the show to launch what we might assume is to be at least the basis for their bid for the requirement to come. They have teamed up with Ultra Electronics Flightline Systems, to develop a Fortress HUMS compact and lightweight Cockpit Voice and Flight Data Recorder that includes an integral HUMS. It is ED-112A compliant and designed for use on rotorcraft platforms and is claimed to be easy to install and an affordable single box solution weighing only a fraction of alternative systems. In a typical installation, overall weight is reduced from 70 lbs. to 13 lbs. (32 kg to 6 kg) versus currently available alternatives.



Regardless of the smaller weight in comparison with other systems that is quite a weight to accommodate nonetheless and it may be that some elements in that offering, including the HUMS, are not actually required by the NPAS requirement [when it is fully formulated]. This 2kg black/orange box does illustrate the type of product that might come forward to feed the new NPAS need for retrofit equipment.

At the other end of the hall, a late arrival on the US Stand, was Canadian company CarteNav with their NPAS favoured mission system software products. *At the show they announced* a new radar control capability for its successful AIMS-ISR® software – the product selected by NPAS among others. This latest offering from CarteNav significantly extends the capabilities of the software, and provides users with comprehensive radar control capability, fully integrated into its existing software interface. Adding this capability to AIMS-ISR® means that existing radar functionality, such as sensor control, sensor display, and data management is now accessed more easily.

Steve Watson, VP of Business Development at CarteNav, commented: “We are delighted to be launching our latest mission system software at the Singapore Airshow. AIMS-ISR® with radar has been developed to provide a more flexible and intuitive interface for radar operators, and can be used for a wide variety of missions, from maritime patrol to border surveillance.”

Although Singapore Airshow 2016 marks the official launch of CarteNav’s latest software, it is already in service with an undisclosed military user, and is in the process of being delivered to other customers.

Mr. Watson continued: “By integrating full radar control into the software and combining it with our Tactical Vision overlays, the operator now has improved geographic context for radar data and enhanced situational awareness from the local operating picture (LOP). The LOP features radar tracks, AIS, and other sensor data overlaid onto both live video and the dynamic moving map. The information now available to the operator from the combined feeds from the radar and the EO/IR camera, coupled with that of other sensors, has created an incredibly powerful user interface where a single user can quickly access and process all the information needed for the mission”.

The major sensor manufacturers, FLIR, L3 Wescam and Controp, were on site and clearly skating around the needs of the US ITAR regulations in promoting their own brand of all-seeing eye but added to that group was a new player in the form of Harris Corporation.

Every so often in some part of the globe I run into a product that shows a significant amount of promise to feature in PAN. Lots of them fall by the wayside, either failing to develop with sufficient promise to be adopted or failing to attract the finance but others – and perhaps the Trakka searchlight and the data recorder are prime examples championed by PAN from the start – make the grade and we really do not know how we got on without them.



A few years ago there were companies in the USA promoting wide area surveillance by means of multiple cameras clustered into the belly of light aircraft. These cameras provided an overall picture of a block of territory and highlighted any movement within that area. The disadvantages in the early scheme were housing the large size of the array in what became a dedicated airframe and the flight profile. To enable the technology to work the flight profile included the need for a dizzying constant tight circuit.



The new to civil user Harris equipment – a development of a tried and tested military system - is now contained within a 15-inch WAMI Sensor turret that is compatible with existing sensor turret mounts and therefore now carrier airframe agnostic. To date the Harris' Wide Area Motion Imagery sensors have delivered over 10,000 hours of airborne persistent surveillance supporting military operations

The data-hungry CorvusEye 1500 system tracks and records all movement within a wide area, stated to be city size, giving each moving object a unique identity. In the aftermath of an incident it is possible to track back on the movements of the suspect moving object in a more comprehensive and faster manner than is currently available through city centre CCTV coverage.

Drawbacks of the current equipment for civil law enforcement might be that the image is wide area and does not allow close up views of the suspect object to meet civil sensitivities but upgrading to a larger turret to include a spotter scope or coupling it with a standard EO/IR turret would seem to resolve that problem.



With the rotary market for the oil and gas industries in recession the Singapore Air Show was very much orientated towards the military and civil airliner world this year. That does not negate the content in the emergency services arena and more than it does iat such as Paris and Farnborough but it does dilute the focus somewhat.

Here and there could be found the potential upcoming technologies—Israel is also developing equipment to deter or disable the UAV intruder making this a very crowded market sector.

The interest in the static park was mainly in airliners simply because you could wander through all parts of an A350 and A380 and see the bits like the crew rest areas and cockpit that are quite rightly locked out of sight when travelling the 14 hours or so as a fare paying passenger. I must admit that any jealousy at the crew having access to beds in the floor and ceiling somewhat evaporated when I realised how cramped and minimalist they actually are! Even so it opened my eyes at the different level of comfort offered by airlines I have not yet sampled and furthers a desire to travel everywhere First Class!

It is a pity that the show did not move to a new location this year. The logistics of the present location are not good. Even on this small island the location is in the 'back and beyond' thrusting a severe strain on the travel infrastructure. Singapore is a 'taxi culture' people do not own cars they use cheap cabs, buses and a great rail network [MRT] but the rail and bus options are simply miles away so the main thrust is upon the taxis. Even in this land of the Uber the system was clearly under strain. Private vehicles, and therefore Uber, were banned from dropping off on site which meant that a very large percentage of the island's taxis were employed at Changi in rush hour. That impacted negatively on the normal work commute.

There was no shortage of people to provide security and direct traffic but the persons who wrote the event plan must have been out of their minds. There was one two-mile-long road in and out. What worked adequately at slack times became chaotic at peak times when three lanes of traffic with very different objectives crossed the same bit of real estate in two places.

To ensure that the show visitors got away the authorities enticed the taxis with a bonus fare. But that failed as the traffic snarled up and all the bonus went straight out of the exhaust pipes in wasted fuel. Getting out at the end of day one left visitors queuing in 32 degrees for two hours for taxis to town and shuttle buses to the MRT. One CEO of a Singapore based manufacturer told me he was bailing out of the show mid-afternoon in order to avoid that inconvenience day two.

Travel to and from big air shows is never far from stress and worry but this year Singapore was poor.



LATER THIS YEAR

Rotortech 2016. 27 - 29 May 2016. Even after the organisers doubled the 2014 booth capacity to 50; they were swamped by post-Christmas bookings as helicopter people returned to work. As a result, the event in Australia was totally booked out far earlier than expected. Four months before the event the waiting list was growing and far outstripping the likely number of cancellations. It was back to the drawing board and thoughts turned to revising the location and erecting a temporary marquee to house the exhibitors at the Novotel Twin Waters Resort. The plan is to use the enormous 10,000m² grass area available next to the trade hall. This might mean the planned VIP Heli-Park for exhibitors to display their wares will have to move elsewhere. The advantage of an 80 stand marquee is that helicopters can land nearby and be easily wheeled inside; whereas entry to any trade hall needs a more complicated ground transport arrangement..

Should the marquee be erected there is still parking for at least 30 helicopters in the Heli-Park and the original Rotortech grassed landing area on the eastern side of the resort is still available and has a capacity of at least 35 helicopters. Some observers predict that Rotortech 2016 may turn out to be the largest helicopter trade show in the Southern Hemisphere. Rob Rich is the AHIA Events Organiser and he is based in Queensland with contact details of Tel: 0415 641 774 E: robsrich@bigpond.com

13 June 2016 PAvCon Classes and 14-15 June 2016 PAvCon Police Aviation Conference 2016. Basic details of the event, how to travel there and book your hotels are now on-line at www.pavcon.org

So far 21 exhibitors have verbally confirmed that they want space and a number of other companies have shown interest in joining the regulars. With 42 exhibitors last year it looks quite likely that significantly in excess of that number will be showing their wares at Oberschleissheim near Munich. Details are on-line at www.pavcon.org

The additional day [13 June] set aside this year will feature Officer Jack Schonely from California leading an ALEA style class on the use of FLIR. At the US based ALEA classes this is seen as a three-day teaching session which has been condensed to fit with European needs and is aimed at both the newcomer and the old hand in handling the tactics of FLIR use.

PAR has arranged that the event is sponsored by the FLIR industry as a whole – each on an equal basis – and will be ‘badged’ as such.





Participating Agency



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Serving police officers are seen as the main people wanting to partake in the classes and to that end the Federal Police [Bundespolizei] have already booked several places. Space permitting industry is welcome but they will be charged £75 for the day unless directly linked to the event sponsors.

COMING THIS MONTH

8-10 March 2016 Security and Policing, UK Home Office Event Five Farnborough, Hampshire. Since its inception over 30 years ago Security & Policing and its precursors has provided a platform for professionals from the UK and across the world to engage with the very highest level of security expertise. The event continuously develops in size and scope and exists to provide the level of industry engagement needed to enable UK Government to procure and deliver its national security priorities.

The event is aimed at police, law enforcement and security professionals who are tasked with security, civil protection and national resilience. Security & Policing showcases world leading products and services, taking advantage of the unique opportunity to bring together people with operational needs with companies that have the relevant solutions, all within a secure environment. The event enables exhibitors to display products which would be too sensitive to show in a more open environment. Operated by ADS, Salamanca Square, 9 Albert Embankment, London, SE1 www.adsgroup.org.uk www.securityandpolicing.co.uk



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